



E- SOUVENIR

napcon 2020

VIRTUAL

National Conference on Pulmonary Diseases

22nd Joint National Conference of
National College of Chest Physicians (India)
and Indian Chest Society

PREPARING TOGETHER FOR A BETTER FUTURE



27 - 31 JANUARY, 2021

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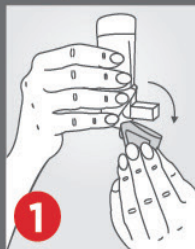
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Dr. Harsh Vardhan



डॉ हर्ष वर्धन
Dr Harsh Vardhan

स्वास्थ्य एवं परिवार कल्याण, विज्ञान और प्रौद्योगिकी
व पृथ्वी विज्ञान मंत्री, भारत सरकार

Union Minister for Health & Family Welfare,
Science & Technology and Earth Sciences
Government of India

सबका साथ, सबका विकास, सबका विश्वास
Sabka Saath, Sabka Vikas, Sabka Vishwas

MESSAGE

I am delighted to learn that the 22nd National Conference on Pulmonary Diseases (NAPCON), being organized jointly by the National College of Chest Physicians (India) and Indian Chest Society from 27th to 31st January 2021 is also releasing an e-Souvenir on the occasion.

Apart from being a source of useful information regarding the subject and members of the association, the Souvenir becomes a precious memorabilia reminiscent of special moments of the past.

I am also pleased to note that Fraternity of Pulmonary Medicine has worked hard during the present unprecedented COVID-19 pandemic, and has already shown a way forward in consonance with the theme of the conference: "Preparing Together for a Better Future".

I convey *my* best wishes for the successful publication of the e-Souvenir and hope this will be useful not only for members but also for other professionals.


(Dr Harsh Vardhan)

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Dr. Jitendra Singh

डॉ० जितेन्द्र सिंह

राज्य मंत्री (स्वतंत्र प्रभार),
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परमाणु ऊर्जा विभाग तथा अंतरिक्ष विभाग,
भारत सरकार



सत्यमेव जयते



Dr. JITENDRA SINGH

Minister of State (Independent Charge),
Ministry of Development of North Eastern Region;
Minister of State, Prime Minister's Office,
Ministry of Personnel, Public Grievances and Pensions,
Department of Atomic Energy and Department of Space,
Government of India

MESSAGE

I am pleased to learn that the 22nd NAPCON(National Conference on Pulmonary Diseases), is being jointly organized by the National College of Chest Physicians (India) and Indian Chest Society from 27th to 31st January 2021. The theme of NAPCON 2020 "Preparing Together for a Better Future" reflects the current status of health dynamics with hope and guidance for the way forward .

Pulmonary Medicine is a rapidly developing specialty of Medicine in India and abroad. Considering the challenge posed by tuberculosis and other pulmonary diseases, the Government recently announced the revised "National Tuberculosis Elimination Programme, Air Pollution , Allergy, Asthma , COPD, Interstitial Lung Diseases, Occupational Lung Diseases, Lung Cancer, Sleep Disorders, Pulmonary Interventions and Critical care", which require extensive work and knowledge for better management.

I wish the Organising Committee all the best for this endeavour and hope that the NAPCON 2020 will culminate in fruitful discussions in different fields of Pulmonary Medicine.

I also congratulate the Organising Committee for the publication of the e-Souvenir.

(Dr. Jitendra Singh)
MBBS (Stanley, Chennai)
MD Medicine, Fellowship (AIIMS, NDL)
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Dr. K S Sachdeva



Dr. K. S. Sachdeva

Deputy Director-General (TB)

Head, Central TB Division

Project Director, National TB Elimination Programme

It gives me immense pleasure that the National College of Chest Physicians and the Indian Chest Society are organizing the 22nd Joint National Conference on Pulmonary Diseases (NAPCON) through a virtual mode, even amidst these trying times. The year 2020 has been pivotal for health professionals worldwide. With the Covid-19 pandemic bringing the world to a halt, the resilience of medical professionals has been put to test. This is especially true for the Chest Physicians and Critical Care experts- most of them participants of this esteemed conference - indeed, you are beacons, showing the way towards exemplary patient care and management.

The National TB Elimination Programme too has worked against all odds and took early measures to ensure timely diagnosis and appropriate treatment for the TB patients, even as we faced a raging pandemic and associated lockdown. We succeeded in notifying nearly 18 lakhs TB patients and extending free of cost, quality ensured drugs and public health action to the patients. We believe that with dedicated efforts of our staff and partners, and sustaining the behavioural changes brought about by the pandemic such as increased focus on cough hygiene, we would succeed in further cutting down transmission of communicable respiratory infections including tuberculosis. I take this opportunity to urge all to work towards Ending TB and other respiratory infections with a renewed vigour and commitment.

We must also not lose focus on non-communicable respiratory illnesses like COPD and asthma which are major public health problems and contribute significantly to India's health burden. I implore you to continue working towards advancing the science to manage these conditions.

It is my sincere wish that all participants of this Conference benefit from the many academic and technical sessions, workshops, debates and symposia that have been planned by the esteemed organizers of NAPCON 2020.

I wish the conference all success and encourage all members working across the government, NGOs, private and corporate sectors, and the community, to pool our expertise and "Prepare Together for a Better Future".

Dr. K. S. Sachdeva

Deputy Director-General (TB)

Head, Central TB Division

Project Director, National TB Elimination Programme



The Asian Pacific Society of Respiriology

The APSR wishes all the best to the NAPCON Conference

Full confidence for the great success of NAPCON 2020!

A surge of COVID-19 has forced us to give up holding conferences and congresses in their usual format. Under these difficult situations, the promotion of academic activities and education are the most important issues for academic societies. The National College of Chest Physicians (India) and Indian Chest Society have tackled the problem, and will hold what will surely be a marvelous virtual meeting, the Virtual NAPCON 2020. As the president of the Asian Pacific Society of Respiriology (APSR), I sincerely appreciate the opportunity to oversee the APSR International Symposium on COVID-19 in the Asia-Pacific region. In addition, I pay my deep respect for the excellent and fruitful programme arrangement of NAPCON 2020. It is a great pleasure that we are taking a step forward to overcome respiratory diseases, including COVID-19, through this virtual meeting.

I expect further development of your societies and NAPCON, and also hope your societies will keep in touch with the APSR.

Thank you very much.

With best regards,

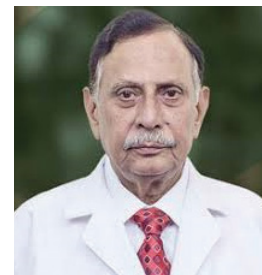
A handwritten signature in black ink, which appears to read 'Yoichi Nakanishi', is written over a light blue circular watermark.

Yoichi Nakanishi

President, Asian Pacific Society of Respiriology

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From the Desk of Organizing Chairman, NAPCON 2020



Prof. Dr. S. N. Gaur
Organizing Chairman, NAPCON 2020

Dear Delegates ,

All of us belonging to the fraternity of Pulmonary and Critical care medicine have become front-line warriors during the COVID-19 pandemic, as society as a whole relies on largely on our efforts. It is an opportunity for all of us to join hands and take the lead to strengthen our healthcare system by working together.

The current COVID-19 pandemic with subsequent lockdown and restrictions on travel and gathering has rendered hosting of a physical conference difficult . Under these circumstances , to ensure the continuity of medical education, we decided to host the 22nd NAPCON [Joint National Conference on Pulmonary Diseases of the National College of Chest Physicians (India) and Indian Chest Society] , the biggest annual national conference of the specialty of Pulmonary Medicine in India for the very first time on a virtual platform. Virtual NAPCON 2020 is scheduled from 27th to 31st January 2021 and will have Workshops, Guest Lectures, Symposia, Honored Lectures, Debates on Controversies, Panel Discussions, and Meet the Professor sessions on recent advances of Pulmonary, Critical Care and Sleep Medicine to provide update on relevant topics concerning the specialty, as well as the Post-Graduate Quiz to encourage Young Talent.

We have a large number of foreign faculties deputed from Chest Associations from the United States, Europe, South-East Asia, and from Neighboring Countries at Virtual NAPCON 2020. In addition, we will also have Four Oration lectures and One Life-Time Awardee each from NCCP (I) and ICS , as well as NCCP(I) and ICS Young Scientist Awards to encourage presenters below 35 years of age. As is the convention, Virtual NAPCON 2020 will also host the annual Governing Council meetings and the General Body meetings of both NCCP(I) and ICS for all attending members to participate.

All the last twenty-one NAPCONs were a grand success, appreciated by all the members as well as the foreign faculty and delegates. I am sure that the same positive spirit will continue. In the limited time available, the Organizing Committee has put in their best efforts, to organize Virtual NAPCON 2020 in a manner to make it really a memorable academic event. I thank all members of the Organizing Committee, Scientific Committee and Other Committees for their efforts. I welcome you all to Virtual NAPCON 2020 and wish the conference a grand success.

We wish You and Family a Happy and Healthy New Year.

Prof. Dr. S. N. Gaur

Organizing Chairman
NAPCON 2020

From the Desk of Organizing Secretary, NAPCON 2020

**Dr. Nikhil Sarangdhar**

Organizing Secretary, NAPCON 2020

Dear Colleagues,

NAPCON (National Conference on Pulmonary Diseases) has been jointly organized by the National College of Chest Physicians (India) and Indian Chest Society since 1999. NAPCON has grown each year to become one of the largest and most sought-after conferences of Pulmonary diseases globally, and, apart from being a much awaited academic and cultural event, also provides opportunity for many pulmonologists across the country and the world to meet and interact to share diverse opinions and experiences.

The enormous task of organising the 22nd NAPCON 2020, for the very first time, on a Virtual Platform, from 27th to 31st January 2021, due to the prevailing situation caused by COVID-19, rendering hosting of a physical conference difficult, has been entrusted to our team. Today's era of digital communication has facilitated the exchange of diverse opinions, ideas, knowledge and experiences from people across the world. Distances and boundaries are no longer what they seemed to be, as the world evolves into a digital village.

In the limited time available we have worked round-the-clock to put together a state-of-the-art Scientific Programme, rich in academic content, exceptional in diversity and expertise of national and international faculty in the wide arena of Pulmonary Medicine and Allied Sciences which is designed to change the perspective of your day-to-day clinical practice, appealing to the interest of practitioners, post-graduate students, senior stalwarts and budding chest physicians, all alike. For the very first time the Workshops and Scientific Programme will have participation of more than 400 national and 100 international faculty, an unprecedented achievement in the history of NAPCON. The news that Chest specialists from all over the country and abroad are assembling together on one virtual platform to disseminate their knowledge, expertise and years of experience ignites the spark of scientific temper which spreads like wild fire in the minds and hearts of interested practitioners, consultants, teachers, post-graduate students and research workers in the field, inculcating in them a desire to interact with learned stalwarts by attending NAPCON 2020 to participate in the exchange of knowledge and share their diverse experiences for better understanding and cooperation. The keen interest and enthusiasm is palpable, as evidenced by the large number of abstracts (1002) submitted for presentation at NAPCON 2020, the best of which will be selected for NCCP(I) - Prof. Dr. S. N. Gaur Young Scientist Award, ICS- Dr. J. C. Kothari Young Scientist Award and twelve categories of NAPCON 2020 award. Of particular interest are the nine pre-conference workshops, where delegates get a chance to update their knowledge and fine-tune their expertise and working skills. In addition there is also NCCP(I) - NAPCON 2020 All-India PG Quiz for meritorious post-graduates across the country to keep up the academic interest and also the NAPCON Talent Hunt, where all can participate and demonstrate their skills and talent in extra-curricular activities during the cultural programme.

I place on record the pioneering step and bold decision taken by the National College of Chest Physicians (India) to host a Virtual NAPCON in the current times, keeping in touch with contemporary health dynamics to ensure academic continuity. I thank NCCP(I) for entrusting me with the responsibility of Organizing Secretary of NAPCON for a second time, after 2016. I acknowledge the visionary leadership of Dr. S. N. Gaur [Organizing Chairman, NAPCON 2020 and Secretary, NCCP(I)] for his guidance and encouragement and untiring efforts, Dr. S. K. Katiyar [Chairman, Scientific Committee] for drafting a par-excellent Scientific Programme and all our national and overseas faculty for being accessible, cooperative and supportive at all times. I am also grateful for the constant support and encouragement given by our NAPCON Core Committee members Dr. P. D. Motiani, [President, NCCP(I)], Dr. S. K. Katiyar, Dr. Narayan Mishra and Dr. Rajesh Solanki, as well as for the goodwill and support of the National Leadership of the Indian Chest Society, Dr. D. J. Christopher [President, ICS], Dr. Rajesh Swarnakar [Secretary, ICS], Dr. D. Behera [President-Elect, ICS] and Dr. J. K. Samaria [Treasurer, ICS]. I express my gratitude for the words of encouragement and positive feedback given by delegates, faculty, students and others who personally appreciated our work by telephone, e-mail or other modes of communication which motivated us to conduct this conference in a professional and orderly manner.

I wish the conference all success and welcome each one of You to Virtual NAPCON 2020 to enjoy the Academic and Cultural Programmes that we have meticulously prepared for all.

Dr. Nikhil Sarangdhar

Organizing Secretary, NAPCON 2020

From the Desk of President, NCCP(I)



Dr. P. D. Motiani
President, NCCP(I)

It is my proud privilege to welcome you all in 22nd NAPCON 2020 virtual, jointly organized by NCCP (I) and ICS from 27th - 31st January 2021. COVID 19 pandemic has restricted the world to organize the conference or other scientific activities in physical manner, therefore virtual conferences are now been organized

The field of pulmonary medicine, critical care, sleep medicine, pulmonary rehabilitation, interventional pulmonology and others are fast progressing speciality, needs advancement for better management.

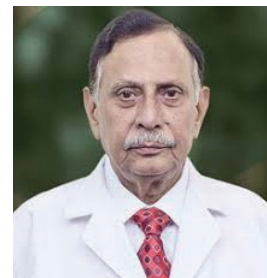
This conference has proved to be the best platform nationally and internationally for pulmonologist, faculty, private practitioners and post graduate students to keep themselves, abreast with new emerging trends with a blend of experience of seniors from National - International Associations and enthusiastic upcoming young faculty through the exchange of ideas and views.

Organizing committee and scientific committee of NAPCON 2020 are sparing no efforts to ensure high standards and reputation. Participation by National and International faculty of ACCP, ATS, ERS, APSR, and International Union against Tuberculosis in the various workshops and scientific program symposia, lectures and panel discussions to make the conference a most memorable event.

I, extend my good wishes to Organizing Chairman Prof. Dr. S. N. Gaur, Organizing Secretary Dr. Nikhil Sarangdhar and Chairman of Scientific Committee Prof. Dr. S. K. Katiyar for their passion and hard work to make the first NAPCON conference on a virtual platform with new heights.

DR. P. D. MOTIANI

From the Desk of Secretary, NCCP(I)



Prof. S. N. Gaur

Honorary Secretary, National College of Chest Physicians (India), and
Professor and Head, Respiratory Medicine,
School of Medical Sciences and Research, Sharda University, Greater NOIDA, U.P.

Dear Colleagues,

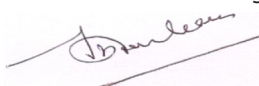
The National College of Chest Physicians (India) and Indian Chest Society has this year entrusted Dr. S. N. Gaur, Organizing Chairman, Dr. Nikhil Sarangdhar, Organizing Secretary, Dr. Savita Jindal, Joint Organizing Secretary of NAPCON-2020 Virtual to host the biggest annual national conference of the specialty of Pulmonary Medicine under the aegis of National College of Chest Physicians (India) and Indian Chest Society, which is scheduled as Virtual from 27th – 31st January, 2021. The step is taken due to the COVID-19 Pandemic and the Scheduled NAPCON-20 which was to be held at Hyderabad has to be cancelled. To avoid missing the year 2020 as the year without NAPCON, this step was taken to hold it on Virtual Platform. Nine P. G. Training Workshops will be on 27th January, 2021. It will include the current topics. The main Conference will be from 28th-31st January, 2021. which will have Guest Lectures, Symposia, Debates, Panel Discussions, Year under review on recent topics of Respiratory Diseases involving International and National Faculty.

NAPCON-2020 will have four NCCP (I) Orations – (1) NCCP(I) - Prof. Raman Viswanathan Memorial Chest Oration, (2) NCCP (I) – Prof. S. K. Jain – Prof. S. K. Katiyar Chest Oration, (3) NCCP (I) –Prof. A. S. Paintal – Dr. R. C. Jain Memorial Chest Oration, (4) NCCP (I) – Prof. P. S. Shankar – Prof. K. C. Mohanty Chest Oration and in addition, NCCP(I) –Prof. M. M. Singh Memorial Lifetime Achievement Award, and three NCCP(I) – Prof. S. N. Gaur Young Scientist Awards to encourage the young scientist (under 35 years of age). There will be Award money. ICS will also have 4 Orations, Young Scientist Award and Lifetime achievement Awards/Orations.

I am happy to inform you that all the last Twenty -One NAPCONs were a grand success, appreciated by the members as well as the foreign faculty/delegates. I am sure that the same sprit will continue and we will have more and more participation. However, this is the first time we are doing a 5 day Virtual conference and need good wishes from all. As in the past, we are expecting a good number of foreign faculties in NAPCON-2020 Virtual with pre recorded sessions from ACCP, ATS, ERS, APSR and from neighboring countries.

Our team of NAPCON-2020 Virtual with Dr. Nikhil Sarangdhar as the Organizing Secretary will put in all efforts to make it a successful virtual event.

On behalf of the National College of Chest Physicians (India) and on my personal behalf, I thank the team of NAPCON-2020 Virtual and the members of the Organizing Committee for their sincere and hard works and I welcome you all to NAPCON-2020 Virtual and wish

 ccess.

(S.N.GAUR)
Hon. Secretary, NCCP (I)

From the Desk of President, ICS



Prof. Dr. D. J. Christopher
President, ICS

Dear Colleagues and Friends,

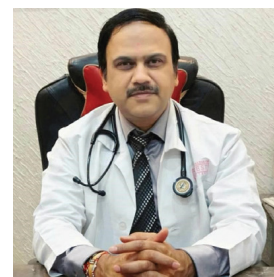
I am very pleased to write this note of greetings and welcome on the occasion of NAPCON 2020. While we reel under the pandemic, the need to exchange scientific knowledge becomes more pressing. The National conference provides the best platform for the exchange of knowledge to the largest section of practitioners and trainees of our speciality. When the NAPCON annual physical meeting planned in Hyderabad in November this year was cancelled due to the prevailing pandemic, it seemed very likely that we would have to miss the conference this year.

These are unprecedented times, and this is an unprecedented NAPCON. For the first time, this prestigious national event of both the NCCP (I) & ICS has gone virtual. While we would miss face to face meeting of our colleagues, I understand efforts are being made to deliver academic content of very high quality. I trust it would be a novel experience attending the conferences from our offices and homes.

I appreciate the NCCP (I) leadership and the Organizing Committee for this bold step and wish the meeting the very best.

Prof. Dr. D. J. Christopher
President, ICS

From the Desk of Secretary, ICS



Dr. Rajesh Swarnakar
Secretary, ICS

Dear Colleagues,

On behalf of the Organising committee , it is my pleasure to invite all of the great Pulmonologists, clinicians, academicians, young researchers, Business delegates and post graduate students from all over India & abroad to attend the Indian National Conference on Pulmonary Diseases NAPCON 2020 from 27th to 31st January , 2021 , happening virtually due to ongoing pandemic . NAPCON conference shares an insight into the recent research and cutting edge technologies in the field Pulmonology which gains immense interest with the colossal and exuberant presence of adepts, young and brilliant clinicians, researchers, business delegates and our talented student community.

We are all acutely aware of the growing crisis associated with coronavirus. Thus it is timely that this virtual meeting will enable you to discuss critical issues in this escalating problem along with other pressing issues in managing respiratory diseases. I commend you for having exciting and memorable virtual events – ‘the new normal’ filled with enlightening interactive sessions. I sincerely hope that this conference will deliberate and discuss all the different facets of this exciting field of Pulmonology and come up with recommendations and deliberations that will lead to a better, healthier and pollution-free world.

I wish the conference a great success.

Come and join this NAPCON Movement to build our specialty a leading one among all.

Dr. Rajesh Swarnakar
Secretary, ICS

From the Desk of Chairman, Scientific Committee, NAPCON 2020

**Prof. Dr. S. K. Katiyar**

Chairman, Scientific Committee, NAPCON 2020

Dear Colleagues,

Greetings from the Scientific Committee of NAPCON-2020. As Chairman, of the committee, it is my great pleasure and privilege to invite you all, the academicians, consultants, in service, young researchers, and students, from all over the country and across the world, to attend virtual NAPCON-2020, a conference with a difference. We assure you with an excellent academic feast and to have a stimulating time and a great learning experience.

NAPCON (National Conference on Pulmonary Diseases), is jointly organized by the National College of Chest Physicians (India) and Indian Chest Society, successfully every year, since 1999. It has now attained a stature of having been one of the largest attended and most sought-after conference of the pulmonologists in the country. This year, NAPCON-2020, was originally scheduled at Hyderabad, but the current COVID-19 pandemic, rendered hosting of a physical conference difficult. Many academic events got cancelled or deferred due to this disease. There were concerns about NAPCON-2020 also, but finally it has gone virtual, not only to keep the trend going, but also to make attempts to design a program which is diverse, highly educative, and truly international, and quite distinctive for this virtual NAPCON 2020, than what we have been witnessing during two decades long journey of NAPCON. We are also going to have a wider participation of the delegates this year who will have a great opportunity to exchange views with the top experts in various fields of pulmonary medicine.

During virtual NAPCON-2020, besides the unique and innovative scientific program, we also have exclusive workshops on current hot topics to enhance your learning and improve practical working skills. Our focus of discussion will certainly be the COVID-19. The other issues will include critical care, interventional pulmonology, imaging techniques, surgical interventions, problems related to air pollution, climatic change, natural disasters and smoking, besides various lung diseases. There will also be discussions on futuristic issues like artificial intelligence, microbiome, probiotics, stem cells, biologicals, e-nose technology, telemedicine, nanotechnology, 3-D pulmonary reconstruction, air travel, etc.

The presence of renowned international and national faculty will be the highlight of the scientific sessions providing an insight on the latest developments and achievements in our specialty, that may even change our concepts on certain key issues. Nearly 400 national and over 110 international faculty members, will be holding the fort of the scientific program. For the first time, several prestigious international organizations, from across the globe, will have their exclusive sessions during the scientific program. We also have a record number of abstracts this year, for the free paper and E-poster presentations, and a national level quiz too.

Please block the dates and be a partner to this great scientific bonanza. Virtual NAPCON-2020 will be an excellent platform to showcase the latest research, developments and innovations taking place in the field of pulmonology. Join us to have a great learning experience. We promise you a well-planned and structured NAPCON-2020 with an access to a huge knowledge bank under one roof, unparalleled to any such event. No hassles, no travel, no hotels, be at home, and no scare and apprehensions of COVID-19.

We look forward to welcoming you during virtual NAPCON-2020 and your presence will help us make this conference a memorable event and it will also add to the vibrancy of the meet, enrich discussions, contribute to professional knowledge exchange, open avenues to work together and collaborations in future research.

“Education has a limit, but not the learning and it is better to be a learner lifelong”

Best wishes for a great learning experience !

Prof. Dr. S. K. Katiyar

Chairman, Scientific Committee, NAPCON 2020

From the Desk of Joint Organizing Secretary



Dr. Savita Jindal

Joint Organizing Secretary

Dear Colleagues and Delegates,

A warm welcome on behalf of Organizing Committee to Virtual NAPCON 2020, the 22nd Joint National Conference on Pulmonary Diseases of National College of Chest Physicians and Indian Chest Society. In view of the challenging times that the world is facing currently due to COVID-19 pandemic, we are organizing a virtual conference this year. Let us enlighten and shower our knowledge in a different way this year making it more fascinating with the same curiosity we have each year.

Together we can make maximum use of the unmatched talents even amidst these hard times. Let us unite and conduct this event together with active participation and enthusiasm like never before.

A sincere thanks to each and everyone engaged in the organization of this wonderful event. We are hopeful for the success and satisfaction of Virtual NAPCON 2020 in the ongoing difficult times.

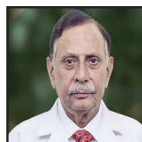
“Strength does not come from physical capacity. It comes from an indomitable will.” - Mahatma Gandhi.

Dr. Savita Jindal

Joint Organizing Secretary



ORGANIZING COMMITTEE

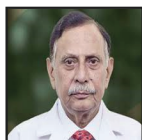


Dr. S. N. Gaur
Organizing Chairman, NAPCON 2020
Secretary, NCCP(I)



Dr. Nikhil Sarangdhar
Organizing Secretary, NAPCON 2020

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Dr. S. N. Gaur



Dr. P. D. Motiani



Dr. S. K. Katiyar



Dr. Narayan Mishra



Dr. Rajesh Solanki



Dr. Nikhil Sarangdhar



Dr. Savita Jindal
Joint Organizing Secretary, NAPCON 2020

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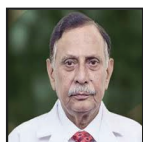


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Chairman

NCCP(I) Members



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Dr. S. N. Gaur



Dr. K. B. Gupta



Dr. Rajesh Solanki



Dr. Nikhil Sarangdhar

ICS Members



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Dr. Rajesh Swarnakar



Dr. Deepak Talwar



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Dr. Harjit Dumra



Dr. Jayaprakash B



Dr. Mansi Gupta



Dr. Pranav Ish

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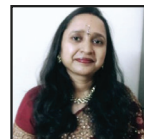
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Dr. Tushar Patel



Dr. Savita Jindal



Dr. Varun Patel

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National Coordinator



Dr. Kripesh R. Sarmah



Dr. Vishakha Kapadia

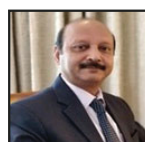


Dr. Amit Dedun

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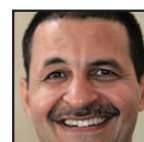
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Dr. Rupak Singla



Dr. Vivek Nangia



Dr. Vishal Chopra



Dr. Mahendra Kumar

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Dr. Raj Bhagat



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Dr. Salil Bhargava



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Dr. Savita Jindal
Convener



Dr. Mansi Gupta



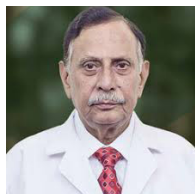
Dr. Shubhra Jain



NATIONAL COLLEGE OF CHEST PHYSICIANS (INDIA) GOVERNING COUNCIL (2020-2021)



Dr. P. D. Motiani
President (2020-21)



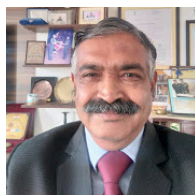
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Secretary (2019-22)
Organizing Chairman,
NAPCON 2020



Dr. B. O. Tayade
President-Elect (2021-22)



Dr. Surya Kant
Immediate Past President (2019-20)



Lt. Gen. Dr. B.N.B.M. Prasad
Vice-President (2020-21)



Dr. Raj Bhagat
Joint Secretary (2020-22)



Dr. V. K. Singh
Treasurer (2018-21)



Dr. Raj Kumar
Editor, IJCDAS (Director, VPCI)



Dr. J. C. Suri
Zonal Chairman (North)



Dr. R. Narasimhan
Zonal Chairman (South)



Dr. Narayan Mishra
Zonal Chairman (East)



Dr. V. K. Jain
Zonal Chairman (West)



Dr. S. K. Katiyar
Zonal Chairman (Central)



Dr. Rakesh Chawla
Councillor (2019-21)



Dr. Ramakant Dixit
Councillor (2019-21)



Dr. Salil Bhargava
Councillor (2019-21)



Dr. K. B. Gupta
Councillor (2020-22)



Dr. Rajendra Prasad
Councillor (2020-22)



Dr. Gajendra Vikram Singh
Councillor (2020-22)



Dr. Nikhil Sarangdhar
Organizing Secretary,
NAPCON 2020



Dr. S. K. Katiyar
Chairman, Academic Forum



Dr. Rajesh N. Solanki
Member, Academic Forum



Dr. Rajesh Chawla
Member, Academic Forum



Dr. K. B. Gupta
Member, Academic Forum



INDIAN CHEST SOCIETY GOVERNING BODY (2020-2021)



Dr. D. J. Christopher
President



Dr. Rakesh Swarnakar
Secretary



Dr. D. Behera
President-Elect



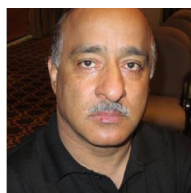
Dr. Sundeep Salvi
Vice-President



Dr. Sudhir Chaudhri
Immediate Past-President



Dr. J. K. Samaria
Treasurer



Dr. Parvaiz Koul
Editor-in-Chief, Lung India



Dr. M. Sabir
Editor, Lung Forum



Dr. Rakesh Chawla
Zonal Chairman (North)



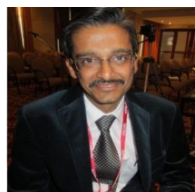
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Zonal Chairman (South)



Dr. Indranil Halder
Zonal Chairman (East)



Dr. Neeraj Gupta
Zonal Chairman (West)



Dr. Raja Dhar
Member



Dr. Prashant Chhajed
Member



Dr. Radha Munje
Member



Dr. Subhakar Kandi
Member



Dr. G. C. Khilnani
Member



Dr. Deepak Talwar
Member

NATIONAL COLLEGE OF CHEST PHYSICIANS (INDIA)

(Previously INDIAN ASSOCIATION OF CHEST DISEASES)



A BRIEF HISTORY

The Indian Association of Chest Diseases was established in the year 1959, with fifty-eight founder members. It was formally inaugurated at the time of Indian Science Congress by the Late Sir Arcot Lakshmanaswami Mudaliar, Vice Chancellor, Madras University, in January 1959. Dr.V.K.R.V.Rao, Vice Chancellor, University of Delhi, presided. Soon after the inauguration, the first business meeting was held under the President ship of Late Dr. A.V. Baliga.

The Association is a registered body functioning essentially for the promotion of the cause of chest diseases and allied sciences. According to the rules of the Association, the first elected members of the Governing Body including the Chairman held office for five years. Later, the rules provided for election of office bearers of the Governing Body as follows: "While the Chairman, Secretary and treasurer will hold office for 3 years, the members of the Governing Body along with the Governors of the National Chapter of the American College of Chest Physicians will hold office for 2 years". In 1968, it was resolved that due to the help and cooperation extended by the Vallabhbhai Patel Chest Institute, the Director of the Institute will be the ex-officio member of the Governing Body.

The first annual conference was held in January 1960 jointly with the Association of Physicians of India and other specialist organisations at New Delhi. Subsequent annual conferences were also held jointly with the Association of Physicians of India till 1963, in which year the Association sponsored the VII International Congress on Chest Diseases in New Delhi. The following year, the Association held its fourth annual conference independently at New Delhi. The President of the Royal College of Physicians, Edinburgh, was a special invitee and guest of honor and he presided over the symposium on 'Recent Advances in the Chemotherapy of Tuberculosis' in New Delhi, open not only to the specialists but also to the general practitioners. The Association held special symposium on 'Respiratory Allergy' in New Delhi in 1967.

In 1974, the Association held its annual conference jointly with the Tuberculosis Association of India. In 1975, the Association along with the Asthma and Bronchitis Foundation of India and the National Chapters of American College of Chest Physicians held an International Conference on Asthma, Bronchitis and Allied Conditions in New Delhi. Dr.Carvin Hinshaw delivered the convocation address.

As part of the aims and objectives of the Association, a Journal, namely 'Indian Journal of Chest Diseases' was started and the first issue came out on July 1, 1959. The journal was quarterly published jointly with the Vallabhbhai Patel Chest Institute, Delhi University. In 1976, in keeping with the progressive thinking, the name of the journal was changed to the 'Indian Journal of Chest Diseases and Allied Sciences'.

The Indian Journal of Chest Diseases and Allied Sciences is the official publication and is published jointly with the Vallabhbhai Patel Chest Institute, Delhi. This journal has been widely acclaimed at both national and international levels. NCCP(I) also started under the leadership of then President Dr. Rajesh Chawla, a Newsletter titled "Pulmonary Communications" in 2016, which was continued as "Lung Bulletin" in 2020 with Dr. Nikhil Sarangdhar as Editor, NCCP(I) Newsletter .

At the annual meeting of the Association held in 1964 both, the Governing Body and the General Body, decided to institute a prize for the best article on any aspect of chest diseases published in either Indian or foreign periodicals, by a young scientist below 40 year of age. In order to give encouragement to our scientists it was decided to extend the prize to the best paper presentation at the annual conference. To maintain a high standard, the prize can even be omitted for that year, if the quality of no paper comes up to the required standards in any such conference.

INDIAN ASSOCIATION FOR CHEST DISEASES

Was renamed as NATIONAL COLLEGE OF CHEST PHYSICIANS (INDIA) in 1981

The Indian Association for Chest Diseases (IACD) in its meeting held on November 15, 1979-subsequently ratified by the General Body meeting held on November 6, 1979, unanimously decided to change the name of IACD to National College of Chest Physicians (India) and to make consequential changes/amendments in the memorandum of the Association, and its rules and regulations. Accordingly, a sub-committee, duly constituted for this purpose, re-drafted the memorandum, and the rules and regulations which were approved by the prescribed authority in a special meeting convened on June 30, 1980 and duly confirmed at a subsequent special meeting of the General Body held on August 14, 1980 at the office of the Tuberculosis Association of India, 3 Red Cross Road, New Delhi. The National College of Chest Physicians (India) thus came into being in January 1981.

The Association/College has held 33 conferences with A.P.I. since its inception in 1959. Since the 28th Annual Conference in Delhi, 1989, the College has organised its annual conferences independently (NACCON). These conferences have proved to be highly successful and have been chaired by the President of NCCP (I). From 1999, the NCCP (I) with ICS is having Joint conferences - NAPCON.

NAPCON**National Conference on Pulmonary Diseases**

After several positive negotiations and meeting spread over almost 8 years, the NCCP (I) and Indian Chest Society (ICS), the two national bodies on Pulmonary Medicine agreed to have the annual conference jointly. This is Called **National Conference on Pulmonary Diseases, in short - NAPCON**. The Organising Secretary and the venue of the NAPCON will be decided on alternate years by these organisations. The first NAPCON was held in Delhi in 1999 and so far following NAPCONs have been held.

Sr. No.	YEAR	VENUE	ORGANISING CHAIRMAN	ORGANISING SECRETARY
1	1999	Delhi		Dr. J. C. Suri
2	2000	Kanpur		Dr. S. K. Katiyar
3	2001	Mumbai	Dr. J. C. Kothari	Dr. Rohini Chowgule
4	2002	Jaipur	Dr. T. N. Sharma	Dr. N. K. Jain
5	2003	Coimbatore	Dr. T. K. Moinudeen	Dr. T. Mohan Kumar
6	2004	Ahmedabad	Dr. Gautam Bhagat	Dr. Rajesh Solanki
7	2005	Kolkata	Dr. A. K. Ghosh	Dr. A. G. Ghoshal
8	2006	Nagpur		Dr. B. O. Tayade
9	2007	Chandigarh	Dr. S. K. Jindal	Dr. Dheeraj Gupta
10	2008	Lucknow		Dr. Rajendra Prasad
11	2009	Calicut		Dr. C. Ravindran
12	2010	Jodhpur	Dr. P. D. Motiani	Dr. K. C. Agarwal
13	2011	Delhi	Dr. V. K. Vijayan	Dr. Raj Kumar
14	2012	Bhubaneswar	Dr. N. K. Gacchayat	Dr. Narayan Mishra
15	2013	Chennai	Dr. Vijayalakshmi Thanasekaraan	Dr. B. Rajagopalan
16	2014	Agra	Dr. A. S. Sachan	Dr. Rakesh Bhargava Dr. Santosh Kumar
17	2015	Jaipur	Dr. N. K. Jain	Dr. Virendra Singh
18	2016	Mumbai	Dr. K. C. Mohanty	Dr. Agam Vora Dr. Nikhil Sarangdhar
19	2017	Kolkata	Dr. A. G. Ghoshal	Dr. Dhruvajyoti Roy Dr. Raja Dhar
20	2018	Ahmedabad	Dr. Rajesh Solanki	Dr. Raj Bhagat Dr. Tushar Patel
21	2019	Kochi	Dr. C. Ravindran	Dr. Rajesh Venkat
22	2020	Virtual	Dr. S. N. Gaur	Dr. Nikhil Sarangdhar

The following held office of the President of the Annual Conferences of the Association, and later National College of Chest Physicians (India). From 1989 the President of the College was also the President of the annual conference.

PRESIDENTS OF THE ANNUAL CONFERENCES

1	1960	Dr. A.C. Ukil	32	1991	Dr. S. C. Kapoor
2	1961	Dr. K. L. Wig	33	1992	Dr. P. S. Shankar
3	1962	Dr. S. S. Ugraonkar	34	1993	Dr. R. K. Narang
4	1963	No conference	35	1994	Dr. K. C. Mohanty
5	1964	Dr. S. K. Sen	36	1995	Dr. S. K. Jain
6	1965	Dr. P. K. Ghosh	37	1996	Dr. S. R. Mathur
7	1966	Dr. K. K. Datey	38	1997	Dr. Baldev Raj

8	1967	Dr. N. Gopinath
9	1968	Dr. R. Subramanian
10	1969	Dr. P. K. Sen
11	1970	Dr. K. N. Sen
12	1971	Dr. K. N. Rao
13	1972	Dr. Basu Chaudhary
14	1973	Dr. S. D. Store
15	1974	Dr. Hans Kumar
16	1975	Dr. P. U. Rao
17	1976	Dr. O. P. Mittal
18	1977	Dr. M. M. Singh
19	1978	Dr. J. S. Guleria
20	1979	Dr. J. S. Guleria
21	1980	Chairman, IACD
22	1981	Dr. F. E. Udhwadia
23	1982	Dr. A. S. Paintal
24	1983	Dr. Hari Har Das
25	1984	Dr. Samir K. Gupta
26	1985	Dr. S. C. Kapoor
27	1986	Dr. S. P. Pamra
28	1987	Dr. S. K. Jain
29	1988	Dr. J. S. Guleria
30	1989	Dr. M. M. Singh
31	1990	Dr. S. K. Jain

39	1998	Dr. R. P. Bhagi
40	1999	Dr. M. S. Agnihotri
41	2000	Dr. V. K. Sharma (JAN.)
42	2000	Dr. A. S. Sachan (NOV.)
43	2001	Dr. V. K. Arora
44	2002	Dr. D. D. S. Kulpati
45	2003	Dr. S. K. Katiyar
46	2004	Dr. V. K. Jain
47	2005	Dr. N. K. Jain
48	2006	Dr. Rajendra Prasad
49	2007	Dr. J. N. Banavaliker
50	2008	Dr. K. B. Gupta
51	2009	Dr. P. K. Gupta
52	2010	Dr. D. Behera
53	2011	Dr. G. C. Khilnani
54	2012	Dr. G. C. Khilnani
55	2013	Dr. J. C. Suri
56	2014	Dr. S. K. Luhadia
57	2015	Dr. Narayan Mishra
58	2016	Dr. Rajesh Chawla
59	2017	Dr. R. S. Bedi
60	2018	Dr. R. N. Solanki
61	2019	Dr. Suryakant
62	2020	Dr. P. D. Motiani

PRESIDENTS & SECRETARIES OF THE COLLEGE

YEAR	PRESIDENT	SECRETARY
1981	Dr. R. Vishwanathan	Dr. M. M. Singh
1982 – 1985	Dr. A. S. Paintal	Dr. M. M. Singh
1986 – 1987	Dr. J. S. Guleria	Dr. M. M. Singh
1988	Dr. M. M. Singh	Dr. S. K. Jain (Delhi)
1989	Dr. S. K. Jain	Dr. S. N. Gaur
1990	Dr. S. C. Kapoor	Dr. S. N. Gaur
1991 – 1992	Dr. P. S. Shankar	Dr. Ashok Shah
1992 – 1993	Dr. R. K. Narang	Dr. S. N. Gaur
1993 – 1994	Dr. K. C. Mohanty	Dr. S. N. Gaur
1995 – 1996	Dr. S. R. Mathur	Dr. S. N. Gaur
1996 – 1997	Dr. Baldev Raj	Dr. S. N. Gaur
1997 – 1998	Dr. R. P. Bhagi	Dr. S. N. Gaur
1998 – 1999	Dr. M. S. Agnihotri	Dr. S. N. Gaur
1999 – 2000	Dr. V. K. Sharma	Dr. S. N. Gaur

2000 – 2001	Dr. A. S. Sachan	Dr. S. N. Gaur
2001 – 2002	Dr. V. K. Arora	Dr. S. N. Gaur
2002 – 2003	Dr. D. D. S. Kulpati	Dr. S. N. Gaur
2003 – 2004	Dr. S. K. Katiyar	Dr. S. N. Gaur
2004 – 2005	Dr. V.K.Jain	Dr. S. N. Gaur
2005 – 2006	Dr. N.K.Jain	Dr. S. N. Gaur
2006 – 2007	Dr. Rajendra Prasad	Dr. S. N. Gaur
2007 – 2008	Dr. J. N. Banavaliker	Dr. S. N. Gaur
2008 – 2009	Dr. K.B.Gupta	Dr. S. N. Gaur
2009 - 2010	Dr. P.K.Gupta	Dr. S. N. Gaur
2010 - 2011	Dr. D. Behera	Dr. S. N. Gaur
2011 - 2012	Dr. G. C. Khilnani	Dr. S. N. Gaur
2012 - 2013	Dr. G. C. Khilnani	Dr. S. N. Gaur
2013 - 2014	Dr. J. C. Suri	Dr. S. N. Gaur
2014 - 2015	Dr. S. K. Luhadia	Dr. S. N. Gaur
2015 - 2016	Dr. Narayan Mishra	Dr. S. N. Gaur
2016 - 2017	Dr. Rajesh Chawla	Dr. S. N. Gaur
2017 - 2018	Dr. R. S. Bedi	Dr. S. N. Gaur
2018 - 2019	Dr. R. N. Solanki	Dr. S. N. Gaur
2019 - 2020	Dr. Suryakant	Dr. S. N. Gaur
2020 - 2021	Dr. P. D. Motiani	Dr. S. N. Gaur

AWARDS

The Association / College has awards to encourage research activities in the field of T. B. and Respiratory Diseases as well as their contribution to the specialty.

A) WARNER-NCCP (I) ORATION (renamed as Parke - Davis NCCP (I) Chest Oration in 1992)

The Warner Hindustan Ltd., through the Asthma, Bronchitis & Cancer Lung Foundation of India, funded annually an oration on any aspect of Chest Diseases, to be delivered at the time of the annual conference. On the special request of the donors, Dr. R. Vishwanathan, who had perhaps the longest experience in the field of chest diseases, delivered the 1st oration in 1972.

The name of the oration was changed to Parke-Davis/NCCP (I) Chest Oration since 1992, on the request of the host organisation since Warner Hindustan Company merged into Parke-Davis Company. The award was finally discontinued after 1995. The list of orators is given below:

Year	Name	From (Place)
1972	Dr. R. Vishwanathan	Delhi
1973	Dr. K. L. Wig	Delhi
1974	Dr. J. P. Sethi	Jaipur
1975	Dr. K.V. Thiruvengadam	Madras
1976	Dr. J. R. Shah	Mumbai
1977	Dr. P. K. Ghosh	Calcutta
1978	Dr. F. E. Udawadia	Mumbai
1979	Dr. P. K. Sen	Calcutta
1981	Dr. A. S. Paintal	Delhi
1982	Dr. G. Daddi	Italy

1983	Dr. H. S. Randhawa	Delhi
1984	Dr. J. S. Guleria	Delhi
1985	Dr. Sameer K. Gupta	Calcutta
1986	Dr. S.K. Jain &	Delhi
		Dr. N.P. Mishra
1987	Dr. M. M. Singh	Delhi
1989	Dr. P. S. Shankar	Gulbarga
1990	Dr. S. C. Kapoor	Delhi
1991	Dr. S. P. Tripathi	Delhi
1992	Dr. K. C. Mohanty	Mumbai
1993	Dr. R. K. Narang	Kanpur
1994	Dr. D. D. S. Kulpati	Delhi
1995	Dr. Hans Kumar	Jaipur

(This award was discontinued from NCCP (I) after 1995)

(B) NCCP(I) – Prof. RAMAN VISHWANATHAN MEMORIAL CHEST ORATION

An eminent scientist working in Pulmonology created the Raman Vishwanathan Endowment Fund of the National College of Chest Physicians of India with the objective of arranging the Raman Vishwanathan Memorial Lecture every year. The first lecture was delivered in 1989. The following eminent scientists of Pulmonology have delivered the lecture so far.

Year	Name	From (Place)
1989	Dr. A. S. Paintal	Delhi
1990	Dr. K. V. Thiruvengadam	Madras
1991	Dr. F. E. Udawadia	Bombay
1992	Dr. J. S. Guleria	Delhi
1993	Dr. R. Prabhakar	Madras
1994	Dr. P. S. Shankar	Gulbarga
1995	Dr. J. N. Pande	Delhi
1996	Dr. H. S. Randhawa	Delhi
1997	Dr. S. K. Jain	Delhi
1998	Dr. M. M. Singh	Delhi
1999	Dr. S. K. Jindal	Chandigarh
Name	Conference	From (Place)
Dr. Babu Paidipathy	NAPCON-1999	Michigan (USA)
Dr. P. Ravindran	NAPCON-2000	Thiruvananthapuram
Dr. Samir K. Gupta	NAPCON-2001	Calcutta
Dr. K. C. Mohanty	NAPCON-2002	Mumbai
Dr. D. D. S. Kulpati	NAPCON-2003	Delhi
Dr. S. N. Gaur	NAPCON-2004	Delhi
Dr. B. K. Khanna	NAPCON-2005	Lucknow
Dr. Naresh A. Dewan	NAPCON-2006	U.S.A.
Dr. Atul C. Mehta	NAPCON-2007	U.S.A.
Dr. Om Prakash Sharma	NAPCON-2008	U.S.A.

Dr. R. C. Jain	NAPCON- 2009	Delhi
Dr. Kalpalatha Guntupalli	NAPCON-2010	U.S.A.
Dr. Rajendra Prasad	NAPCON-2011	Lucknow
Dr. V. K. Jain	NAPCON-2012	Bikaner
Dr. D. Behera	NAPCON-2013	Chandigarh
Dr. S. K. Sharma	NAPCON-2014	Delhi
Dr. S. K. Katiyar	NAPCON-2015	Kanpur
Dr. V. K. Arora	NAPCON-2016	Ghaziabad
Dr. N. K. Jain	NAPCON-2017	Jaipur
Dr. K. B. Gupta	NAPCON-2018	Rohtak
r. P. K. Gupta	NAPCON-2019	Jodhpur
Dr. Surender Kashyap	NAPCON-2020 Virtual	Mandi, H. P.

(C) NCCP (I) – Cipla Chest Oration

NCCP (I) - Cipla Chest Oration was created with the objective of awarding oration every year by an eminent scientist working in the field of Pulmonology, preferably on Bronchial Asthma. This award was sponsored by M/S Cipla (India) Ltd. The first oration was delivered in 1997. Following persons have so far received this award: -

Year	Name	From (Place)
1997	Dr. V. K. Arora	Pondicherry
1998	Dr. S. N. Gaur	Delhi
1999	Dr. V. K. Jain	Bikaner
Name	Conference & Year	From (Place)
Dr. S. K. Katiyar	NAPCON-1999	Kanpur
Dr. Rajendra Prasad	NAPCON-2000	Lucknow
Dr. D. Behera	NAPCON-2001	Chandigarh
Dr. S. C. Matah	NAPCON-2002	Varanasi
Dr. N. K. Jain	NAPCON-2003	Jaipur
Dr. V. K. Vijayan	NAPCON-2004	Delhi
Dr. S. K. Agarwal	NAPCON-2005	Varanasi
Dr. Jaikishan	NAPCON-2006	Patiala
Dr. R. C. Shoo	NAPCON-2007	Mangalore
Dr. J. N. Banavaliker	NAPCON-2008	Delhi
Dr. Ashok Shah	NAPCON-2009	Delhi

The Award was discontinued from 2010

D) NCCP (I) – PROF. A. S. PAINTAL – PROF. R. C. JAIN MEMORIAL CHEST ORATION

(Previously called German Remedies Chest Oration)

This Oration was created with the objective of awarding oration every year by an eminent scientist working in the field of Pulmonary Medicine. The award will not be given to the recipient of Warner Chest Orators. NCCP (I) – Parke Davis Orators, NCCP (I) – Cipla Chest Orators to encourage new persons. This award was sponsored by M/S German Remedies Ltd. The first oration was delivered in 2002. Following persons have so far received this award: -

Name	Conference & Year	From (Place)
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Dr. J. C. Suri	NAPCON – 2002	Delhi
Dr. K. B. Gupta	NAPCON – 2003	Rohtak
Dr. R. S. Bedi	NAPCON – 2004	Patiala
Dr. S. K. Luhadia	NAPCON – 2005	Udaipur
Dr. Gopi Chand Khilnani	NAPCON – 2006	Delhi
Dr. P. D. Motiani	NAPCON – 2007	Jodhpur
Dr. Rakesh Chandra Gupta	NAPCON – 2008	Ajmer
Dr. Brig. B. N. B. M. Prasad	NAPCON - 2009	Pune
Dr. Manohar Lal Gupta	NAPCON - 2010	Jaipur
Dr. A. K. Janmeja	NAPCON - 2011	Chandigarh
Dr. Suryakant	NAPCON - 2012	Lucknow
Dr. R. Narsimhan	NAPCON - 2013	Chennai
Dr. A. K. Rajput	NAPCON - 2014	Delhi
Dr. K. C. Agarwal	NAPCON - 2015	Jodhpur
Dr. S. Koolwal	NAPCON - 2016	Jaipur
Dr. S. K. Sarkar	NAPCON - 2017	Jaipur
Dr. Rakesh K. Chawla	NAPCON - 2018	Delhi
Dr. Ravindra K. Dewan	NAPCON - 2019	Delhi
Dr. Manoj K. Goel	NAPCON - 2020 Virtual	Delhi

(E) NCCP (I) – PROF. P. S. SHANKAR – PROF. DR. K. C. MOHANTY CHEST ORATION

(Previously called LUPIN Chest Oration)

This Oration was created with the objective of awarding oration every year by an eminent scientist working in the field of Pulmonary Medicine. The award will not be given to the recipient of Warner Chest Orators, NCCP (I) Parke Davis Orators, Raman Viswanathan Memorial Oration, NCCP (I) – Cipla Chest Orators and NCCP (I) – German Remedies Chest Oration to encourage new persons. This award was sponsored by M/S. Lupin Ltd. The first oration was delivered in 2005. Following persons have so far received this award: -

Name	Conference & Year	From (Place)
Dr. S. K. Sharma	NAPCON – 2005	Delhi
Dr. P. K. Gupta	NAPCON – 2006	Jodhpur
Dr. R. C. Jain	NAPCON – 2007	Delhi
Dr. R. N. Solanki	NAPCON – 2008	Ahmedabad
Dr. Narayan Mishra	NAPCON – 2009	Berhampur
Dr. Rajan Santosham	NAPCON - 2010	Chennai
Dr. Rajesh Chawla	NAPCON – 2011	Delhi
Dr. Raj Kumar	NAPCON-2012	Delhi
Dr. S. Kashyap	NAPCON-2013	Karnal
Dr. Deepak Talwar	NAPCON-2014	Delhi
Dr. Rajiv Goyal	NAPCON-2015	Delhi
Dr. Rohit Sarin	NAPCON-2016	Delhi
Dr. M. K. Sen	NAPCON-2017	Delhi

Dr. Santosh Kumar	NAPCON-2018	Agra
Dr. Raj Bhagat	NAPCON-2019	Ahmedabad
Dr. Nikhil Sarangdhar	NAPCON-2020 Virtual	Mumbai

(F) NCCP (I) – PROF. S. K. JAIN – PROF. S. K. KATIYAR CHEST ORATION

(Previously called Dr. Reddy's Chest Oration)

This Oration was created with the objective of awarding oration every year by an eminent scientist working in the field of Pulmonology. This award was sponsored by M/S Dr. Reddy's India Ltd. Ltd. The first oration was delivered in 2010. Following persons have so far received this award: -

Name	Conference & Year	From (Place)
Dr. S. K. Chhabra	NAPCON - 2010	Delhi
Brig. Dr. M. S. Barthwal	NAPCON - 2011	Pune
Dr. Dheeraj Gupta	NAPCON - 2012	Chandigarh
Dr. Randeep Guleria	NAPCON - 2013	Delhi
Dr. Gautam Bhagat	NAPCON - 2014	Ahmedabad
Dr. Rakesh Bhargava	NAPCON - 2015	Agra
Dr. Ramakant Dixit	NAPCON - 2016	Ajmer
Dr. Neeraj Gupta	NAPCON - 2017	Almer
Dr. Rupak Singla	NAPCON - 2018	Delhi
Dr. Gajendra Vikram Singh	NAPCON - 2019	Agra
Dr. Hari Mohan Kansal	NAPCON - 2020 Virtual	Greater Noida,U.P.

(G) NCCP (I) - PROF. S. N. GAUR YOUNG SCIENTIST AWARD

The award is given to the young scientist under 35 years of age, who is the first author and is judged by presenting his paper in that award category during the NAPCON. This award was started in 1997. From 2005 this award has been increased from one to three awards and presently the cash prize of the awards is - 1st Cash Prize for Rs.5000/-, 2nd Cash Prize for Rs.3000/- and 3rd Cash Prize for Rs.2000/- to encourage young talents. From 2012, to encourage participation, all the papers selected under this category (maximum 9) will be given Rs.5000/- as travel grant from NCCP(I).

(H) NCCP (I) – PROF. M. M. SINGH MEMORIAL LIFETIME ACHIEVEMENT AWARD

This Award was initially called NCCP(I) – Lifetime Achievement Award and was given to Prof. M. M. Singh in 1999 and to Prof. P. S. Shankar in 2005. From 2010, to pay respect to Prof. M. M. Singh posthumously, the name of the award was changed to the present one. Following persons have so far received this award: -

Name	Conference & Year	From (Place)
Prof. Dr. M. M. Singh	NAPCON - 1999	Delhi
Prof. Dr. P. S. Shankar	NAPCON - 2005	Gulbarga
Prof. Dr. K. C. Mohanty	NAPCON - 2010	Mumbai
Prof. Dr. S. K. Jain	NAPCON - 2011	Delhi
Prof. Dr. S. N. Tripathy	NAPCON - 2012	Bhubaneswar
(Posthumously)	NAPCON - 2015	Agra
Dr. K. G. Yedurappa	NAPCON - 2013	Mysore
Prof. H. S. Randhawa	NAPCON - 2014	Delhi
Prof. Dr. S. K. Jindal	NAPCON - 2015	Chandigarh
Prof. Dr. P. Ravindran	NAPCON - 2016	Trivandrum

Prof. Dr. A. S. Sachan	NAPCON - 2017	Agra
Prof. Dr. S. K. Katiyar	NAPCON - 2018	Kanpur
Prof. Dr. V. K. Arora	NAPCON - 2019	Ghaziabad
Prof. Dr. Rajendra Prasad	NAPCON - 2020 Virtual	Lucknow

ZONES AND CHAPTERS

The Head Office of the National College of Chest Physicians (India) is at V.P. Chest Institute, University of Delhi, Delhi. The NCCP (I) is presently divided in five zones in the country viz., East (Chairman- Dr. Narayan Mishra), West (Dr. V. K. Jain), North (Dr. J. C. Suri) , Central (Dr. S. K. Katiyar) and South Zone (Dr. R. Narasimhan). Central zone has a U.P.Chapter at Kanpur, North zone has a Rajasthan chapter at Jaipur, West Zone has a Gujarat Chapter at Ahmedabad and Maharashtra chapter at Nagpur. These chapters also have their own academic activities.

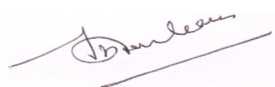
Fellowships of the National College of Chest Physicians of India

It was initially decided that all existing fellows of the American College of Chest Physicians would be taken as the Founder Fellows of the National College of Chest Physicians (India). It was further decided that the selection of new fellows would be restricted to eminent scientists engaged in the chest specialty and allied sciences. The application of the candidate for fellowship will be scrutinized by a high power Credential Committee and its recommendations should be duly approved by the Governing Council and then by the General Body. The College has on its roll approximately 2000 Members and Fellows.

The NCCP(I) has a website www.nccpindia.org. The NCCP (I) has published a Directory of the College having detailed information about every fellow & member of the college, which is published after every 5 years.

The Joint venture of NCCP (I) & ICS i.e. NAPCON has been a grand success providing opportunity to every person in the specialty to come under one roof and to achieve the maximum scientific benefit. The NAPCON has been attended by eminent persons from American Thoracic Society (ATS), American College of Chest Physicians (ACCP), Asia Pacific Society of Respirology, Chest Specialists from abroad and from neighbouring Asian countries, NRIs. etc. I wish this joint venture to continue in times to come and all persons of this Specialty remain united.

Long Live NCCP (I), Long Live NAPCON



Secretary, NCCP (I)
Dated 28-11-2020

ICS HISTORY

A BRIEF HISTORY

The Indian Chest Society was formed in the year 1980. A few foresighted respiratory medicine specialists couriered the idea. The lead was taken by Dr. S.R. Kamat, the then Chief of the Department of Chest Medicine at the K.E.M. Hospital, Mumbai, The core group involved in the planning and promoting of this society consisted of Dr. P.G. Kamath, Dr. J.C. Kothari and Dr. A.C. Shah from Mumbai, Dr. C.V. Ramakrishnan and Dr. C.N. Deivanayagan from Chennai, Dr. K.J.R. Murthy from Hyderabad, Dr. S.N. Tripathy from Orrisa and Dr. Samir K. Gupta from Kolkata. The office of the society headquarters started functioning from K.E.M. Hospital, Mumbai with the registered office at T.B. Hospital Shivadi, Mumbai.



The main objective of the Society was to generate and disseminate the knowledge on respiratory medicine and to give the medical fraternity interested in this specialty. A common platform to discuss and put forward their views.

INDIAN CHEST SOCIETY : AIMS AND OBJECTIVES

Indian Chest Society is the organization of qualified Chest Physicians and physicians interested in the field of Respiratory medicine. Indian Chest Society is a non-profit making organization devoted to research, academic, educational and patient welfare activities in respiratory medicine. The main objective of the Society was to generate and disseminate knowledge on respiratory medicine through following activities :

- By promoting Research and Academic activities in the field of Respiratory medicine.
- By organizing periodic academic meetings and conferences at International, National, Zonal and local level and to bring together, periodically, the medical fraternity interested in respiratory medicine, at a common meeting point.
- By organizing periodic patient awareness and educational programmes at various levels to spread knowledge and understanding about the important respiratory diseases.
- To assist in creating technical manpower required to handle various diagnostic and therapeutic activities related to the field of respiratory medicine.
- To assist in creating trained manpower, both medical and technical required for handling everyday increasing need of the patients in various hospitals and intensive care units.
- To open booth at various international conferences for creating understanding between the ICS and International Societies.
- To promote basic research and disease registry of various diseases in the country.

The financial needs required for the various activities of the society are met by donations, membership fee and unspent amount from the conferences.

In 1998, the society was decentralized four zones, to facilitate independent and smoother functioning. The first National Congress on Respiratory Diseases (NCRD) was held in September 1981 at the Hotel President in Mumbai in which a committee was formed to develop by law/constitution of the society.

2nd NCRD was held in 1982 at Hotel Taj Intercontinental, Mumbai, 3rd NCRD in 1983 at Chennai, 4th NCRD in 1984 at Trivandrum, 5th NCRD in 1985 at Jaipur, 6th NCRD in 1986 at Mumbai, 7th NCRD in 1987 at Kolkata, 8th NCRD on 5-6 January, 1989 at Goa, 9th NCRD on 17-18 December, 1989 at Hyderabad, 10th NCRD in 1990 at Mumbai, 11th NCRD in 1991 at Calicut, 12th NCRD in 1992 at New Delhi, 13th NCRD on 3-6th January, 1994 at Chennai, 14th NCRD in 1995 at Pune, 15th NCRD in 1995 at Jamshedpur, 16th NCRD in 1996 at Bangalore, 17th NCRD in 1997 at Varanasi and 18th NCRD was held in 1998 at hotel Ranvir Classic, Jalandhar.

In 1999, Indian Chest Society joined the hands with the National College of Chest Physicians NCCP (I) for organizing a joint national conference of both the societies and thus first NAPCON was born. It was decided to hold NAPCON alternate year by each society. First NAPCON was held at New Delhi in the year 1999.

NAPCON 1999 was hosted by the ICS in New Delhi, with Dr. J.C. Suri as the Organizing Secretary. NAPCON 2000 was hosted by the NCCP in Kanpur. The ICS hosted NAPCON 2001 took place from 7th to 11th November, 2001 at Mumbai and 2002 NCCP hosted the conference at Jaipur.

Following are the National Conferences of the Society held from Inception

Conference	Date & Venue
1st NCRD Conference on 11-12 September, 1981	Hotel President, Mumbai
2nd NCRD Conference on 2-4 December, 1982	Hotel Taj Intercontinental, Mumbai
3rd NCRD Conference on 16-17 December, 1983	Chennai
4th NCRD Conference on 6-9 December, 1984	Trivandrum
5th NCRD Conference on 13-14 December, 1985	S.M.S. Medical College, Jaipur
6th NCRD Conference on 12-14 December, 1986	K.E.M. Hospital, Mumbai
7th NCRD Conference on 17-18 December, 1987	Park Hotel, Kolkata
8th NCRD Conference on 5-6 January, 1989	Goa

9th NCRD Conference on 17-18 December, 1989	Hyderabad
10th NCRD Conference on 12-13 December, 1990	K.E.M. Hospital, Mumbai
11th NCRD Conference on 21-21 December, 1991	Calicut
12th NCRD Conference on 14-15 March, 1992	New Delhi
13th NCRD Conference on 3-6 January, 1994	Chennai
14th NCRD Conference on 2-3 December, 1995	Pune
15th NCRD Conference on 1-4 December, 1995	St. John Hall, Jamashedpur
16th NCRD Conference on 5-8 December, 1996	Taj& West Hotel, Bangalore
17th NCRD Conference on 16-18 December, 1997	Hotel Clark, Varanasi
18th NCRD Conference on 5-8 November, 1998	Hotel Ranvir Classic , Jalandhar
1st NAPCON on 17-19 November, 1999	Ashok Hotel, New Delhi
2nd NAPCON on 14-17 October, 2000	G.S.V.M. Medical College, Kanpur
3rd NAPCON on 7-11 November, 2001	TajMahal Hotel, Mumbai
4th NAPCON on 20-24 November, 2002	B.M. Birla Auditorium, Jaipur
5th NAPCON on 12-16 November, 2003	The Residency Awanashi Road, Coimbatore
6th NAPCON on 16-21 November, 2004	B.J. Medical College, Ahmadabad
7th NAPCON on 16-20 November, 2005	Science City Auditorium, Kolkata
8th NAPCON on 1-5 November, 2006	Government Medical College, Nagpur
9th NAPCON on 22-25 November, 2007	PGIMER, Chandigarh
10th NAPCON on 6-9 November, 2008	C.M.M.M.U. – UP, Lucknow
11th NAPCON on 5-8 November, 2009	Kadavu Resort, Calicut, Kerala
12th NAPCON on 26-29 November, 2010	Jodhpur
13th NAPCON on 27-30 November, 2011	Habitat World India Habitat Centre, New Delhi
14th NAPCON on 17-20 November, 2012	Hotel Swosti Premium, Bhubaneswar
15th NAPCON on 27-30 November, 2013	Sri Ramchandra Medical College & Research Centre, Chennai
16th NAPCON on 21-23 November, 2014	Hotel Taj, Agra
17th NAPCON on 4-6 November, 2015	B.M. Birla Auditorium, Jaipur
18th NAPCON on 25-27 November, 2016	Hotel Grand Hyatt, Mumbai
19th NAPCON on 15-19 November, 2017	Science City Auditorium, Kolkata
20th NAPCON on 29 Nov. – 2 Dec., 2018	Gujrat University & Conventions Centre, Ahmedabad

Following are the list of Presidents and Secretaries of the Society

Year	President	Secretary
1981	A committee was formed for ICS Constitution	
1982	Dr. M. P. Mathotra	Dr. P.G. Kamat
1983	Dr. C.V. Ramakrishana	Dr. P.G. Kamat
1984	Dr. S.K. Gupta	Dr. P.G. Kamat
1985	Dr. P.S. Shankar	Dr. P.G. Kamat
1986	Dr. Kewal Krishna	Dr. P.G. Kamat
1987	Dr. J.C. Kothari	Dr. P.G. Kamat
1988	Dr. KG. Yedurappa	Dr. P.G. Kamat

1989	Dr. K.C. Mohanty	Dr. P.G. Kamat
1990	Dr. K.J.R. Murthy	Dr. A.A. Mahashur
1991	Dr. A.S. Bagga	Dr. A.A. Mahashur
1992	Dr. D.D.S. Kulpati	Dr. A.A. Mahashur
1993	Dr. U.S. Mathur	Dr. A.A. Mahashur
1994	Dr. C.N. Deviyangam	Dr. A.A. Mahashur
1995	Dr. SurendraNath	Dr. A.A. Mahashur
1996	Dr. V.K. Arora	Dr. Rohini V. Chowgule
1997	Dr. Srinivasrao	Dr. Rohini V. Chowgule
1998	Dr. S. Chandrasekharan	Dr. Rohini V. Chowgule
1999	Dr. S.V. Rang	Dr. Rohini V. Chowgule
2000	Dr. P. Ravindran	Dr. Rohini V. Chowgule
2001	Dr. T. Mohan Kumar	Dr. Rohini V. Chowgule
2002	Dr. K.B. Gupta	Dr. Rohini V. Chowgule
2003	Dr. S.K. Jindal	Dr. Rohini V. Chowgule
2004	Dr. DhimanGanguly	Dr. Rohini V. Chowgule
2005	Dr. V.K. Jain	Dr. J.K. Samaria
2006	Dr. A.A. Mahashur	Dr. J.K. Samaria
2007	Dr. VijayalakshmiThanasekaraan	Dr. J.K. Samaria
2008	Dr. Rejendra Prasad	Dr. J.K. Samaria
2009	Dr. K.P. Govindan	Dr. J.K. Samaria
2010	Dr. S.K. Katiyar	Dr. J.K. Samaria
2011	Dr. PranabBaruwa	Dr. J.K. Samaria
2012	Dr. Narayan Mishra	Dr. J.K. Samaria
2013	Dr. A.G. Ghoshal	Dr. J.K. Samaria
2014	Dr. M. Sabir	Dr. J.K. Samaria
2015	Dr. N.K. Jain	Dr. J.K. Samaria
2016	Dr. Virendra Singh	Dr. J.K. Samaria
2017	Dr. Surya Kant	Dr. Rajesh Swarnakar
2018	Dr. S.K. Luhadia	Dr. Rajesh Swarnakar

LUNG INDIA :

The first National Congress on Respiratory Diseases (NCRD) was held in September 1981 at the Hotel President in Mumbai. At that conference the General Body of the Society resolved to bring out its official organ published as the eminently successful "Lung India" from that humble beginning the society has come a long way and now has over 1600 members.

Respire :

"Life at ICS" A platform where we all come together to display our efforts quarterly. Now Respire will our official Newsletter of India Chest Society. We will keep doing more to bring you the latest and the best happening in the World of ICS and promise to make it more interesting for the readers.

FOLLOWING ARE THE RECIPIENTS OF ICS ORATIONS AWARDS**2005****RECIPIENTS OF ICS ORATIONS/AWARDS**

- ICS Oration Awards - Dr. Virendra Singh
- ICS Siliver Jubilee Oration - Dr. S. R. Kamath
- Dr. O. A. Sarma Oration - Dr. K. B. Gupta

2006**RECIPIENTS OF ICS ORATIONS/AWARDS**

- ICS Oration Awards - Dr. R.S. Bedi
- ICS Silver Jubilee Oration - Dr. S.C. Matah
- Dr. O.A. Sarma Oration - Dr. Rajendra Prasad

2007**RECIPIENTS OF ICS ORATIONS/AWARDS**

- ICS Oration Awards - Dr. S. K. Katiyar
- ICS Silver Jubilee Oration - Dr. A. G. Ghoshal
- Dr. O.A. Sarma Oration - Dr. BNB Prasad
- ICS Honor Lecutre Award - Dr. A. A. Mahashur

2008**RECIPIENTS OF ICS ORATIONS/AWARDS**

- ICS Oration Awards - Dr. G.C. Khilnani
- ICS Silver Jubilee Oration - Dr. Dheeraj Gupta
- Dr. O. A. Sarma Oration - Dr. Narayan Mishra
- ICS Honor Lecutre Award - Dr. V. Thanasekaraan

2009**RECIPIENTS OF ICS ORATIONS/AWARDS**

- ICS Oration Awards - Dr. D. Behera
- ICS - Dr. C. V. Ramakrishnan Oration - Dr. Sundeep Salvi
- Dr. O. A. Sarma Oration Awards - Dr. D. J. Christopher
- ICS Honor Lecutre Award - Dr. Rajendra Prasad

2010**RECIPIENTS OF ICS ORATIONS/AWARDS**

- ICS Oration Awards - Dr. A.N. Agrawal
- ICS - Dr. C. V. Ramakrishnan Oration - Dr. C. Ravindran
- Dr. O. A. Sarma Oration Awards - Dr. Ashok Shah
- ICS Honor Lecutre Award - Dr. K. P. Govindan

2011**RECIPIENTS OF ICS ORATIONS/AWARDS**

- First Life Time Achievement Award - Prof. S.K. Jindal
- ICS - Dr. K.J.R. Murthy Oration Award - Dr. J. C. Suri
- ICS – Dr. C.V. Ramakrishnan Oration Award - Dr. Randeep Guleria
- ICS – Dr. O.A. Sarma Oration Award - Dr. N. K. Jain
- ICS – Dr. S.N. Tripathy Oration Award` - Dr. S. K. Katiyar

2012**RECIPIENTS OF ICS ORATIONS/AWARDS**

- Life Time Achievement Award - Prof. C.N. Deivanyagan
- ICS - Dr. K.J.R. Murthy Oration Award - Dr. S.K. Sarma
- ICS – Dr. C.V. Ramakrishnan Oration Award - Dr. Sanjeev Mehta
- ICS – Dr. O.A. Sarma Oration Award - Dr. R. Narasimhan
- ICS – Dr. S.N. Tripathy Oration Award` - Dr. PranabBaruwa

2013**RECIPIENTS OF ICS ORATIONS/AWARDS**

- Life Time Achievement Award - Prof. DhimanGanguly
- ICS - Dr. K.J.R. Murthy Oration Award - Dr. SandhyaNanjundiah
- ICS – Dr. C.V. Ramakrishnan Oration Award - Dr. P. Bhattacharyya
- ICS – Dr. O.A. Sarma Oration Award - Dr. Suryakant
- ICS – Dr. S.N. Tripathy Oration Award` - Dr. Narayan Mishra

2014**RECIPIENTS OF ICS ORATIONS/AWARDS**

- Life Time Achievement Award - Prof. P.S. Shankar
- ICS – Dr. S.N. Tripathy Oration Award - Dr. Alope Gopal Ghoshal
- ICS – Dr. O. A. Sarma Oration Award - Dr. Rajesh N. Solanki
- ICS – Dr. K.J.R. Murthy Oration Award - Dr. V. K. Arora
- ICS – Dr. C. V. Ramakrishnan Oration Award - Dr. Rajagopalan Balakrishnan

2015**RECIPIENTS OF ICS ORATIONS/AWARDS**

- Life Time Achievement Award - Prof. Ashok A. Mahashur
- ICS – Dr. S.N. Tripathy Presidential Oration Award- Dr. M. Sabir
- ICS – Dr. O. A. Sarma Oration Award - Dr. Rakesh K. Chawla
- ICS – Dr. K.J.R. Murthy Oration Award - Dr. S.K. Luhadia
- ICS – Dr. C.V. Ramakrishnan Oration Award - Dr. Deepak Talwar

2016**RECIPIENTS OF ICS ORATIONS/AWARDS**

- Life Time Achievement Award - Prof. V. Thanasekaraan
- ICS - Dr. K.J.R. Murthy Oration Award - Dr. J. K. Samaria
- ICS – Dr. S.N. Tripathy Presidential Oration Award- Dr. N. K. Jain
- ICS – Dr. O.A. Sarma Oration Award - Dr. Chitra Chandrashekerlravatham
- ICS – Dr. C.V. Ramakrishnan Oration Award - Dr. S.K. Sarkar

2017**RECIPIENTS OF ICS ORATIONS/AWARDS**

- Life Time Achievement Award - Prof. Dr. Sr. Kamat
- ICS - Dr. K.J.R. Murthy Oration Award - Dr. Rajesh Chawla
- ICS – Dr. S.N. Tripathy Presidential Oration Award- Dr. Virendra Singh
- ICS – Dr. O.A. Sarma Oration Award - Dr. Rajan Santosham
- ICS – Dr. C.V. Ramakrishnan Oration Award - Dr. Sudhir Chaudhri

2018**RECIPIENTS OF ICS ORATIONS/AWARDS**

- Life Time Achievement Award - Prof. Pranab Baruwa
- ICS - Dr. K. J. R. Murthy Oration Award - Dr. Agam Vora
- ICS – Dr. S. N. Tripathy Presidential Oration Award- Dr. Surya Kant
- ICS – Dr. O. A. Sarma Oration Award - Dr. Parvaiz Koul
- ICS – Dr. C. V. Ramakrishnan Oration Award - Dr. Rajiv Goyal

FOLLOWING ACTIVITIES OF SOCIETY:**CENTER FOR PFT TRAINING WORKSHOP FOR PULMONARY TECHNICIANS**

The society has been successfully conducting workshop on Spirometry Technician Training every year for last 8 years at different centers across the country. Society is further looking for centers that have appropriate infrastructure to conduct the Workshop on “Spirometry Technician Training” for the technicians. Please note that all the expenditure on such course will be provided by the society.

INDIAN CHEST SOCIETY INTERNATIONAL TRAVEL GRANT

ICS proposes to award Travel Grants to encourage young scientists less than 35 years of age to present their research work at international meetings. Travel grants up to a maximum of Rs. 75000/- for ERS International Conference and Rs. 100000/- (ATS and ACCP International Conferences) along with complimentary registration being offered by the American College of Chest Physicians (ACCP), European Respiratory Society (ERS) and American Thoracic Society (ATS) are available for the young scientists. Please note that the Complimentary registration is subject to approval from the organizing body of the international conferences.

FELLOWSHIP OF INDIAN CHEST SOCIETY (FICS)

Fellowship of Indian Chest Society (FICS) is open for members. This fellowship is to recognize members of the Indian Chest Society who have excelled in their respective field of expertise. The fellowship will be given after the approval of the application of the candidate by High Power Credential Committee. The Process of selection of fellowship is objective, transparent and accountable. The selected fellow will be allowed to use “FICS” as a sub title. The fellowship fee is Rs. 10000/- to be paid after selection.

WORKSHOP ON INTENSIVE RESPIRATORY CRITICAL CARE

The society has been successfully conducting workshops on intensive respiratory critical care round the year for last 9 years at different centers across the country such as Chennai, Mumbai, Kanpur, Patna & Secunderabad, Kochi & Kolkata. Those who are interested to attend to said Intensive Respiratory Critical Care Workshop may visit the Indian Chest Society website for further information on upcoming workshops.

Society is further looking for centres that have appropriate infrastructure and academic capability to conduct the Workshop on “Intensive Respiratory Critical Care” for the physicians. Please note that all the expenditure on such course will be provided by the society. Interested candidates along with the details of their centre may apply to the Indian Chest Society headquarters.

SLEEP WORKSHOP

The Society has successfully conducted the workshop on Sleep Apnea, last year at Kolkata. Those who are interested to attend Sleep Study Workshop may visit the Indian Chest Society website for further information on forthcoming workshop.

The Indian Chest Society is looking for Centres that have appropriate infrastructure and academic capability to conduct the “Sleep Workshop” for the physicians. Please note that all the expenditure incurred on such workshop will be provided by the society. Interested candidates along with the details of their centre may apply to the Indian Chest Society headquarters.

BRONCHOSCOPY WORKSHOP

The Society has been successfully conducting the workshop on Bronchoscopy round the year at various places. Those who are interested to attend may visit the Indian Chest Society website for further information on for the coming workshop. The Indian Chest Society is looking for members who have appropriate infrastructure and academic capability to conduct "Bronchoscopy Workshop" for the physicians. Please note that all the expenditure incurred on such workshop will be provided by the society. Interested members along with the details of their centre may apply to the Indian Chest Society headquarters.

SHORT TERM TRAINING GRANT

Indian Chest Society has started a unique program for Short Term Training of 3 weeks duration for the Young Chest Physicians in Pulmonary Medicine at some of the State-of-Art institutions on specialized subjects like interventional Pulmonology, Intensive Respiratory Care, Sleep Disorders and Pulmonary Rehabilitation. Beside arranging the training opportunity, the society is also providing a token grant of Rs. 20,000/- to each candidate selected for this training.

MEMBERSHIP ADVANTAGES OF INDIAN CHEST SOCIETY

COMPLIMENTARY MEMBERSHIP OF EUROPEAN RESPIRATORY SOCIETY

A member of Indian Chest Society can enjoy dual membership benefit is single paying. Because of Indian Chest Society has done an agreement with European Respiratory Society by virtue of which a member of Indian Chest Society automatically becomes a member of European Respiratory Society also. This facility is available for existing and new members also.

All the existing members are requested to inform all those chest physicians who are not yet member of the society to take benefit of, not only life membership of the society but also complimentary membership of European Respiratory Society for there year, by virtue of which all the new members will also have complementary membership and full benefit of ERS membership including access to all the academic materials and many more privileges of ERS, without having to pay any amount, you may encourage you Friends/Colleagues to be part of the vibrant organization INDIAN CHEST SOCIETY.

ONLINE MEMBERSHIP OF INDIAN CHEST SOCIETY

Now Indian Chest Society starts a new feature of online membership has been added to the website of India Chest Society, which will bring further convenience for all the physicians who are interested in joining Indian Chest Society. Now one can join the society instantly using his debit or credit card or net banking facility without having to go through the hassles of sending Demand Drafts to the society. We are sure that this initiative will further give tremendous boost to membership drive of the society.

The democratic soul of the Indian Chest Society lies in the elections of the office bearers and Governing Body by the members of the Society every year. ICS Election 2018 for the first time held through E-Voting. The Society holds quarterly Governing Body meetings and one Annual General Body meeting in a year to ensure proper functioning of the society so as to meet out its objectives.

History of Indian Chest Society by

Dr. J. K. Samaria, Hon. Treasure, Indian Chest Society

Ex-Professor & Head, Deptt. Of Chest Diseases, Insititute of Medical Sciences, B.h.U., Varanasi
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NAPCON
NATIONAL CONFERENCE OF PULMONARY DISEASES
Joint National Conference of
NATIONAL COLLEGE OF CHEST PHYSICIANS (INDIA)
and
INDIAN CHEST SOCIETY



A BRIEF HISTORY

The National College of Chest Physicians (India) organized several conferences since it was formed. The first conference of NCCP(I) (then IACD) was hosted in 1960 at New Delhi jointly with the Association of Physicians of India and other specialist organisations. Subsequent annual conferences were also held jointly with the Association of Physicians of India till 1963, in which year the Association sponsored the 8th International Congress on Chest Diseases in New Delhi. The following year, the Association held its fourth annual conference independently at New Delhi to which the President of the Royal College of Physicians of Edinburgh was a special invitee and guest of honour. In 1974, it held its annual conference jointly with the Tuberculosis Association of India.

Since 1989, NCCP(I) organised its annual conferences, called NACCON (National Chest Conference). These conferences were very successful and popular and were chaired by the then Presidents of NCCP(I). The Indian Chest Society (ICS) was also hosting its annual national conference, called NCRD (National Congress on Respiratory Diseases). In greater interest of the Pulmonary fraternity of our country, the need to have a united conference of both NCCP(I) and ICS, the two largest national bodies on Pulmonary Medicine was felt. After several positive negotiations and meetings spread over almost 8 years, the President, Secretary and Governing Bodies of both the NCCP (I) and the ICS, evolved a consensus to conduct their joint national conference together. From 1999, the NCCP(I) with ICS is having Joint National Conference on Pulmonary Diseases, called NAPCON. The guidelines for organising NAPCON were finalized to assist the organizers and also to have uniformity in organization and maintain a high academic standard of the scientific programme of NAPCON. NCCP(I) and ICS alternately select the venue and organisers of NAPCON each year and a similar turn is followed for selection of Chairperson of the Scientific Committee, which consists of equal number of members from both associations. To promote national integration, each year NAPCON is hosted at a different city and has in turn been organised in the north, south, east and western regions of our country, truly reflecting a pan-Indian character. The NAPCON logo, selected jointly by both associations shows two hands representing both NCCP(I) and ICS working together in harmony.

NAPCON as a joint venture of NCCP (I) and ICS has been a grand success right from the beginning, providing opportunity to every person in the specialty of Pulmonary Medicine to come together under one roof to achieve the maximum scientific benefit. NAPCON has been attended by eminent faculty from the American Thoracic Society (ATS), American College of Chest Physicians (ACCP), European Respiratory Society (ERS), Asia Pacific Society of Respiriology (APSR) and other Chest Specialists from abroad and from neighbouring Asian countries. The scientific programmes of NAPCONs are also state-of-the-art and widely acclaimed internationally. Not only Chest Physicians but also Physicians, Critical care specialists, Radiologists, Infectious disease specialists, Microbiologists and Pathologists, Cardiologists and Thoracic Surgeons and learned faculties from other allied specialties are invited to deliver guest lectures or participate in debates, panel discussions, practice changing research and symposia to enrich the diversity and academic content of the scientific programme. The scientific programme covers a plethora of topics on different aspects of respiratory diseases and other allied sciences including critical care, pneumonia, tuberculosis, viral and other respiratory infections, diffuse lung diseases, asthma, COPD, interstitial lung diseases, sleep disorders, cardio-thoracic surgery, lung cancer, bronchoscopy, thoracoscopy and other thoracic interventions, pleural diseases, pulmonary vascular disorders, pediatric pulmonology, respiratory allergy and immunology, environmental and occupational problems, pulmonary imaging, sports medicine and rehabilitation apart from several other topics to constitute a unique academic feast.

Apart from the much-awaited scientific programme, delegates are also given the opportunity to participate in several workshops on a wide variety of topics like pulmonary function tests, imaging, research methods and scientific paper writing, critical care, mechanical ventilation, bronchoscopy and interventional pulmonology, allergy, sleep disorders, interstitial lung diseases, tuberculosis and others to refine their technical knowledge and skills. Satellite symposia and free paper oral and poster presentations add to the academic flavour. The Young budding Chest Physicians and Post-graduates eagerly look forward to the opportunity to present their original research work and more than 700 different abstracts are presented at NAPCON year after year. NAPCON is truly a complete scientific and cultural feast, providing opportunity for many pulmonologists and doctors of other specialties of all ages to meet, interact and have discussion with each other to share their knowledge and experiences to evolve strategies for better management of respiratory diseases.

Right since its inception, NAPCON has grown from strength to strength each year to become one of the largest conferences of Pulmonary diseases in Asia and globally with attendance of nearly 3000 delegates annually. NAPCON is a unique success story in itself, a testimony of unity, strength and cooperation between NCCP(I) and ICS and has evolved into a much sought-after 'Brand name' and 'Status symbol' popular amongst the Chest Physicians and Post-Graduates in India and abroad.

NAPCONs from 1999 till date

Sr. No.	YEAR	VENUE	ORGANISING CHAIRMAN	ORGANISING SECRETARY
1	1999	Delhi		Dr. J. C. Suri
2	2000	Kanpur		Dr. S. K. Katiyar
3	2001	Mumbai	Dr. J. C. Kothari	Dr. Rohini Chowgule
4	2002	Jaipur	Dr. T. N. Sharma	Dr. N. K. Jain
5	2003	Coimbatore	Dr. T. K. Moinudeen	Dr. T. Mohan Kumar
6	2004	Ahmedabad	Dr. Gautam Bhagat	Dr. Rajesh Solanki
7	2005	Kolkata	Dr. A. K. Ghosh	Dr. A. G. Ghoshal
8	2006	Nagpur		Dr. B. O. Tayade
9	2007	Chandigarh	Dr. S. K. Jindal	Dr. Dheeraj Gupta
10	2008	Lucknow		Dr. Rajendra Prasad
11	2009	Calicut		Dr. C. Ravindran
12	2010	Jodhpur	Dr. P. D. Motiani	Dr. K. C. Agarwal
13	2011	Delhi	Dr. V. K. Vijayan	Dr. Raj Kumar
14	2012	Bhubaneshwar	Dr. N. K. Gacchayat	Dr. Narayan Mishra
15	2013	Chennai	Dr. Vijayalakshmi Thanasekaraan	Dr. B. Rajagopalan
16	2014	Agra	Dr. A. S. Sachan	Dr. Rakesh Bhargava Dr. Santosh Kumar
17	2015	Jaipur	Dr. N. K. Jain	Dr. Virendra Singh
18	2016	Mumbai	Dr. K. C. Mohanty	Dr. Agam Vora Dr. Nikhil Sarangdhar
19	2017	Kolkata	Dr. A. G. Ghoshal	Dr. Dhrubajyoti Roy Dr. Raja Dhar
20	2018	Ahmedabad	Dr. Rajesh Solanki	Dr. Raj Bhagat Dr. Tushar Patel
21	2019	Kochi	Dr. C. Ravindran	Dr. Rajesh Venkat
22	2020	Virtual	Dr. S. N. Gaur	Dr. Nikhil Sarangdhar

All NAPCONs were a grand success, appreciated by members and fellows of both NCCP(I) and ICS, faculty, delegates and post-graduate students, as well as the foreign faculty and delegates. Credit for this success goes to team-work from NCCP(I) and ICS, the Organising Committee and the Scientific Committee for working hard in tandem to ensure fabulous conferences of high repute which are appreciated and acclaimed internationally. We are confident the same spirit will continue, year after year, and we look forward to greater participation as well as better conferences in future.



NAPCON CONGRATULATES AWARDEES



Dr. Rajendra Prasad

NCCP(I) - Prof. M. M. Singh Lifetime Achievement Award



Dr. Surender Kashyap

NCCP(I) - Prof. Dr. Raman
Vishwanathan Memorial Chest
Oration



Dr. Manoj Goel

NCCP(I) - Prof. Dr. A. S. Paintal -
Prof. Dr. R. C. Jain Memorial
Chest Oration



Dr. Nikhil Sarangdhar

NCCP(I) - Prof. Dr. P. S. Shankar -
Prof. Dr. K. C. Mohanty
Chest Oration



Dr. Hari Mohan Kansal

NCCP(I) - Prof. Dr. S. K. Jain -
Prof. Dr. S. K. Katiyar
Chest Oration



Dr. V. K. Arora

ICS - Lifetime Achievement
Award



Dr. Surender Kashyap

ICS - Lifetime Achievement
Award



Dr. M. Sabir

ICS - Lifetime Achievement
Award



Dr. Sudhir Chaudhri

ICS - Dr. S. N. Tripathy
Presidential Oration Award



Dr. Balamugesh T

ICS - Dr. K. J. R. Murthy
Oration Award



Dr. Raj Kumar

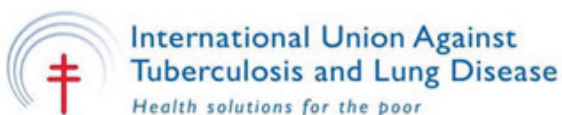
ICS - Dr. C. V. Ramakrishnan
Oration Award



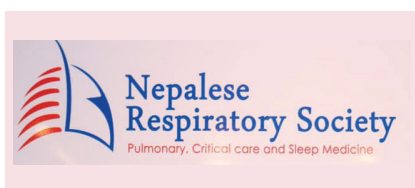
Dr. Salil Bhargava

ICS - Dr. O. A. Sarma
Oration Award

INTERNATIONAL DELEGATION



The Research Institute of Tuberculosis, Japan Anti-tuberculosis Association



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6. ALICE HADCHOUËL (FRANCE)
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8. ANDREW BERSTEN (AUSTRALIA)
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117. YOICHI NAKANISHI (JAPAN)
118. YUANLIN SONG (CHINA)

NATIONAL FACULTY

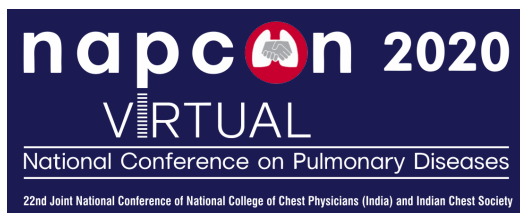
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| 23. AJMAL KHAN | 60. ARUN MADAN | 97. C CHANDRASHEKHAR |
| 24. AJO JOSE | 61. ARUN SAMPATH | 98. C RAVINDRAN |
| 25. AKHILESH K | 62. ARTI SHAH | 99. CHITRA IRAVATHAM |
| 26. ALLADI MOHAN | 63. ARVIND KUMAR | 100. D BEHERA |
| 27. ALOK NATH | 64. ASHISH AGARWAL | 101. D J CHRISTOPHER |
| 28. ALPA DALAL | 65. ASHISH TANDON | 102. D K MANOJ |
| 29. AMINA MOBASHIR | 66. ASHISH PRAKASH | 103. D P DWIVEDI |
| 30. AMIR KHOJA | 67. A K SINGH | 104. DAVIS PAUL |
| 31. AMIT AGARWAL | 68. ASHOK KUMAR SINGH | 105. DEBAJYOTI BHATTACHARYA |
| 32. AMIT DEDUN | 69. ASHOK MAHASHUR | 106. DEEPAK AGGARWAL |
| 33. AMIT DHAMIJA | 70. ASHOK RAJPUT | 107. DEEPAK MUTHREJA |
| 34. AMITA NENE | 71. ASHOK SHAH | 108. DEEPAK PRAJAPAT |
| 35. AMITESH GUPTA | 72. ASHU SEITH BHALLA | 109. DEEPAK TALWAR |
| 36. AMITH SREEDHARAN | 73. ASMITA MEHTA | 110. DEEPENDRA KUMAR RAI |
| 37. ANAND JAISWAL | 74. ATUL LUHADIA | 111. DEEPTI RATHEE |

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113.DHRUBAJYOTI ROY	153.J K SAMARIA	193.M K AGARWAL
114.DHRUVA CHAUDHARY	154.J M JOSHI	194.M L GUPTA
115.DINESH MEHTA	155.JAI KISHAN	195.M M PURI
116.DIPTI GOTHI	156.JAYMOHAN UNNITHAN	196.M S BARTHWAL
117.FATHADUDEEN ABDUL	157.J V PETER	197.MADHU
118.G C AHIR	158.JYOTI PATNAIK	198.MAHAVIR MODI
119.G C KHILNANI	159.K NAGARAJU	199.MAHEEMA BHASKAR
120.G N SHRIVASTAVA	160.K A AMEER	200.MAHENDRA KUMAR
121.G S WANDER	161.K B GUPTA	201.MAHESH GOYAL
122.GAJENDRA VIKRAM SINGH	162.K C AGARWAL	202.MANJARI TRIPATHI
123.GARGI	163.K K CHOPRA	203.MALAY SARKAR
124.GAURAV GUPTA	164.K K SHARMA	204.MANAV MANCHANDA
125.GAUTAM BHAGAT	165.K NAGARAJU	205.MANGESH TIWASKAR
126.GAUTAM MODI	166.K P GOVINDAN	206.MANDEEP GARG
127.GAYATHRI DEVI HJ	167.K P SURAJ	207.MANJUNATH B G
128.GELLA VISHWANATH	168.K S SACHDEVA	208.MANOJ AGARWAL
129.GEORGE D'SOUZA	169.K V NAGENDRA PRASAD	209.MANOJ GOEL
130.GHULAM HASSAN	170.K R BALAKRISHNAN	210.MANOJ SINGH
131.GIRIJA NAIR	171.KAVITHA VENKATNARAYAN	211.MANOJ K PANIGRAHI
132.GIRISH AGARWAL	172.KAMAL JODHANI	212.MANU CHOPRA
133.GIRISH SINDHWANI	173.KAPIL SALGIA	213.MAYANK MISHRA
134.GOPAL RAVAL	174.KAPIL ZIRPE	214.MAYANK SAXENA
135.GOURAHARI PRADHAN	175.KARAN MADAN	215.MANSI GUPTA
136.GYANENDRA AGARWAL	176.KARN MEHRA	216.MILIND NADKAR
137.H PARAMESH	177.KARUNAKARA PADHY	217.MOHAMMED SHAMEEM
138.H M KANSAL	178.KETAKI UTPAT	218.MOHAN KUMAR THEKKINKATTIL
139.H J SINGH	179.KETAN MEHTA	219.MRINAL SIRCAR
140.HANMANT VARUDKAR	180.KIRAN VISHNU NARAYAN	220.MUKESH GOYAL
141.HARIT CHATURVEDI	181.KRIPESH RANJAN SARMAH	221.MUTHU VALIAPPAN
142.HARJIT DUMRA	182.KUMAR DOSHI	222.N C KAJAL
143.HARPREET SINGH	183.KUMAR UTSAV SAMARIA	223.N K GACHHAYAT
144.HIMANSHU GARG	184.LALIT SINGH	224.N K JAIN
145.INDERPAUL SINGH SEHGAL	185.LALITA FERNANDES	225.N RAMAKRISHNAN
146.INDIRA KUMARI	186.LANCELOT PINTO	226.N T AWAD
147.INDRANIL HALDER	187.LAVINA MIRCHANDANI	227.NAGARJUNA MATURU
148.IRFAN ISMAIL AYUB	188.LAXMIKANT YENGE	228.NALIN JOSHI
149.J SARMA	189.LINGADEVI T	229.NARAYAN MISHRA
150.J B SHARMA	190.LOGANATHAN N	230.NAVEED SHAH
151.J C SURI	191.M. SABIR	231.NAVEEN ARORA

232.NAVEEN DUTT	272.PAVAN TIWARI	312.RAJAN SANTOSHAM
233.NAVNEET SINGH	273.PAWAN KUMAR SINGH	313.RAJENDRA PRASAD
234.NARENDRA KHIPPAL	274.PIYUSH ARORA	314.RAJESH CHAWLA
235.NASSER YUSUF	275.POONZUGHALI RAJAJI	315.RAJESH GOTHI
236.NEEL THAKKER	276.POULOMI CHATTERJI	316.RAJESH SOLANKI
237.NEERAJ GUPTA	277.PRADYUMNA SHARMA	317.RAJESH SWARNAKAR
238.NEETU JAIN	278.PRALHAD PRABHUDESAI	318.RAJESH VENKAT
239.NEVIN KISHORE	279.PRASHANT CHHAJED	319.RAJASEKHARA REDDY
240.NIKHIL SARANGDHAR	280.PRASHANT PRAKASH	320.RAJIV GARG
241.NIRUPAM SHARAN	281.PRASHANT SAXENA	321.RAJIV GOYAL
242.NISHANT CHAUHAN	282.PRATIBHA DOGRA	322.RAJIV PALIWAL
243.NISHTHA SINGH	283.PRATIBHA GOGIA	323.RAJNISH GUPTA
244.NITESH GUPTA	284.PRATIBHA SINGHAL	324.RAJNISH KAUSHIK
245.NITA BASUMETRY	285.PRANAV ISH	325.RAKESH BHARGAVA
246.NITIN ABHYANKAR	286.PRAVEEN VALSALAN	326.RAKESH CHAWLA
247.NITIN GOEL	287.PREM PRAKASH	327.RAM DEOSKAR
248.NITIN JAIN	288.PRINCE JAMES	328.RAMADEVI GOURINENI
249.NOUFAL POONGADAN	289.PRIYA RAMACHANDRAN	329.RAMAKANT DIXIT
250.P ARJUN	290.PRIYANK JAIN	330.RANDEEP GULERIA
251.P RAVINDRAN	291.PRIYANKA NARANJE	331.RAVI DOSI
252.P SUKUMARAN	292.PUNEET KHANNA	332.RAVINDRA M SARNAIK
253.P A MAHESH	293.PUSHPENDRA VERMA	333.RAVINDRA MEHTA
254.P D MOTIANI	294.R NARASIMHAN	334.RENNIS DAVIS
255.P K GUPTA	295.R VIJAI KUMAR	335.RESHMI NAIR
256.P K THOMAS	296.R C GUPTA	336.RICHA GUPTA
257.P P BOSE	297.R C SAHOO	337.RITABRATA MITRA
258.P R GUPTA	298.R K DEWAN	338.RITESH AGRAWAL
259.P R MOHAPATRA	299.R K JENAW	339.RITISHA BHATT
260.P S SHAJAHAN	300.R M SUNDRANI	340.ROHIT SARIN
261.P S SHANKAR	301.R M P L RAMANATHAN	341.ROSELEEN KAUR BALI
262.P S TAMPI	302.R N MALLICK	342.RUCHI DUA
263.P T JAMES	303.R P MEENA	343.RUPAK SINGLA
264.PARAG SANGHAVI	304.RADHA MUNJE	344.S K AGARWAL
265.PARAMJYOTHI G K	305.RAGHAVA RAO	345.S K CHHABRA
266.PARTHIV MEHTA	306.RAHUL SHARMA	346.S K JINDAL
267.PARUL MRIGPURI	307.RAHUL PANDIT	347.S K KATIYAR
268.PARUL VADGAMA	308.RAJ BHAGAT	348.S K LUHADIA
269.PARVAIZ KOUL	309.RAJ KUMAR	349.S K SARKAR
270.PARVEZ AHMED	310.RAJA DHAR	350.S K SHARMA
271.PAVAN KUMAR BIRARIS	311.RAJAM IYER	351.S N GAUR

352.S N GUPTA	392.SUBHAKAR KANDI	432.V THANASEKARAAN
353.S NAIDU	393.SUBHAL DIXIT	433.V K ARORA
354.S P RAI	394.SUBIR KUMAR DEY	434.V K JAIN
355.S RAJU	395.SUBODH PANDEY	435.V K SINGH
356.SHAJAL DHOORIA	396.SUDHA KANSAL	436.V VINOD KUMAR
357.SALIL BENDRE	397.SUDHANSHU KALRA	437.V P MYNEEDU
358.SALIL BHARGAVA	398.SUDHIR CHAUDHRI	438.V R PATTABHI RAMAN
359.SAMEER SINGHAL	399.SUDHIR KUMAR	439.VAIBHAV CHACHRA
360.SAMIR SAHU	400.SUJEET RAJAN	440.VARUN PATEL
361.SANDEEP DEWAN	401.SUKHESH RAO	441.VEEROTTAM TOMER
362.SANDEEP KATIYAR	402.SUMITA AGRAWAL	442.VENUGOPAL JAGANATHAN
363.SANDEEP NAYYAR	403.SUNDEEP SALVI	443.VENUGOPAL P
364.SANDEEP TANDON	404.SUNNY VIRDI	444.VIJAY HADDA
365.SANGEETA SHARMA	405.SUPRIYA SARKAR	445.VIKAS MARWAH
366.SANJEEV MEHTA	406.SURABHI VYAS	446.VIKAS MOURYA
367.SANJEEV NAIR	407.SURAJ VERMA	447.VIMAL RAJ
368.SANJEEV SINHA	408.SURESH RAO	448.VINEET ALEXANDER
369.SANTHAKUMAR S	409.SURYA KANT	449.VIPUL KUMAR
370.SANTOSH KUMAR (AGRA)	410.SURENDER KASHYAP	450.VIRENDRA SINGH
371.SANTOSH KUMAR (LUCKNOW)	411.SURESH KOOLWAL	451.VISHAK ACHARYA
372.SATHEESH CHANDER	412.SURESH RAMASUBBAN	452.VISHAKA KAPADIA
373.SAURABH KARMAKAR	413.SUSHANT	453.VISHAL ARYA
374.SAURABH MANDILWAR	414.SUSHANT MESHRAM	454.VISHAL CHOPRA
375.SAURABH MITTAL	415.SUSHEELA KATARIA	455.VISHNU SHARMA
376.SAVITA JINDAL	416.SUSHMITA ROYCHOWDHURY	456.VISWESWARAN
377.SHARAD AGARKHEDKAR	417.SWARNJEET BHULLAR	457.VIVEK NANGIA
378.SHASHANK JOSHI	418.T BALAMUGESH	458.YUVARAJAN S
379.SHASHI BHUSHAN	419.T K JAYALAKSHMI	459.ZARIR UDWADIA
380.SHEETU SINGH	420.T U SUKUMARAN	460.ZIA HASHIM
381.SHIKHA JINDAL GUPTA	421.TANUSHREE GAHLOT	
382.SHITAL PATIL	422.TARIQ MAHMOOD	
383.SHUBHAM GARG	423.THOMAS VADAKKAN	
384.SHUBHRA JAIN	424.TINKU JOSEPH	
385.SHYAM KRISHNAN	425.TRINATH DASH	
386.SITESH ROY	426.TUSHAR PATEL	
387.SONALI TRIVEDI	427.U C OJHA	
388.SONAM SPALGAIS	428.UJJWAL PARAKH	
389.SONIA DALAL	429.UMA DEVARAJ	
390.SOURIN BHUNIYA	430.UMA MAHESHWARI	
391.SRI KRISHNA	431.UNNATI DESAI	

NAPCON 2020 VIRTUAL WORKSHOPS



- ALL workshop details listed below are TENTATIVE and subject to change.
- For latest updates, please visit our website www.virtualnapcon2020.com



ALLERGY AND IMMUNOTHERAPY

DATE : Wednesday, 27th January 2021

TIME : 9:00 to 16:00

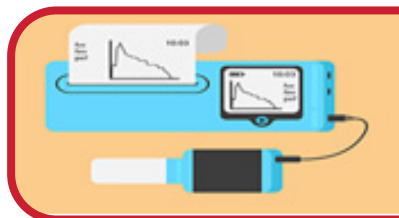
WORKSHOP DIRECTOR : Dr. Raj Kumar

SKILL OBJECTIVES :

After completing this workshop, You will be able to:

1. Get sensitized regarding the role of allergy testing and role of allergen immunotherapy
2. Understand and be able to interpret skin prick test
3. Incorporate allergy management in your clinical practice
4. Administer immunotherapy in your clinical practice

Time	Programme	Faculty
09:00 – 09:20	Introduction and Briefing about Allergy workshop	Dr. Raj Kumar
09:20 – 09:40	Basics of Allergy	Dr. M K Agarwal
09:40 – 10:00	Clinical Aspect of Respiratory Allergy	Dr. Rajendra Prasad
10:00 – 10:20	Aeroallergens in Clinical Practice	Dr. A B Singh
10:20 – 10:40	In-vivo and In-vitro Diagnosis of Allergy	Dr. P A Mahesh
10:40 – 11:00	Patient Selection for Allergen Immunotherapy	Dr. Raj Kumar
11:00 – 11:10	Break for Q/A	
11:10 – 11:30	Indian Guidelines of Allergen Immunotherapy	Dr. S N Gaur
11:30 – 11:50	SCIT vs SLIT - A focus on Efficacy & Safety	Dr. Nagendra Prasad Komarla
11:50 – 12:10	Allergen Immunotherapy in Paediatrics	Dr. Nagaraju K
12:10 – 12:20	Break for Q/A	
12:10 – 12:20	Break for Q/A	
12:40 – 13:00	Skin Allergy	Dr. Mahesh Goyal
13:00 – 13:20	Novel Forms of Allergen Immunotherapy	Dr. Naveen Arora
12:10 – 12:20	Break for Q/A & LUNCH	
14:00 – 14:40	Skin Prick Test (SPT): Practical demonstration (Virtual)	Dr. B K Menon, Dr. Nitin Goel, Dr. Sonam Spalgais, Dr. Parul Mrigpuri
14:40 – 15:40	Case discussion: Clinical interpretation of diagnostic tests and Starting of Immunotherapy	with All Faculty members
15:40 – 16:00	Post-Workshop Skill Assessment	Convenor / All Faculty



PULMONARY FUNCTION TESTS

DATE : Wednesday, 27th January 2021

TIME : 9:00 to 18:00

WORKSHOP DIRECTOR : Dr. Mohan Kumar Thekinkattil

SKILL OBJECTIVES

After completing this workshop, You will be able to :

1. Know and interpret basic and advanced PFT results
2. Perform and Interpret Oscillometry, Diffusion capacity (DLCO), Nitrogen washout, FENO, 6 minute Walk test and know the pitfalls
3. Perform Cardio-Pulmonary Exercise testing (CPET) and Arterial Blood Gases (ABG) and assess and analyse reports with confidence

Time	Programme	Faculty
9:00 – 9:30	Introduction and Welcome	Dr. Mohankumar T
9:30 – 10:15	Basic Spirometry	Dr. Sundeep Salvi
10:15 – 11:00	Body Plethysmography	Dr. Lavina Mirchandani
11:00 – 11:15	Break for Q/A	Convenor & Faculty
11:15 – 12:00	DLCO	Dr. P. Sukumaran
12:00 – 12:45	Nitrogen (N ₂) Wash out	Dr. Vishwanath Gella
12:45 – 13:30	Cardio- pulmonary exercise testing	Dr. Lancelot Pinto
13:30 – 13:45	Break for Q/A	Convenor & Faculty
13:45 – 14:15	LUNCH	
14:15 – 15:00	Oscillometry	Dr. Nitin Vanjare
15:00 – 15:45	6 minute walk test	Dr. Rupak Singla
15:45 – 16:30	FENO	Dr. Irfan Ismail Ayub
16:30 – 17:15	ABG	Dr. Kripesh Sarmah
17:15 – 17:30	Break for Q/A	Convenor & Faculty
17:30 – 18:00	Post-Workshop Skill Assessment	Convenor & All Faculty



THORACIC IMAGING

DATE : Wednesday, 27th January 2021

TIME : 9:00 to 17:00

WORKSHOP DIRECTOR : Dr. Bhavin Jankharia

SKILL OBJECTIVES

After completing this workshop, You will be able to:

1. Gain new insights in interpretation of Chest X-Ray and CT and other imaging modalities.
2. Read every chest pathology on different thoracic imaging techniques as confidently as the radiologist.
3. Observe and understand the technique of doing Image-Guided Biopsies.

Time	Programme	Faculty
9:00 – 9:10	Introduction and Welcome	Dr. Bhavin Jankharia
9:10 – 9:40	Chest X-Ray Interpretation	Dr. S K Katiyar
9:40 – 10:10	Lung Nodules – Solitary and Multiple	Dr. Palmi Shah (USA)
10:10 – 10:40	Mediastinal Masses	Dr. Aparna Irodi
10:40 – 11:10	Approach to Adenopathy	Dr. Bhavin Jankharia
11:10 – 11:20	Break for Q/A	
11:20 – 11:50	COVID-19 : Signs on CT	Dr. Vimal Raj
11:50 – 12:20	Cystic Lung Diseases	Dr. Prachi Agarwal (USA)
12:20 – 12:50	Fibrosing ILDs	Dr. Sudhakar Pipavath (USA)
12:50 – 13:20	Non-Fibrosing ILDs	Dr. Sushil Sonavane (USA)
13:20 – 13:30	Break for Q/A	
13:30 – 14:00	Break for LUNCH	
14:00 – 14:30	Low-dose CT in Smokers	Dr. Parang Sanghavi
14:30 – 15:00	Tuberculosis	Dr. Ashu Seith Bhalla
15:00 – 15:30	Pleural Diseases	Dr. Priyanka Naranje
15:30 – 16:00	Fungal Infections	Dr. Mandeep Garg
16:00 – 16:30	Image Guided Thoracic Interventions	Dr. Bhavin Jankharia
16:30 – 16:40	Break for Q /A	
16:40 – 17:00	Post-Workshop Skill Assessment	Convenor / All Faculty



BRONCHOSCOPY

DATE : Wednesday, 27th January 2021

TIME : 9:00 to 18:30

WORKSHOP DIRECTOR : Dr. Rajesh Chawla

CO-ORDINATORS : Dr. Sandeep Katiyar, Dr. Aakanksha Chawla Jain

SKILL OBJECTIVES : After completing this workshop, You will be able to -

1. Acquire the knowledge of the normal bronchoscopy procedure and identification of normal bronchial tree
2. Acquire the knowledge of the scope of Rigid and Fibre-optic Bronchoscopy
3. Know about the correct methods of taking biopsies and doing BAL
4. Acquire the knowledge of EBUS, Bronchial thermoplasty and therapeutic procedures

Time	Programme	Faculty
9:00 – 9:15	Introduction and Welcome	Dr. Rajesh Chawla, Dr. Sandeep Katiyar
9:15 – 9:45	Fibreoptic Bronchoscopy - An Overview	Dr. Rajesh Chawla
9:45 – 10:25	Bronchoscopy - Tips for a Young Bronchoscopist from The Master	Dr. Atul Mehta (USA)
10:25 – 10:45	Local Anaesthesia and sedation during Bronchoscopy	Dr. Bharat Gopal
10:45 – 11:15	Demonstration of normal fiber bronchoscopy procedure and identifying various segments of bronchial tree	Dr. Rajesh Chawla
11:15 – 11:35	Identifying various bronchoscopic lesions during Bronchoscopy - Demonstration	Dr. Manoj Goel
11:35 – 11:50	Break for Q/A	
Moderators : Dr. Ajay Lal, Dr. Veerotam Tomer		
11:50 – 12:20	The Art of taking bronchial biopsy, BAL and Transbronchial biopsy – A Case-based demonstration	Dr. Prashant Chhajed
12:20 – 12:50	Fiber bronchoscopic Cryo Lung Biopsy - A Case-based demonstration	Dr. Ritesh Agarwal
12:50 – 13:00	Break for Q/A	
Moderators : Dr. P. Chhajed, Dr. Sandeep Nayyar		
13:00 – 13:30	C-EBUS - EBUS Mediastinal Anatomy, EBUS guided FNAC and Biopsy - A Case-based demonstration	Dr. V. R. Pattabhiraman
13:30 – 14:00	Radial EBUS – A Case-based demonstration	Dr. Amit Dhamija
14:00 – 14:45	Break for Q/A and LUNCH	
Moderators : Dr. V.R. Pattabhiraman, Dr. Ritesh Agarwal		
14:45 – 15:15	Airway Stenting using Rigid bronchoscopy and Fibreoptic Bronchoscopy – A Case-based Demonstration	Dr. Rajiv Goyal
15:15 – 15:45	Bronchoscopy in the management of Hemoptysis and BPF - A Case-based Demonstration	Dr. Ravi Mehta
15:45 – 16:00	Break for Q/A	
Moderators : Dr. A. Jayachandra, Dr. Tinku Joseph		
16:00 – 16:30	Rigid Bronchoscopy - its Scope as a diagnostic and therapeutic modality - A Case-based Demonstration	Dr. Karan Madan
16:30 – 17:00	Bronchial Thermoplasty – A Case-based Demonstration	Dr. Nagarjuna Maturu
17:00 – 17:30	Interesting Bronchoscopy Cases - I	Dr. Avdlesh Bansal
17:30 – 18:00	Interesting Bronchoscopy Cases - II	Dr. Sushmita Roychowdhury
18:00 – 18:30	Post-Workshop Skill Assessment MCQ / Q & A	Dr. Rajiv Goyal / Dr. Sushmita Roychowdhury /
	All Faculty	



DATE : Wednesday, 27th January 2021

TIME : 9:00 to 18:00

WORKSHOP DIRECTOR : Dr. Rakesh Chawla

WORKSHOP CO-ORDINATORS: Dr. Nitin Abhyankar, Dr. Aditya K. Chawla

SKILL OBJECTIVES : After completing this workshop, You will be able to :

1. Understand and acknowledge the Role and Current status of Thoracoscopy in Management of Pleural Diseases.
2. Know the Pre-requisites, Technique and Instrumentation required for performing Medical Thoracoscopy as well as insertion of Indwelling Pleural Catheters.
3. Gain Skill, expertise and confidence in performing Thoracoscopy procedures as Interventional Pulmonologists.

Time	Programme	Faculty
9:00 – 9:10	Introduction and Welcome	Dr. Rakesh K. Chawla
Chairs : Dr. Gyanendra Aggarwal, Dr. Sandeep Nayyar, Dr. Vaibhav Chachra		
9:10 – 9:35	History, Relevant Anatomy and Setting Up of a Thoracoscopy Suite	Dr. Aditya K. Chawla
9:35 – 9:55	Indications, Pre-operative Preparation, Sedation and Anaesthesia for Thoracoscopy	Dr. Arun Madan
9:55 – 10:20	Semirigid Thoracoscopy – Similarities and Differences	Dr. M. Munavvar (U.K.)
10:20 – 10:45	Rigid Thoracoscopy – Step by Step	Dr. Rakesh K. Chawla
10:45 – 11:00	Break for Q & A	
Chairs : Dr. Vineet Alexander, Dr. Nevin Kishore, Dr. Prashant Saxena		
11:00 – 11:25	Indwelling Pleural Catheter – Role in 2020	Dr. Rajesh Thomas (Australia)
11:25 – 11:50	Malignant Pleural Effusion – A Case-based approach	Dr. Sandeep Katiyar
11:50 – 12:15	Malignant Pleural Mesothelioma – What's New ?	Dr. Stefano Gasparini (Italy)
12:15 – 12:25	Break for Q & A & Inauguration	
Chairs : Dr. Mahendra Kumar, Dr. S. Yuvarajan, Dr. Vishal Arya		
12:35 – 13:00	VATS in Tuberculosis and Lung Cancer	Dr. Arvind Kumar
13:00 – 13:25	Thoracoscopy in the absence of Pleural Effusion	Dr. Philippe Astoule (France)
13:25 – 13:50	Recurrent Spontaneous Pneumothorax : A Case - Based Approach	Dr. Nitin Abhyankar
13:50 – 14:30	Break for Q & A & LUNCH	
Chairs : Dr. Ajmal Khan, Dr. Ujjwal Parakh, Dr. Arjun Khanna		
14:30 – 14:55	Intraleural agents for Empyema	Dr. Kumar Utsav Samaria
14:55 – 15:20	Thorascopic Cryo Pleural Biopsy – Is it Better ?	Dr. Manoj Goel
15:20 – 15:45	Visualization of Thoracic Anatomy and Lung Pathology on Ultrasound	Dr. Rajesh Gothi
Chairs : Dr. Vikas Mourya, Dr. Manav Manchanda, Dr. Gargi		
15:45 – 16:10	Thoracoscopy – Tips and Tricks	Dr. M. Munavvar (U.K.)
16:10 – 16:35	Clinical Pearls in Medical Thoracoscopy – How to prevent complications	Dr. Philippe Astoule (France)
16:35 – 17:00	Complications of Medical Thoracoscopy	Dr. Stefano Gasparini (Italy)
Chairs : Dr. Madhu, Dr. Prem Prakash, Dr. Praveen Valsalan, Dr. Dinesh Mehta		
17:00 – 17:15	From Thoracoscopy to VATS – Right Intervention For Right Patient	Dr. Sri Krishna
17:15 – 17:30	Has Closed Pleural Biopsy lost its Relevance in India ?	Dr. Rennis Davis
17:30 – 17:40	Break for Q & A	
17:40 – 18:00	Post-Workshop Skill Assessment	Dr. S. Yuvarajan and All Faculty



RESPIRATORY FAILURE AND ASSISTED VENTILATION

DATE : Wednesday, 27th January 2021

TIME : 9:00 to 18:00

WORKSHOP DIRECTORS : Dr. Dhruva Chaudhry, Dr. Gopi C Khilnani

WORKSHOP CO-ORDINATORS : Dr. Manjunath B G, Dr. Pawan Kumar Singh

SKILL OBJECTIVES : After completing this workshop, You will be able to :

1. Understand the indications, contra-indications and clinical application of non-invasive and invasive mechanical ventilation.
2. Understand the different modes of ventilation and interpret ventilator graphics and waveforms in the clinical context.
3. Successfully initiate, monitor and manage a patient on NIV and Invasive Ventilation .
4. Wean a patient from ventilation appropriately.
5. Gain skill and confidence in Mechanical Ventilation as an integral component of Pulmonary Medicine.

Time	Programme	Faculty
9:00 – 9:10	Introduction and Welcome	Dr. Dhruva Chaudhry Dr. G. C. Khilnani
9:10 – 9:30	Approach to Respiratory failure (Acute) - Practical Aspects	Dr. Dhruva Chaudhry
9:30 – 9:45	Overview of Oxygen Therapy	Dr. Vijay Hadda
Session 1 - Non-Invasive Ventilation		
9:45 – 10:30	High Flow Nasal Cannula - Setting up, Use and Weaning	Dr. Inderpaul Singh Sehgal Dr. Sateesh Chander
10:30 – 11:15	Non-Invasive Ventilation - Indications, Modes and Setting up	Dr. Vivek Nangia Dr. Vikas Marwah
11:15 – 12:00	Interface, Machines, Troubleshooting (including Asynchrony) during NIV	Dr. Rajesh Chawla Dr. Ansuman Mukhopadhyay
12:00 – 12:20	Break for Q/A	
12:20 – 13:00	Break for LUNCH	
Session 2 - Invasive Ventilation		
13:00 – 13:45	Basic Modes of Ventilation – How to Set them on a Ventilator	Dr. Subhal Dixit Dr. Deepti Rathee
13:45 – 14:30	Interpretation of Ventilator Graphics	Dr. Pawan Kumar Singh Dr. Rajnish Kaushik
14:30 – 15:15	Troubleshooting (including Asynchrony) during Mechanical Ventilation	Dr. Manjunath BG Dr. Manoj Singh
15:15 – 15:30	Break for Q/A	
Session 3 – Disease-Specific Ventilation		
15:30 – 16:15	COPD	Dr. Girish Agarwal Dr. Bharat Jigiasi
	ARDS	Dr. Sandeep Dewan Dr. Vijay Hadda
16:15 – 17:15	Case - based practical application - 2 cases x 30 minutes each ARDS Acute Exacerbation of COPD	Dr. G. C. Khilnani Dr. Vijay Hadda
17:15 – 17:35	Domiciliary NIV for Chronic Respiratory Failure	Dr. Mark Elliott (U.K.)
17:35 – 17:45	Break for Q/A	
17:45 – 18:00	Post – Workshop Skill Assessment	All Faculty



DATE : Wednesday, 27th January 2021

TIME : 9:00 to 18:30

WORKSHOP DIRECTOR : Dr. Vikram Sarbhai

SKILL OBJECTIVES : After completing this workshop, You will be able to :

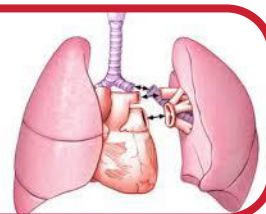
1. Gain basic and advanced skills for diagnosis and assessment of Sleep Disorders.
2. Understand the utility of newer tools to assess sleepiness.
3. Overview Interpreting Polysomnography and Titration of PAP.
4. Understand Impact of Breathing Disorders in Sleep in the Patho-physiological morbidity.
5. Understand Dental and Neurological facets of Sleep Disorders and Interventions.

Time	Programme	Faculty
09:00 - 09:10	Introduction to Sleep Medicine and Workshop	Dr. Vikram Sarbhai (UAE)
09:10 - 09:30	Excessive Daytime Sleepiness Assessment : Patient Complaints; Questionnaires & Assessment tools	Dr. Mayank Vats (Dubai)
09:30 - 09:31	Introduction of Next Speaker (Chair : Dr. R M P L Ramanathan)	
09:31 - 09:51	Physiology & Pathophysiology of Sleep & Breathing	Dr. H N Mallick
09:51 - 09:59	Discussion with 2 Speakers on Sleep (Chair : Dr R M P L Ramanathan)	
09:59 - 10:00	Introduction of Next Speaker (Chair : Dr. R M P L Ramanathan)	
10:00 - 10:20	Obstructive Sleep Apnea Syndrome (OSA) : Epidemiology & Clinical Presentation	Dr. A G Ghoshal
10:20 - 10:21	Introduction of Next Speaker (Chair : Dr. R M P L Ramanathan)	
10:21 - 10:41	OSAS: Phenotypes and Endotypes	Dr. C Ravindran
10:41 - 10:42	Introduction of Next Speaker (Chair : Dr. R M P L Ramanathan)	
10:42 - 11:02	Clinical Assessment of OSA	Dr. Rajesh Swarnakar
11:02 - 11:14	Discussion with 3 Speakers on OSA (Chair : Dr R M P L Ramanathan)	
11:14 - 11:15	Introduction of Next Speaker (Chair : Dr. Shashi Bhushan)	
11:15 - 11:35	Sleep Studies : Types of Polysomnography (Level 1-4)	Dr. Jyotsana Joshi
11:35 - 11:36	Introduction of Next Speaker (Chair : Dr. Shashi Bhushan)	
11:36 - 11:56	AASM Sleep Scoring Rules : Technical aspects of sleep measurement - Stages of sleep; EEG arousals; Limb movements; Periodic leg movements	Dr. Tripat Deep Singh (Singapore)
11:56 - 11:57	Introduction of Next Speaker (Chair : Dr. Shashi Bhushan)	
11:57 - 12:17	AASM Sleep Scoring Rules : Respiratory events - Obstructive sleep apnoea; Central sleep apnoea; Cheyne-Stokes respiration	Dr. Rohit Kumar
12:17 - 12:18	Introduction of Next Speaker (Chair : Dr. Shashi Bhushan)	
12:18 - 12:38	Evaluation of sleepiness & vigilance - Multiple sleep latency test (MSLT) and Maintenance of wakefulness test (MWT)	Dr. Dhrubajyoti Roy
12:38 - 12:54	Discussion with 4 Speakers on Sleep Studies (Chair : Dr. Shashi Bhushan)	
12:54 - 12:55	Introduction of Next Speaker (Chair : Dr. Indranil Halder)	
12:55 - 13:15	Masks; Modes & Titration of PAP	Dr. R. Vijai Kumar
13:15 - 13:20	2 Questions / Discussion & Introduction of Next Speaker (Chair : Dr Indranil Halder)	
13:20 - 13:40	Obesity Hypoventilation Syndrome (OHS) - Diagnosis, epidemiology and comorbidities	Dr. Randeep Guleria
13:40 - 13:41	Introduction of Next Speaker (Chair : Dr. Indranil Halder)	

13:41 - 14:01	Management of Obesity Hypoventilation Syndrome – During Acute-on-Chronic Hypercapnic Respiratory Failure and Follow-up	Dr. Partha Pratim Bose
14:01 - 14:09	Discussion with 2 Speakers on OHS (Chair : Dr Indranil Halder)	
14:09 - 14:10	Introduction of Next Speaker (Chair : Dr Indranil Halder)	
14:10 - 14:30	Central Sleep Apnea (CSA) : Pathophysiology, Prevalence and diagnosis	Dr. N. Ramakrishnan
14:30- 14:31	Introduction of Next Speaker (Chair : Dr. Indranil Halder)	
14:31- 14:51	Sleep & Advanced COPD : Therapeutic Interventions	Dr. Dipti Gothi
14:51- 14:59	Discussion with 2 Speakers on SDB (Chair : Dr. Indranil Halder)	
14:59- 15:00	Introduction of Next Speaker (Chair : Dr. Saurabh Mittal)	
15:00 - 15:20	Metabolic Complications of Sleep Disordered Breathing (SDB) and effect of PAP Therapy	Dr. Vikram Sarbhai (UAE)
15:20 - 15:21	Introduction of Next Speaker (Chair : Dr. Saurabh Mittal)	
15:21 - 15:41	Pathophysiology of Cardiovascular morbidity in SDB and effect of PAP Therapy	Dr. Anant Mohan
15:41 - 15:42	Introduction of Next Speaker (Chair : Dr. Saurabh Mittal)	
15:42- 16:02	Neurodegeneration Risks with Sleep Apnea - Circadian Rhythms & Cognition Dysfunction; Dementia and Treatment outcomes	Dr. Deepak Shrivastava (USA)
16:02- 16:14	Discussion with 3 Speakers on SDB and Co-Morbidities (Chair : Dr. Saurabh Mittal)	
16:14 - 16:15	Introduction of Next Speaker (Chair : Dr. Saurabh Mittal)	
16:15 - 16:35	Upper Airway Surgery & Oral Appliances for OSA	Dr. B Jayan
16:35 - 16:36	Introduction of Next Speaker (Chair : Dr. Saurabh Mittal)	
16:36 - 16:56	Treatment of Difficult OSA – Personalized Therapy : Monotherapy versus combined therapy ? MAD + PAP	Dr. J C Suri
16:56 - 17:04	Questions & Discussion with 2 Speakers (Chair : Dr. Saurabh Mittal)	
17:04 - 17:05	Introduction of Next Speaker (Chair : Dr. Partha Pratim Bose)	
17:05 - 17:25	Parasomnias, RBD and Nocturnal Epilepsy	Dr. Manjari Tripathi
17:25 - 17:26	Introduction of Next Speaker (Chair : Dr. Partha Pratim Bose)	
17:26 - 17:46	Narcolepsy & Hypersomolence Syndromes	Ramadevi Gourineni (Tirupati)
17:46 - 17:47	Introduction of Next Speaker (Chair : Dr. Partha Pratim Bose)	
17:47 - 18:07	Periodic Leg Movements and Restless Legs Syndrome	Dr. Amita Nene
18:07- 18:20	Discussion with 3 Speakers on Neurological Disorders in Sleep (Chair : Dr. Partha Pratim Bose)	
18:20 - 18:30	Valedictory	



INTERSTITIAL LUNG DISEASES AND LUNG TRANSPLANTATION



DATE : Wednesday, 27th January 2021

TIME : 9:00 to 18:00

WORKSHOP DIRECTORS : Dr. Deepak Talwar (ILD), Dr. Apar Jindal (Lung Transplantation)

SKILL OBJECTIVES : After completing this workshop, You will be able to :

1. Gain working knowledge and skills to confidently identify and classify different radiological patterns in Interstitial Lung diseases.
2. Develop a confident approach towards step-wise diagnosis, assessment and monitoring of ILDs.
3. Be apprised with latest developments in the treatment of ILDs.
4. Gain working knowledge and skills in the field of Lung Transplantation giving hope to your patients suffering from end-stage lung diseases across our country and around the world.
5. Apply knowledge of the pre-requisites of Lung Transplantation for Recipient and Donor selection.
6. Understand the procedure and techniques of Lung Transplant and confidently manage post-operative complications and follow-up of Recipients.
7. Acknowledge the importance of Your role as a Pulmonologist, as well as a Multi-Disciplinary Approach for Interstitial Lung Diseases as well as Lung Transplantation

Time	Programme	Faculty
9:00 – 9:05	Introduction and Welcome	Dr. Deepak Talwar
Session 1 : ILD Diagnosis Chairs : Dr. Virendra Singh, Dr. S. K. Jindal		
9:05 – 9:20	ILD in India : Cases with lessons learnt	Dr. Raja Dhar
9:20 – 9:35	Essentials in Clinical diagnosis of ILD in the present times	Dr. Randeep Guleria
9:35 – 9:55	Imaging in ILD's : Raising the Bar for the Radiologist	Dr. Vimal Raj
9:55 – 10:10	Cryobiopsy for ILD's in Today's Scenario : Why & When	Dr. Venerino Poletti (Italy)
10:10 – 10:30	MDD Case Discussions (4 cases x 5 mins each)	Dr. Deepak Prajapat
	Panel : Dr. Toby Mahler (USA), Dr. S. K. Jindal, Dr. Randeep Guleria, Dr. Raja Dhar, Dr. Surabhi Vyas	
10:30 – 10:40	Break for Q/A	
Session 2 : Update on Common ILDs Chairs : Dr. Sheetu Singh, Dr. A. K. Singh		
10:40 – 10:55	Idiopathic Pulmonary Fibrosis - Update	Dr. Toby Mahler (USA)
10:55 – 11:10	CTD – ILD - Update	Dr. Vijay Hadda
11:10 – 11:25	Chronic HP - Update	Dr. Martina Vasakova (Czechoslovakia)
11:25 – 11:40	Sarcoidosis - Update	Dr. Dan A. Culver (USA)
11:40 – 11:50	Break for Q/A - ILD Quiz	
Session 3 : Round Table Discussion on Hot Topics in ILD Chairs : Dr. Deepak Talwar, Dr. Zarir Udwadia		
11:50 – 12:15	Post-COVID Pulmonary Fibrosis (Case-based)	Dr. Suhail Raof (USA)
12:15 – 12:30	Progressive Pulmonary Fibrosis (Case-based)	Dr. Luca Richeldi (Italy)
Session 4 : MDD with Cases of Rare ILDs Chairs : Dr. Nita M Basumetry Dr. Sunny Viridi		
12:30 – 12:45	2 cases in MDD of each variety x 5 mins each	Dr. Sheetu Singh, Dr. Aditya Jindal, Dr. Rajesh Gothi
12:45 – 13:00	Cystic ILD – Update	Dr. Suhail Raof (USA)
13:00 – 13:15	Alveolar Proteinosis	Dr. Francesco Bonella (Germany)

13:15 – 13:40	Break for Q /A with Faculty and LUNCH	
Session 5 : Treatment of ILDs Chair : Dr. Vishveswaran, Dr. Atulya Atreja		
13:40 – 14:00	Overview of Steroids & Immunosuppressives in Non-IPF ILDs	Dr. Katrin Hostettler (Switzerland)
14:00 – 14:20	Overview of Anti-fibrotic Therapy : Drugs, Dosing, Time and Duration	Dr. Vincent Cottin (France)
14:20 – 14:30	Pulmonary Rehabilitation in ILD and adapting to the present times	Dr. Sally Singh (UK)
14:30 – 14:50	Post-ILD Workshop Skill Assessment	All Faculty
14:50 – 15:00	Break	
15:00 – 15:05	Introduction and Welcome	Dr. Apar Jindal
15:05 – 15:25	Indications for Lung Transplantation – Challenges Faced and the Importance of Early Referral	Dr. Apar Jindal
15:25 – 15:45	Immunosuppression post-transplant – Balancing with infection prophylaxis	Dr. Vaidehi Kaza (USA)
15:45 – 16:05	ECMO as a bridge to Lung transplant – the good, the bad and the ugly	Dr. K. R. Balakrishnan
16:05 – 16:25	Graft Rejections – Recognizing and Managing them	Dr. Alan Glanville (Australia)
16:25 – 16:40	Break for Q/A	
16:40 – 17:00	Importance of the Interventional Pulmonologist in the Lung Transplant Unit – Management of post-transplant Airway complications	Dr. Arun Nair (UK)
17:00 – 17:20	Infections post-lung transplantation	Dr. Harish Seethamraju (USA)
17:20 – 17:40	Preparing the lung transplant recipient – the pre-transplant work up and management	Dr. R.M.P.L. Ramanathan
17:40 – 18:00	Long-term follow-up of the Lung-Transplant Patient – Back to the Referring Pulmonologist	Dr. Deepak Talwar
18:00 – 18:10	Break for Q/A	
18:10 – 18:30	Post -Lung Transplant Workshop Skill Assessment	All Faculty



OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE)

DATE : Wednesday, 27th January 2021

TIME : 10:00 to 18:00

WORKSHOP DIRECTORS: Dr. Mansi Gupta, Dr. Pranav Ish

SKILL OBJECTIVES : After completing this workshop, you will be able to:

1. Understand what and how to prepare for OSCE
2. Understand how to present your cases and interpret various investigation in OSCE
3. Understand the marking schemes of examiners and frequently asked questions (F.A.Q.s)
4. Get oriented to virtual examination practice for various international fellowship exams as well as MD/DNB/DM exit exams

Time	Programme	Faculty
10:00 – 10:15	Introduction and Welcome	Dr. Mansi Gupta, Dr. Pranav Ish
10:15 – 10:35	Approach to History taking in OSCE	Dr. Sumita Aggrawal + DM Fellow
10:35 – 11:15	Approach to and Interpretation of Clinical Examination in OSCE	Dr. Nitesh Gupta + DM Fellow
11:15 – 11:30	Break for Q & A	All Faculty
11:30 – 12:15	Approach to and Interpretation of Chest X-rays in OSCE	Dr. Richa Gupta
12:15 – 13:00	Approach to and Interpretation of PFT in OSCE	Dr. Animesh Ray
13:00 – 13:30	Approach to and Interpretation of ABG in OSCE	Dr. Mansi Gupta
13:30 – 14:00	Approach to and Interpretation of PSG in OSCE	Dr. Uma Maheshwari
14:00 – 14:30	Break for Q & A LUNCH	All Faculty
14:30 – 15:45	OSCE PRACTICE CASES – SESSION I 1. Pneumonia 2. COPD 3. Interstitial Lung Disease	Dr. Arjun Khanna Dr. Pranav Ish Dr. B. Visweswaran
15:45 – 16:00	Break for Q & A	All Faculty
16:00 – 17:30	OSCE PRACTICE CASES – SESSION II 1. Pleural Effusion 2. Acute Respiratory Distress Syndrome 3. Obesity-Hypoventilation Syndrome with Obstructive Sleep Apnea 4. Pulmonary Embolism	Dr. D. J. Christopher Dr. Pawan Singh Dr. Rahul Sharma Dr. Brijesh Prajapat
17:30 – 18:00	Post – Workshop Skill Assessment	All Faculty

SCIENTIFIC PROGRAMME AT A GLANCE

The Scientific Programme of Virtual NAPCON 2020 is for 4 days from 28 to 31 January 2021 and distributed over different halls. All attendees will get equal opportunity to interact with renowned national and international faculty in the field of Pulmonary Medicine. The Scientific Committee has strived hard to provide a well-balanced elaborate academic programme with presentation of the latest developments in Pulmonary Medicine and Allied Sciences along with discussion of the challenges faced in resource-limited settings. Final programme will be made available by the Scientific Committee after inputs from NCCP(I) and ICS Governing Council members in the joint meeting. In addition to the deliberations covered under the Scientific Programme, there are also 4 Oration Lectures of NCCP(I) and ICS each, 9 Young Scientist Award presentations of NCCP(I) and ICS each, Oral Paper Presentations and the E-Poster Exhibition.

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|------------------------------------|---------------------|------------------------------|
| • DEBATES | • PANEL DISCUSSIONS | • SYMPOSIUMS |
| • INTERNATIONAL SOCIETY SYMPOSIA | • GRAND ROUNDS | • PLENARY SESSIONS |
| • NEW GUIDELINES & RECOMMENDATIONS | • RECENT ADVANCES | • PRACTICE-CHANGING RESEARCH |
| • REAL-LIFE CLINICAL EXPERIENCES | • MEET THE EXPERT | • SEMINARS |

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|---|---|
| <ul style="list-style-type: none"> • 1 and 2 Metre Rule • 3-D Pulmonary Reconstruction • Aerodynamics of Aerosols and Generating Procedures • Air and Space Travel in Lung Diseases and In-flight Simulation • Air Purifiers • All about Masks, Respirators and PPE • Allergy and Immunology • Antibiotics and Anti-Microbials • Artificial Intelligence • Asthma • Bariatric and Thoracic Surgery • Biologicals • Bioterrorism • Bronchiectasis • Bronchopleural Fistula - Endoscopic Management • Critical Care, Sepsis and Resuscitation • COPD • COVID-19, Influenza and Pandemic Infections • Connective Tissue Disorders • CT - Advances, Low-dose Screening for Lung Cancer • Cystic Lung Diseases • De-addiction • Developmental Disorders • E-consultation and E-prescription • E-learning and Skill Development • E-nose • Climatic Change and Environmental Disasters (Forest Fires, Thunderstorms and Volcanic Eruptions) - Impact and Mitigation • Escape Pathogens and Superbugs • Fungal Infections • Genetic Disorders and Gene Therapy • High-Altitude Disorders • High-flow Nasal Oxygen • ILD • Immunotherapy and Immunomodulators • Interventional Pulmonology - Bronchoscopy - Ultrathin, HD+, Eye Scan, EBUS, Virtual and Navigational, Thoracoscopy, Awake Procedures, Single-Use Scopes • Inhalational Therapy - Advances and Recent Developments • Latest Updates | <ul style="list-style-type: none"> • Liquid Biopsy • Lung Cancer - Screening in Young Patients, Incidental Nodules, Multiple Primaries, Stereotactic Irradiation • Lung Transplantation and Solid Organ Transplantation • Microbiome • MRI - Acoustic Noise Effects on Neonatal and Fetal growth, Health risks with Gadolinium and other contrast agents • Nanotechnology - Silver and Gold Nanoparticles • Nebulization - Emerging Trends in Drug Delivery • Non-Invasive Ventilation • Opportunistic and Exotic Infections • Palliative Care • Pediatric Pulmonology • Pharmacotherapy and Targeted Therapies in Lung Diseases • Phenotype, Genotype and Endotype • Pleural Diseases • Pleurodesis • Pneumonias • Positional Therapy • Precision Medicine • Probiotics • Pulmonary Function Assessment • Pulmonary Vascular Disorders • Regenerative (Stem Cell) Therapy • Rehabilitation • Respiratory Failure - Mechanical Ventilation, ECMO, Modes and Adherence of PAP therapy • Screening for Pulmonary Disease - Biomarkers, Low-dose CT • Shared Ventilators between Patients • Sleep Apnea and other Sleep Disorders in COVID-19 • Sudden Death • Robotics • Telemedicine • Tuberculosis • Ultrasound - Point-of-care (POCUS), Contrast-Enhanced, USG for Early Management and as an alternative to CT • Upper Airway Disorders and Interventions • Vaccination • Virtual Primary Respiratory Care • Virtual Reality - The New Norm |
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ORATIONS: 4 Oration lectures each are awarded by the National College of Chest Physicians (India) and Indian Chest Society to pioneering workers in the field of Pulmonary medicine in recognition of their original work.

NCCP (India) orations :

1. NCCP(I) - Prof. Dr. Raman Vishwanathan memorial chest oration
2. NCCP(I) - Prof. Dr. A. S. Paintal - Prof. Dr. R. C. Jain memorial chest oration
3. NCCP(I) - Prof. Dr. P. S. Shankar - Prof. Dr. K. C. Mohanty chest oration
4. NCCP(I) - Prof. Dr. S. K. Jain - Prof. Dr. S. K. Katiyar chest oration

ICS orations :

1. ICS - Prof. Dr. S. N. Tripathy presidential oration
2. ICS - Prof. Dr. C. V. Ramakrishnan memorial oration
3. ICS - Prof. Dr. O. A. Sarma oration
4. ICS - Prof. Dr. K. J. R. Murthy oration

INTERNATIONAL SYMPOSIA



Asian-Pacific Society of Respirology (APSR) International Symposium on COVID-19 in Asia-Pacific



Indonesian Society of Respirology



MALAYSIAN THORACIC SOCIETY



-	SYMPOSIUM	SCHEDULE
	<p>Asian-Pacific Society of Respirology (APSR) International Symposium on COVID-19 in Asia-Pacific</p> <p>Chair: Yoichi Nakanishi [Asian-Pacific Society of Respirology (APSR)]</p> <p>Clinical research on and trials for COVID-19 in Japan. Akihito Yokoyama [Japan Respiratory Society (JRS)]</p> <p>Measures to COVID-19 in Australia and New Zealand: Policy to guard against virus spreads. Bruce Thompson [Thoracic Society of Australia and New Zealand (TSANZ)]</p> <p>The key to contain COVID-19: The Taiwan Model. Shih-Chi Ku [Taiwan Society of Pulmonary & Critical Care Medicine (TSPCCM)]</p> <p>How to build effective COVID-19 community communication in Indonesia. Fathiyah Isbaniah [Indonesian Society of Respirology (ISR)]</p> <p>How did Singapore overcome big wave of COVID-19? Adrian Chan [Singapore Thoracic Society (STS)]</p> <p>Dealing with COVID-19 Pandemic in Malaysia. Syazatul Syakirin Sirol Aflah [Malaysian Thoracic Society (MTS)]</p> <p>Key Measures to control the Second Big Wave of COVID-19 in Sri Lanka. Bodhika Samarasekera [Sri Lanka College of Pulmonologists (SLCP)]</p> <p>COVID-19 response in Mongolia. Tumur-Ochir Tsedev-ochir [Mongolian Respiratory Society (MRS)]</p> <p>Additional measures to cope with the recent new wave of COVID-19 in Hong Kong. Raymond Liu [The Hong Kong Thoracic Society (HKTS)]</p>	<p>THURSDAY 28-01-2021 14:45 - 16:30</p>

 <p>CHEST AMERICAN COLLEGE of CHEST PHYSICIANS</p>	<p>American College of Chest Physicians (ACCP) CHEST International Symposium on Asthma Moderator : Steven Q Simpson (USA)</p> <p>Advances in Asthma Management - A Spotlight on Biologics. Sandhya Khurana (USA)</p> <p>The implications of Asthma and Management during the COVID-19 Pandemic. Diego J Maselli (USA)</p> <p>An Update on Asthma Guidelines. Megan Conroy (USA)</p>	<p>SUNDAY 31-01-2021 15:30 – 17:00</p>
 <p>AMERICAN THORACIC SOCIETY ATS</p>	<p>American Thoracic Society (ATS) International Symposium on COPD</p> <p>Chair : Juan Celedon (USA)</p> <p>Early COPD : Does finding cases impact future risks? Fernando J. Martinez (USA)</p> <p>Biomarkers and imaging in COPD : tailoring treatment. MeiLan King Han (USA)</p> <p>Treating COPD in the 21st Century : What is beyond Triple Therapy. Bartolome Celli (USA)</p>	<p>SATURDAY 30-01-2021 18:00 – 19:30</p>
 <p>ERS EUROPEAN RESPIRATORY SOCIETY every breath counts</p>	<p>European Respiratory Society (ERS) International Symposium on Sepsis</p> <p>Chairs : Simon Tiberi (UK), Catia Cilloniz (Spain)</p> <p>Role of non-invasive respiratory assistance in sepsis. Raffaele Scala (Italy)</p> <p>Personalised medicine in Sepsis. Lieuwe Bos (The Netherlands)</p> <p>HAP / VAP. Antoni Torres (Spain)</p>	<p>SATURDAY 30-01-2021 18:00 – 19:30</p>
 <p>Türk Toraks Derneği Turkish Thoracic Society</p>	<p>Turkish Thoracic Society (TTS) International Symposium on COVID-19 : Turkish Page of the COVID-19 Book</p> <p>Facilitators : Oya Itil (Turkey), Nurdan Kokturk (Turkey)</p> <p>How has Turkey responded to the COVID-19 threat?. Fusun Oner Eyuboglu (Turkey)</p> <p>Air pollution in the COVID-19 era. Hasan Bayram (Turkey)</p> <p>What have we done in the ICU against COVID-19 threat? Begum Ergan (Turkey)</p>	<p>SATURDAY 30-01-2021 18:00 – 19:30</p>
 <p>International Union Against Tuberculosis and Lung Disease</p>	<p>IUAT-LD (The Union) International Symposium A Comprehensive Approach for Tuberculosis Care and Lung Health</p> <p>Chair : Guy Marks (The Union), Rhea Lobo (The Union)</p> <p>Building back the TB response after the initial COVID-19 impact in India. K S Sachdeva</p> <p>Addressing Co-morbidities as part of a comprehensive approach to lung health. Paula Fujiwara (France)</p> <p>Occupational Risk factors for lung infections. Rodney Ehrlich (South Africa)</p> <p>Post lung infection health : What is needed?. Jamilah Meghji (UK)</p>	<p>SATURDAY 30-01-2021 16:30 – 18:00</p>

 <p>The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association</p>	<p>Japan Anti-TB Association (JATA) International Symposium TB control and care in Japan - Challenge towards Ending TB</p> <p>Chair : Ikushi Onozakii (Japan) Co-Chair : Kosuke Okada(Japan)</p> <p>Introduction. Ikushi Onozakii (Japan)</p> <p>Epidemiological shift of TB in Japan and recent challenges to join low burden countries. Lisa Kawatsu (Japan)</p> <p>TB care for the elderly. Takashi Yoshiyama (Japan)</p> <p>TB laboratory : developing new things based on techniques of the past. Satoshi Mitarai (Japan)</p> <p>Roles of Physicians and Professional society towards Ending TB. Seiya Kato (Japan)</p>	<p>THURSDAY 28-01-2021 11:15 – 12:45</p>
	<p>Bangladesh Primary Care Respiratory Society (BPCRS) International Symposium on Primary Respiratory Care</p> <p>Chair : V K Arora, Narendra Bhatta (Nepal), Ritisha Bhatt</p> <p>Systematic review of clinical effectiveness, component, and delivery of pulmonary rehabilitation in low-resource settings. G M Monsur Habib (Bangladesh)</p> <p>Safe re-opening of private primary respiratory care practices in Bangladesh during the COVID-19 pandemic: a practical guide. S M Rowshan Alam (Bangladesh)</p> <p>Engaging with stakeholders in a research programme to promote implementation of pulmonary rehabilitation in Bangladesh: Challenges and opportunities. Aftab Uddin (Bangladesh)</p> <p>Life style modification in prevention, and care of chronic respiratory diseases. Muhammad Jahangir Kabir (Bangladesh)</p> <p>Continuing professional education for general practitioners on COPD : feasibility of a blended learning approach in Bangladesh. Mohd. Nazim Uzzaman (Bangladesh)</p>	<p>SATURDAY 30-01-2021 14:00 – 15:30</p>
	<p>Nepalese Respiratory Society (NRS) International Symposium Responding to Pulmonary Diseases in the Era of COVID-19 : Unprecedented Times, Unprecedented Challenges</p> <p>Chair : Rajesh Solanki, Surya Kant, Sudhir Chaudhri, Indranil Halder</p> <p>Outpatients Management of COPD in the COVID-19 Era : The Known, the Unknown and the Controversies. Ramesh Chokhani (Nepal)</p> <p>Managing Pulmonary Tuberculosis in the COVID-19 Era : Responding to Vital Clinical Cross-Talks. Deebye Raj Mishra (Nepal)</p> <p>Adoption and Adaptation of Pulmonary -Telemedicine during and beyond COVID- 19. Narendra Bhatta (Nepal)</p>	<p>SATURDAY 30-01-2021 16:30 – 18:00</p>
	<p>Viet Nam Respiratory Society (VNRS) International Symposium</p> <p>Chair : Ngo Quy Chau (Viet Nam)</p> <p><i>(Details Awaited)</i></p>	<p>SATURDAY 30-01-2021 16:30 – 18:00</p>
	<p>Cleveland Clinic International Symposium on Interventional Pulmonology</p> <p>Moderator : Atul Mehta (USA)</p> <p>Interventional Pulmonology innovations for 2025. Tanmay Panchabhai (USA)</p> <p>Ice in the Airways. Sameer K. Avsarala (USA)</p> <p>EBUS-TBNA in the developing world. Pratibha Gogia</p> <p>Management of Recurrent Pleural Effusion. Satish Kalanjeri (USA)</p>	<p>SATURDAY 30-01-2021 18:00 – 19:30</p>

<p>International Symposium (U.K.) on Respiratory Infections</p> <p>Chair : M Munavvar (UK)</p> <p>COVID-19 Management and the ERS COVID-19 Guidelines. James D Chalmers (UK)</p> <p>BTS MDR Clinical Advisory Service - Key learning points from a standardised approach to the Management of MDRTB. Onn Min Kon (UK)</p> <p>Stepwise Management of Adults with Bronchiectasis in 2021. Adam Hill (UK)</p>	<p>FRIDAY 29-01-2021 15:15 – 16:30</p>
<p>International Symposium (Australian) on Critical Care</p> <p>Chair : Deepak Talwar, Avdhesh Bansal, Animesh Ray, Kavitha Venkatnarayan</p> <p>Sodium burden in ICU. Shailesh Bihari (Australia)</p> <p>Update on ARDS. Andrew Bersten (Australia)</p> <p>Veno-venous (VV) ECMO in ICU. Ubbo Wiersema (Australia)</p> <p>Coagulopathy in Liver failure in ICU. Russell Laver (Australia)</p>	<p>THURSDAY 28-01-2021 14:45 – 16:10</p>
<p>International Symposium on Pediatric Pulmonology</p> <p>Chair : Sangeeta Sharma, Santhakumar S, Saurabh Karmakar, Pranav Ish</p> <p>Primary Ciliary Dyskinesia - Diagnosis and Management. Nisha Bhatta (Nepal)</p> <p>High Resolution Transthoracic Ultrasound in Evaluation of Pediatric Mediastinal Lymphadenopathy. Priyanka Naranje</p> <p>Pediatric and Neonatal airway Endoscopy - Current status and the way forward . Fabio Midulla (Italy)</p> <p>Surfactant dysfunction and alveolar proteinosis in children. Alice Hadchouel -Duverge (France)</p>	<p>SATURDAY 30-01-2021 16:30 – 18:00</p>
<p>International Symposium on COPD</p> <p>Chair : Sanjeev Mehta</p> <p>COPD in India. Sanjeev Mehta</p> <p>Can Phenotyping COPD lead to Personalized Medicine? Sidney Braman (USA)</p> <p>Eosinophilic COPD - a real entity? Nicola Hanania (USA)</p> <p>The co-morbidities of COPD : mechanisms and disease impact. Barry Make (USA)</p> <p>The 'scope' of treating COPD : use of valves. Vishisht Mehta (USA)</p>	<p>SUNDAY 31-01-2021 10:15 - 12:00</p>
<p>International Symposium-cum-panel discussion on Asthma</p> <p>Chair : Sanjeev Mehta</p> <p>How asthma biomarkers can direct therapy. Nicola Hanania (USA)</p> <p>Biologics for asthma - State of the Art. Linda Rogers (USA)</p> <p>Asthma in the Elderly- a different disease?. Sidney Braman (USA)</p> <p>followed by</p> <p>Panel discussion on Biologics : Are they ready for prime time ? Advantages and Limitations .</p> <p>Moderator : Sanjeev Mehta Panelists : Nicola Hanania (USA), Linda Rogers (USA), Sidney Braman (USA)</p>	<p>SUNDAY 31-01-2021 14:00 – 15:30</p>

	<p>International Symposium on Post-COVID-19 Pulmonary Fibrosis</p> <p>Chair : Sanjeev Mehta</p> <p>Introduction. Sanjeev Mehta (5 mins)</p> <p>COVID Lung Disease - Clinical Perspectives of Imaging in the COVID-19 Pandemic. Suhail Raoof (USA) (45 mins)</p> <p>Summary and closing remarks. Sanjeev Mehta (10 mins)</p>	<p>SUNDAY 31-01-2021 17:00 – 18:15</p>
	<p>Symposium for International Guest Speakers - I</p> <p>Chair : S K Jindal, Padma Shri Randeep Guleria, Richa Gupta, Prajwol Shreshtha (Nepal)</p> <p>Is COVID respiratory failure different? Management of COVID ARDS. Kalpalatha Guntupalli (USA)</p> <p>Asthma- COPD overlap syndrome. Dharani Narendra (USA)</p> <p>Overview of Pulmonary Arterial Hypertension. Namita Sood (USA)</p>	<p>THURSDAY 28-01-2021 9:00 – 10:15</p>
	<p>Symposium for International Guest Speakers - II</p> <p>Chair : D J Christopher, Raja Dhar, Rajesh Swarnakar, Deepak Muthreja</p> <p>Respiratory Mucosal Barrier - Normal versus Diseased. P K Vedanthan (USA)</p> <p>Airway Inflammation and early immune response in COVID-19 patients. Hari Shankar Sharma (The Netherlands)</p> <p>Thoracoscopy for Undiagnosed Pleural Effusion. Pyng Lee (Singapore)</p> <p>COVID-19 considerations in the Intensive Care Unit. Atul Malhotra (USA)</p>	<p>SUNDAY 31-01-2021 14:00 – 15:30</p>
	<p>Symposium for International Guest Speakers - III</p> <p>Chair : P D Motiani, S N Gaur, Manoj Goel</p> <p>Policy decisions and COVID-19. Vikram Sarbhai (UAE)</p> <p>Why early prevention of exacerbation is most important intervention in COPD management? Mukesh Singh (UK)</p> <p>Hospital management of severe asthma- pearls and pitfalls. Vivek Iyer (USA)</p> <p>Management of COVID-19 patients with Respiratory failure in the NHS. Anand Singh (UK)</p>	<p>SUNDAY 31-01-2021 17:00 - 18:15</p>

THURSDAY, 28th JANUARY 2021					
TIME	HALL - A	HALL - B	HALL - C	HALL - D	
9:00 - 10:15	<p>Symposium on Pulmonary Imaging - I</p> <p>Hot Topics in Pulmonary Imaging</p> <p>Chair : A S Natarajan, Rajesh Venkat, S N Gupta, Kiran Vishnu Narayan</p> <p>Hypersensitivity pneumonitis and interstitial lung anomalies - understanding the new guidelines and position papers.</p> <p>Bhavin Jankharia (20 mins)</p> <p>Post-COVID lung - what does this mean and its implications.</p> <p>Ashu Seth Bhalla (20 mins)</p> <p>Subsolid nodules.</p> <p>Aparna Irodi (20 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on Respiratory Infections - I</p> <p>A Non-Robust antibiotic pipeline</p> <p>Chair : Vivek Nangia, Ajmal Khan, Sourin Bhuniya, Ajeet Singh</p> <p>Omadacycline : A New and Improved Tetracycline.</p> <p>B K Menon (15 mins)</p> <p>Triple-drug antibiotic : A combination of Imipenem, Cilastatin and Relebactam.</p> <p>Tanushree Gahlot (15 mins)</p> <p>Lefamulin : A new antibiotic for community-acquired pneumonia.</p> <p>Subodh Pandey (15 mins)</p> <p>The forgotten antibiotic Octapeptin: to combat MDR organisms.</p> <p>Vipul Kumar (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on Asthma - I</p> <p>Current status in Asthma</p> <p>Chair : Lavina Mirchandani, Lalita Fernandes, Bharat Bhushan Sharma, Anand Srivastava</p> <p>Small Airways in the management of asthma.</p> <p>J K Samaria (15 mins)</p> <p>Extra-fine corticosteroid for inhaled use.</p> <p>Jaymohan Unnithan (15 mins)</p> <p>Impulse oscillometry.</p> <p>Mahavir Modi (15 mins)</p> <p>FENO.</p> <p>Rajesh Swarnakar (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium for International Guest Speakers - I</p> <p>Chair : S K Jindal, Padma Shri Randeep Guleria, Richa Gupta, Prajwol Shreshtha (Nepal)</p> <p>Is COVID respiratory failure different? Management of COVID ARDS.</p> <p>Kalpaltha Guntupalli (USA) (20 mins)</p> <p>Asthma- COPD overlap syndrome.</p> <p>Dharani Narendra (USA) (20 mins)</p> <p>Overview of Pulmonary Arterial Hypertension.</p> <p>Namita Sood (USA) (20 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on Critical care : The Need of the Hour - I</p> <p>Chair : R Vijai Kumar, Shailesh Bihari (Australia), Anirban Sarkar, Amith Sreedharan</p> <p>Interpretation of ABG in ICU.</p> <p>Supriyo Sarkar (15 mins)</p> <p>Bronchoscopy in ICU.</p> <p>Vijay Hadda (15 mins)</p> <p>Echocardiography in a difficult to wean patient.</p> <p>Shivesh Prakash (Australia) (15 mins)</p> <p>Lung microbiome in predicting outcomes in critically ill patients.</p> <p>Avdesh Bansal (15 mins)</p> <p>Q & A (10 mins)</p>
10:15 - 11:15	<p>Panel Discussion on COVID-19 - I</p> <p>Nebulization as a risk factor for the transmission of SARS-CoV-2 and other contagious infections</p> <p>Moderator: S K Katiyar</p> <p>Panelists: Lalit Singh, P Prabhudesai, P S Shajahan, Pratibha Singhal, Radha Munje, Santosh Kumar (Agra)</p> <p>Q & A (10 mins)</p>	<p>Panel discussion on Lung Cancer</p> <p>Low-dose computed tomography (LDCT) screening for the early detection of lung cancer</p> <p>Moderator: Padma Shri D Behera</p> <p>Panelists : Anand Jaiswal, B Jayaprakash, Rajesh Swarnakar, Mandeep Garg, Shubham Garg</p> <p>Q & A (10 mins)</p>	<p>Symposium on Best Papers - I</p> <p>Chair : Ramakant Dixit, Anupam Patra, Rahul Sharma, Ashish Agarwal</p> <p>10 Best Papers in Pulmonary and Critical Care (2019-20).</p> <p>Chawla (30 mins)</p> <p>6 Best Papers in Pleural Diseases.</p> <p>D J Christopher (20 mins)</p> <p>Q & A (15 mins)</p>	<p>Debate on COVID-19 - I</p> <p>Chairpersons : Angira Dasgupta, Jayalakshmi T K, Lalit Singh, Sandeep Katiyar</p> <p>Post- COVID pulmonary fibrosis : the potential role for anti-fibrotic therapy.</p> <p>Potential role. - Neeraj Gupta</p> <p>vs</p> <p>No role . Venugopal Panicker (12 + 4 + 1 mins each)</p> <p>5 Best Papers in ILD - I</p> <p>BV Murali Mohan (20 mins)</p> <p>Q & A (5 mins)</p>	<p>Symposium on COVID-19: The Disaster of the Century - I</p> <p>Cytokine release syndrome (COVID-19 CRS)</p> <p>Chair: Dhruva Chaudhry</p> <p>Definition and Diagnosis.</p> <p>Vijay Hadda (10 mins)</p> <p>Pathogenesis.</p> <p>J V Peter (10 mins)</p> <p>Panel Discussion on Management of CRS - A Case Based Approach</p> <p>Moderator : Dhruva Chaudhry</p> <p>Panelists: Anant Mohan, Harpreet Singh, Sushila Kataria, Kapil Zirpe, Rahul Pandit (35 mins)</p> <p>Q & A (5 mins)</p>

<p>11:15 - 12:45</p> <p>National College of Chest Physicians (India) - Prof. Dr. S. N. Gaur Young Scientist Award (11:15 - 13:00)</p>	<p>Symposium on COVID-19 : The Disaster of the Century - II <i>Dynamics of Aerosols, droplets, and airborne transmission : current perspective</i> Chair: Rakesh Bhargava, Arti Shah, Ashish Tandon, Arjun Khanna Physical characteristics, aerodynamics, and transmission of aerosols. Ritabrata Mitra (15 mins) Cough, sneezes, and talking – the natural aerosol generating manoeuvres during health and disease. Sudhir Chaudhri (15 mins) What is the fate of aerosols and how true is the '2-metre rule'?. Anivita Aggarwal (15 mins) How to control or minimize the potential risk of transmission of infection from the aerosols from natural sources and aerosol generating procedures (AGP's). Prashant Prakash (15 mins) Home air purifiers - how useful?. Shubhra Jain (15 mins) Q & A (15 mins)</p>	<p>Symposium on Pleural Diseases Chair : Sukumaran P, Mohd. Shameem, Amit Dhamija, Adesh Kumar Conservative versus interventional treatment for spontaneous pneumothorax. J Christopher (15 mins) Pleurodesis in malignant pleural effusion. Rakesh Chawla (15 mins) Hepatic hydrothorax. Anirban Sarkar (15 mins) Role of fibrinolytics in the era of thoracoscopy. (Brig.) M S Barthwal (15 mins) Endoscopic management of bronchopleural fistula (BPF). Amir Khoja (15 mins) Q & A (15 mins)</p>	<p>Japan Anti-TB Association (JATA) International Symposium TB control and care in Japan - Challenge towards Ending TB Chair : Ikushi Onozakii (Japan) Co-Chair : Kosuke Okada (Japan) Introduction Ikushi Onozakii (Japan) (10 mins) Epidemiological shift of TB in Japan and recent challenges to join low burden countries . Lisa Kawatsu (Japan) (15 mins) TB care for the elderly . Takashi Yoshiyama (Japan) (15 mins) TB laboratory : developing new things based on techniques of the past. Satoshi Mitarai (Japan) (15 mins) Roles of Physicians and Professional society towards ending TB. Seiya Kato (Japan) (15 mins) Q & A and Closing Remarks (20 mins)</p>	<p>Symposium on Bronchiectasis Chair : P K Gupta, P T James, Bindu C G, Avik Ghoshal Bronchiectasis : The re-emergence of a challenge. Ashok Shah (15 mins) Airway clearance techniques for bronchiectasis. Animesh Ray (15 mins) Radiology in bronchiectasis. A S Natarajan (15 mins) Management of bronchiectasis, guidelines in adults, and associated anxiety and depression. Gayathri Devi H J (15 mins) Long-term antibiotics - role of inhaled/ nebulised antibiotics : a new dawn. Manoj Panigrahi (15 mins) Q & A (15 mins)</p>
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<p>Practice-changing Research in TB (13:00 - 14:05)</p> <p>Chair : Subhakar Kandi, N C Kajal, Savita Jindal, Anivita Aggarwal</p> <p>Primary Clofazimine and Bedaquiline Resistance among Isolates from patients with Multidrug-Resistant Tuberculosis.</p> <p>Sonam Spalgais (8 mins)</p> <p>Clofazimine Exposure in vitro selects Efflux Pump Mutants and Bedaquiline Resistance.</p> <p>Amitesh Gupta (8 mins)</p> <p>Amikacin Liposome Inhalation Suspension for Treatment-Refractory Lung Disease caused by Mycobacterium avium Complex (CONVERT). A Prospective, Open-Label, Randomized Study.</p> <p>Ajay Verma (8 mins)</p> <p>Phase 2b controlled trial of M72/AS01E Vaccine to prevent Tuberculosis and Prevention of M. tuberculosis infection with H4:IC31 Vaccine or BCG Revaccination.</p> <p>Ajo Jose (8 mins)</p> <p>Surgical face masks worn by patients with multidrug-resistant tuberculosis: impact on infectivity of air on a hospital ward.</p> <p>Amit Agarwal (8 mins)</p> <p>Diagnostic value of pleural fluid T-SPOT for tuberculous pleurisy: An updated meta-analysis .</p> <p>Nishant Kumar Chauhan (8 mins)</p> <p>An Inhalable Theranostic system for local Tuberculosis treatment containing an Isoniazid loaded metal organic framework Fe-MIL-101-NH2- From raw MOF to drug delivery system.</p> <p>Prajwol Shrestha (Nepal) (8 mins)</p> <p>Q & A (9 mins)</p>	<p>Symposium on Lung Cancer - I</p> <p>Chair : P R Mohapatra, J K Saini, Lancelot Pinto, Loganathan N</p> <p>Emerging biomarkers in lung cancer diagnostics – time to put away the biopsy needle?</p> <p>Padma Shri D Behera (15 mins)</p> <p>The electronic nose (E-nose) technology for lung cancer detection.</p> <p>Irfan Ismail Ayub (15 mins)</p> <p>Liquid biopsy in lung cancer: an update.</p> <p>Uma Devaraj (15 mins)</p> <p>Lung cancer in young patients (< 30 years).</p> <p>Paramjyothi G K (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on National Guidelines, Consensus reports & Position papers - I</p> <p>Chair : Alok Nath, Anurag Agarwal (Dehradun), Mayank Mishra, Poonzughali Rajaji</p> <p>ISCCM guidelines for the use of non-invasive ventilation in acute respiratory failure in adult ICUs (2020).</p> <p>Sudha Kansal (15 mins)</p> <p>Tracheostomy in Adult Intensive Care Unit: An ISCCM Expert Panel Practice Recommendations (2020).</p> <p>Suresh Ramasubban (15 mins)</p> <p>Indian Society of Critical Care Medicine Position Statement for Central Venous Catheterization and Management (2020).</p> <p>Trinath Dash (15 mins)</p> <p>Guidelines of the Indian Society for Sleep Research (ISSR) for Practice of Sleep Medicine during COVID-19 (2020).</p> <p>Sushant Meshram (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on International Guidelines, Consensus reports & Position papers - I</p> <p>Chair : (Brig.) Debajyoti Bhattacharya, D P Dwivedi, D K Manoj, Suraj Verma</p> <p>Antimicrobial de-escalation in critically ill patients: a position statement from a task force of the European Society of Intensive Care Medicine (ESICM) and European Society of Clinical Microbiology and Infectious Diseases (ESCMID) Critically Ill Patients Study Group (ESGCIP) (2020).</p> <p>S N Gupta (15 mins)</p> <p>American Association for Bronchology and Interventional Pulmonology (AABIP) Statement on the Use of Bronchoscopy and Respiratory Specimen Collection in Patients with Suspected or Confirmed COVID-19 Infection (2020).</p> <p>Girish Sindhwani (15 mins)</p> <p>Expert consensus-based clinical practice guidelines management of intravascular catheters in the intensive care unit - The French Society of Intensive Care Medicine (2020).</p> <p>Roseleen Kaur Bali (15 mins)</p> <p>Emerging respiratory infections threatening public health in the Asia-Pacific region: A position paper of the Asian Pacific Society of Respiriology (2019).</p> <p>P Jabeed (Qatar) (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on Pulmonary Vascular Disorders - I</p> <p>Chair : Vishal Chopra, Venugopal Panicker, K K Sharma, Pushpendra Verma</p> <p>The new definition and updated classification of pulmonary hypertension.</p> <p>Ajit Vigg (15 mins)</p> <p>Genetics and genomics of pulmonary arterial hypertension.</p> <p>B V Murali Mohan (15 mins)</p> <p>Diagnostic tools for screening PAH.</p> <p>(Air Commodore) Ajay Handa (15 mins)</p> <p>Risk assessment in pulmonary arterial hypertension.</p> <p>Bindu C G (15 mins)</p> <p>Q & A (15 mins)</p>
<p>12:45 - 14:00</p> <p>14:00 - 14:45</p> <p style="text-align: center;">LUNCH BREAK</p>				

<p>Asian-Pacific Society of Respiriology (APSR) International Symposium on COVID-19 in Asia-Pacific</p> <p>Chair: David Lam (Hong Kong), Yuanlin Song (China), Emily Stone (Australia)</p> <p>Opening Remarks . David Lam (5 mins)</p> <p>Clinical research on and trials for COVID-19 in Japan. Akihito Yokoyama [Japan Respiratory Society (JRS)] (6 mins)</p> <p>Measures to COVID-19 in Australia and New Zealand: Policy to guard against virus spreads. Bruce Thompson [Thoracic Society of Australia and New Zealand (TSANZ)] (6 mins)</p> <p>The key to contain COVID-19: The Taiwan Model. Shih-Chi Ku [Taiwan Society of Pulmonary & Critical Care Medicine (TSPCCM)] (6 mins)</p> <p>How to build effective COVID-19 community communication in Indonesia. Fathiyah Isbaniah [Indonesian Society of Respiriology (ISR)] (6 mins)</p> <p>How did Singapore overcome big wave of COVID-19? Adrian Chan [Singapore Thoracic Society (STS)] (6 mins)</p> <p>Dealing with COVID-19 Pandemic in Malaysia. Syazatul Syakirin Sirol Afiah [Malaysian Thoracic Society (MTS)] (6 mins)</p> <p>Key Measures to control the Second Big Wave of COVID-19 in Sri Lanka. Bodhika Samarasekera [Sri Lanka College of Pulmonologists (SLCP)] (6 mins)</p> <p>COVID-19 response in Mongolia. Tumur-Ochir Tsedev-ochir [Mongolian Respiratory Society (MRS)] (6 mins)</p> <p>Additional measures to cope with the recent new wave of COVID-19 in Hong Kong. Raymond Liu [The Hong Kong Thoracic Society (HKTS)] (6 mins)</p> <p>Q & A (40 mins)</p> <p>Closing Remarks</p>	<p>International Symposium (Australian) on Critical Care (14:45 - 16:10)</p> <p>Chair : Deepak Talwar, Avdhesh Bansal, Animesh Ray, Kavitha Venkatnarayan</p> <p>Sodium burden in ICU. Shailesh Bihari (Australia) (15 mins)</p> <p>Update on ARDS Andrew Bersten (Australia) (20 mins)</p> <p>Veno-venous (VV) ECMO in ICU. Ubbo Wiersema (Australia) (20 mins)</p> <p>Coagulopathy in Liver failure in ICU Russell Laver (Australia) (20 mins)</p> <p>Q & A (10 mins)</p> <p>Industry Session (20 mins) (16:10 - 16:30)</p> <p>Current status of Mepolizumab use in Severe Asthma – A Case-Based Approach Case 1 (Brig.) Ashok Rajput (7 mins)</p> <p>Case 2 Priti Meshram (7 mins)</p> <p>Q & A (6 mins)</p>	<p>Symposium on OSA - I Obstructive Sleep Apnoea in Children (14:45 - 16:00)</p> <p>Chair : J C Suri, B P Singh, Ghulam Hassan, Saurabh Mittal</p> <p>Updates on paediatric obstructive sleep apnoea. Avik Ghoshal (UK) (15 mins)</p> <p>OSA and UARS - same or different disease? Dhrubajyoti Roy (15 mins)</p> <p>Anti-inflammatory medications for OSA in children. George D'Souza (15 mins)</p> <p>Surgical management versus non-surgical management for obstructive sleep-disordered breathing in children. Sonia Dalal (15 mins)</p> <p>Q & A (15 mins)</p> <p>Industry Session (BOEHRINGER - INGELHEIM) (30 mins) (16:00 - 16:30)</p> <p>Chair : Prahlad Prabhudesai</p> <p>SSc-ILD - When to add Nintedanib? Sujeet Rajan (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on Non-Tubercular Mycobacterial Infections</p> <p>Chair : Radha Munje, B K Meghwal, Anil Kumar Jain, Rajiv Garg</p> <p>Increased risk of nontuberculous mycobacterial infection with long-term inhaled corticosteroid therapy. S K Luhadia (15 mins)</p> <p>Pharmaco-therapeutic approaches in Non-tuberculous Mycobacterial pulmonary disease (NTM-PD). K B Gupta (15 mins)</p> <p>Treatment of extra-pulmonary non-tuberculous mycobacterial diseases. Indira Kumari (15 mins)</p> <p>Inhaled antibiotics for NTM lung disease. Kapil Salgia (15 mins)</p> <p>Looking beyond typical treatments for Atypical Mycobacteria. Rajendra Prasad (15 mins)</p> <p>Surgical treatment of pulmonary Non-Tuberculous Mycobacterial infections. Rajashekara Reddy (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on COPD - I Precision Medicine in COPD</p> <p>Chair: J K Samaria, N K Gacchayat, Jogesh Sarma, Gourahari Pradhan</p> <p>Clinical phenotypes of COPD. Angira Dasgupta (15 mins)</p> <p>Biomarkers of COPD and their relevance in management. K P Suraj (15 mins)</p> <p>Frequent exacerbators. Girija Nair (15 mins)</p> <p>Biomass smoke COPD. P A Mahesh (15 mins)</p> <p>Rofumilast : not for everyone. Deependra Rai (15 mins)</p> <p>COPD mortality and phenotypes. Ayva Bansal (15 mins)</p> <p>Q & A (15 mins)</p>

14:45 - 16:30

16:30 - 18:30	<p>NCCP(I) ORATIONS Chair : P. D. Motiani (President) S. N. Gaur (Secretary)</p> <p>NCCP(I) - Prof. Dr. Raman Vishwanathan Memorial Chest Oration. <i>Medical Education in India : Present Scenario and Future Challenges.</i> Surender Kashyap</p> <p>NCCP(I) - Prof. Dr. A. S. Paintal - Prof. Dr. R. C. Jain Memorial Chest Oration. <i>My Journey of Pulmonary Interventions and Innovations in ICU.</i> Manoj Goel</p> <p>NCCP(I) - Prof. Dr. P. S. Shankar - Prof. Dr. K. C. Mohanty Chest Oration. <i>Herd Immunity : Hope or Hype ?.</i> Nikhil Sarangdhar</p> <p>NCCP(I) - Prof. Dr. S. K. Jain - Prof. Dr. S. K. Katiyar Chest Oration. <i>Tuberculosis and Diabetes-an unpleasant partnership.</i> H M Kansal</p>	ORATIONS IN HALL A	ORATIONS IN HALL A	ORATIONS IN HALL A	ORATIONS IN HALL A
18:30 - 19:30	NCCP (India) Annual General Body Meeting				
19:30 - 21:00	CULTURAL PROGRAM				

FRIDAY, 29th JANUARY 2021					
TIME	HALL - A	HALL - B	HALL - C	HALL - D	HALL - E
9:00 - 10:30	<p>Symposium on Dust and Environment related disorders Chair : V K Jain, P Jabeed (Qatar), Sameer Singhal, Sonali Trivedi Silicosis: Is it a systemic disease? Ramakant Dixit (15 mins) Accelerated silicosis in artificial stone versus natural stone silicosis. P D Motiani (15 mins) Talc's mesothelioma connection. P K Gupta (15 mins) Global epidemic of malignant pleural mesothelioma and the latency period of asbestos use. U C Ojha (15 mins) Lungs in coir workers. P S Shajahan (15 mins) Q & A (15 mins)</p>	<p>Symposium on Respiratory Infections - II Chair : George D'Souza, Vishak Acharya, Anitha Kumari, H J Singh The growing threat of antibiotic resistance. Samir Sahu (15 mins) Inappropriate use of antibiotics in respiratory tract infections. Sanjeev Mehta (15 mins) Mechanisms of antibiotic resistance. Parvaiz Koul (15 mins) ESKAPE pathogens and strategies to combat these in the era of antimicrobial resistance. Vivek Nangia (15 mins) Rapid diagnosis of pulmonary infections in ICU setting. Mrinal Sircar (15 mins) Q & A (15 mins)</p>	<p>Symposium on COVID-19 : The Disaster of the Century - III Chair : S K Sharma, Sanjeev Nair, M M Puri, Kumar Utsav Samaria From SARS and MERS to COVID-19: a comparison of severe acute respiratory infection caused by three highly pathogenic human coronaviruses. Narayan Mishra (15 mins) Stability of SARS-CoV-2 and SARS-CoV-1 in aerosols and different surfaces. Saurabh Karmakar (15 mins) Post exposure prophylaxis for COVID-19. Zia Hashim (15 mins) Management of asthma during SARS-CoV-2 infection. Sitesh Roy (15 mins) COPD and COVID-19. Agam Vora (15 mins) Q & A (15 mins)</p>	<p>Symposium on ILD (Sarcoidosis) Chair : B V Murali Mohan, Naveen Dutt, Harjit Dumra, Deepak Aggarwal Environmental risk factors for sarcoidosis. Vishwanath Gella (15 mins) Thoracic sarcoidosis imaging including atypical manifestations. Priya Ramchandran (15 mins) New treatment strategies for pulmonary sarcoidosis. Sahajal Dhooria (15 mins) Refractory sarcoidosis . S K Jindal (15 mins) Bronchoscopic interventions in sarcoidosis. Ravindra Mehta (15 mins) Q & A (15 mins)</p>	<p>Symposium on OSA - II Chair : Vikram Sarbhai (UAE), Himanshu Garg, Gopal Raval, Varun Patel Phenotypic subtypes in obstructive sleep apnoea - a step towards precision management. Alpa Dalal (15 mins) Asymptomatic OSA - our approach. A G Ghoshal (15 mins) Obesity-hypoventilation syndrome. Dipti Gothi (15 mins) Sleep and breathing disturbances in patients with COPD at high altitude. A K Singh (Lucknow) (15 mins) Sudden death in obstructive sleep apnoea. Kripesh Sarmah (15 mins) Q & A (15 mins)</p>

<p>Panel Discussion on TB - I <i>Widening horizons of GeneXpert and interpretation of results</i> Moderator : Subhakar Kandi Panelists : Amita Nene, Bhavini Shah, V K Singh, V P Myneedu, Jai Kishan K, M M Puri Q & A (10 mins)</p>	<p>Panel Discussion on Asthma - I <i>Better understanding and management of asthma through tools of modern technology</i> Moderator: Virendra Singh Panelists: B Vidyasagar , Bharat Bhushan Sharma, H J Singh, Indranil Halder, (Brig.) M S Barthwal, Ruchi Dua Q & A (10 mins)</p>	<p>Panel Discussion on COPD - I <i>Newer bronchodilators in the management of COPD</i> Moderator : S K Jindal Panelists: Basanta Hazarika, Nitin Jain, G N Srivastava , P Ravindran, Raju, Sukumaran P, Tarang Kulkarni Q & A (10 mins)</p>	<p>Panel discussion on COVID-19 - II <i>Role of various pharmacological interventions in the management of COVID-19</i> Moderator : Vivek Nangia Panelists : Anand Kumar, Fathahudeen Abdul, Ravindra Samaik, S K Sharma, Shashi Bhushan, Sushmita Roychowdhury Q & A (10 mins)</p>	<p>Practice-changing Research in Respiratory Infections Chair : Parvaiz Koul, H M Kansal, (Col.) S P Rai, Vipul Kumar Oral Lefamulin vs Moxifloxacin for early clinical response among adults with Community-Acquired bacterial pneumonia - The LEAP 2 RCT . Ajeet Singh Shakawat (8 mins) Empirical Anti-MRSA vs Standard antibiotic therapy and Risk of 30-Day mortality in patients hospitalized for Pneumonia. Rennis Davis (8 mins) Blood Culture results before and after Antimicrobial administration in patients with severe manifestations of Sepsis : A Diagnostic Study. Shyam Krishnan (8 mins) Efficacy and Safety of Cefiderocol vs. High-Dose Meropenem in patients with nosocomial pneumonia. Mukesh Goyal (8 mins) In situ identification of Gram-negative bacteria in human lungs using a topical fluorescent peptide targeting Lipid A. Nirupam Sharan (8 mins) Antimicrobial properties of Apismellifera's Bee Venom. Parul Mirigpuri (8 mins) Q & A (10 mins)</p>
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10:30 - 11:30

<p>11:30 - 13:00</p> <p>Indian Chest Society - Dr. J. C. Kothari Young Scientist Award (11:30 - 13:15)</p>	<p>Symposium on Paediatric Respiratory Allergy Convenor : H Paramesh Imbalance of homeostasis in paediatric respiratory allergy. H Paramesh (20 mins) T U Sukumaran (20 mins) Diagnosis of allergic airway diseases. Current Therapeutics of Airway Diseases. Sharad Agarwalekar (20 mins) Update on Immunotherapy in Paediatric Airway Allergies. K Nagaraju (20 mins) Q & A (10 mins)</p>	<p>Symposium on Stem Cell therapy in Lung Diseases - A Futuristic perspective Chair : Girish Sindhvani, Rohit Kumar, Abha Mahashur, Vishakha Kapadia Mesenchymal stem/stromal cells (MSC): a promising therapeutic approach for the treatment of lung diseases. P S Shankar (15 mins) Stem cell therapy for chronic obstructive pulmonary disease: current status. Puneet Khanna (15 mins) Cell-based therapy for idiopathic pulmonary fibrosis. D P Dwivedi (15 mins) Mesenchymal stem cell therapy for acute respiratory distress syndrome. S Yuvarajan (15 mins) The potential of mesenchymal stem cell-based therapy for COVID-19. Vishnu Sharma (15 mins) Q & A (15 mins)</p>	<p>Practice-changing Research in COVID -19 - I Chair: Alladi Mohan, Sanjeev Sinha, Ajay Lanjewar, Anil Sontakke Signs and symptoms to determine if a patient presenting in primary care or hospital outpatient settings has COVID-19 disease. Saurabh Mandliwar (8 mins) Convalescent plasma or hyperimmune immunoglobulin for people with COVID-19: a rapid review. Ashesh Dhungana (Nepal) (8 mins) Medical masks vs N95 respirators for preventing COVID-19 in healthcare workers: A systematic review and meta-analysis of randomized trials. Shikha Jindal Gupta (8 mins) COVID-19 Systematic Urgent Review Group Effort (SURGE) Study Authors. Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. Kavitha Venkatnarayan (8 mins) Q & A (8 mins)</p>	<p>Symposium on Interventional Pulmonology - I What's New ? Chair : (Lt. Gen. Retd.) BNBM Prasad, R Narasimhan, V R Pattabhi Raman, T Balamugesh Forbearance with Stents. Atul Mehta (USA) (20 mins) High definition HD+ with image enhancement technology (I- scan) in bronchoscopy. Nagarjuna Maturu (15 mins) Electromagnetic navigation bronchoscopy for peripheral pulmonary lesions. Tinku Joseph (15 mins) Ultra-thin and thin bronchoscope for peripheral pulmonary lesions. Pratibha Singhal (15 mins) Single use flexible bronchoscopes in COVID-19 pandemic. Ashutosh Sachdeva (USA) (15 mins) Q & A (10 mins)</p>
			<p>Practice-changing Research in Asthma Chair : Uma Devaraj, Trinath Dash, Tarang Kulkarni, Shyam Krishnan Combined Analysis of Asthma Safety Trials of Long-Acting β2-Agonists. Manoj K Agarwal (8 mins) Efficacy and Safety of Dupilumab in Glucocorticoid-Dependent Severe Asthma. Rahul Sharma (8 mins) Six-Year Follow-up of a Trial of Antenatal Vitamin D for Asthma Reduction. Anand Srivastava (8 mins) Social media based surveillance systems for healthcare using machine learning: A systematic review. Ritisha Bhatt (8 mins) Machine learning approaches to personalize early prediction of asthma exacerbations. Piyush Arora (8 mins) Q & A (10 mins)</p>	

<p>13:00 - 14:00</p>	<p>Debate on Asthma - I (13:15 - 14:00) Chair : (Brig.) Ashok Rajput, Agam Vora, B Vidyasagar, Ruchi Dua <i>Budesonide versus Fluticasone: which to use as inhaled corticosteroid ?</i> Budesonide . (Lt. Col.) Manu Chopra vs Fluticasone. P Arjun (12 + 4 + 1 mins each) Q & A (5 mins)</p>	<p>Debate (13:00 - 13:40) 13-valent pneumococcal conjugate vaccine (PCV13) versus 23-valent pneumococcal polysaccharide vaccine (PPSV23) versus both : A Triangular Debate Chair : Mohan Kumar Thekkinkattil, Abhay Uppe, Rennis Davis For 13-valent vaccine. Parvaiz Koul (10 + 3 mins) vs For 23-valent vaccine Rajesh Venkat (10 + 3 mins) vs For Both Anshuman Mukhopadhyay (10 + 3 mins) ===== Industry Session (SANOFI - PASTEUR) (20 mins) (13:40 - 14:00) Impact of Influenza and Influenza Vaccination on Chronic Obstructive Lung Disease (COPD). Vivek Nangia (15 mins) Q & A (5 mins)</p>	<p>Symposium on Best Papers - II Chair : Davis Paul, Supriyo Sarkar, Tariq Mahmood, Brijesh Prajapat 8 Best Papers in Lung Cancer. Anant Mohan (25 mins) 5 Best Papers in ILD - II. Virendra Singh (20 mins) Q & A (10 mins)</p>	<p>Practice-changing Research in Critical Care Chair : (Col.) Vikas Marwah, Thomas Vadakkan, Gyanendra Agarwal, Ankit Bansal Treatment with allogeneic mesenchymal stromal cells for moderate to severe acute respiratory distress syndrome (START study): a randomised phase 2a safety trial.Amith Sreedharan (8 mins) Biomarker-guided antibiotic stewardship in suspected ventilator-associated pneumonia (VAPrapid2): a randomised controlled trial and process evaluation. Muthu Valliappan (8 mins) Effect of Stress Ulcer prophylaxis with Proton Pump Inhibitors vs Histamine-2 Receptor Blockers on In-Hospital mortality among ICU patients receiving invasive mechanical ventilation: PEPTIC trial. Ajay Verma (8 mins) Heterogeneity of treatment effect of prophylactic pantoprazole in adult ICU patients: a post hoc analysis of the SUP-ICU trial. Ashish Prakash (8 mins) Association of Noninvasive Oxygenation Strategies With All-Cause Mortality in Adults With Acute Hypoxemic Respiratory Failure : A Systematic Review and Meta-analysis. Deepti Rathee (8 mins) Airway Management in the Emergency Department (The OCEAN-Study) - a prospective single centre observational cohort. Ashesh Dhungana (Nepal) (8 mins) Q & A (12 mins)</p>	<p>Practice-changing Research in Obstructive Sleep Apnoea Chair : Rajnish Gupta, Gayathri Devi H J, Kripesh Sarmah, Saurabh Mittal Effect of Telemedicine Education and Telemonitoring on Continuous Positive Airway Pressure Adherence: The Tele-OSA Randomized Trial. Mahavir Modi (8 mins) Effect of Venlafaxine on Apnea-Hypopnea Index in Patients With Sleep Apnea: A Randomized, Double-Blind Crossover Study. Pratibha Dogra (8 mins) The Combination of Atomoxetine and Oxybutynin Greatly Reduces Obstructive Sleep Apnea Severity: A Randomized, Placebo-controlled, Double-Blind Crossover Trial. P Arjun (8 mins) Acupuncture for Obstructive Sleep Apnea (OSA) in Adults: A Systematic Review and Meta-Analysis. Paramjyothi G K (8 mins) Short-term CPAP adherence in obstructive sleep apnea: a big data analysis using real world data. Dipti Gothi (8 mins) Obstructive sleep apnea and arrhythmia: A systemic review. Rajnish Gupta (8 mins) Q & A (12 mins)</p>
<p>14:00 - 14:30</p>	<p>LUNCH BREAK</p>				

14:30 - 15:15	<p>Debate on Tuberculosis - I <i>Shortened tuberculosis treatment regimens for MDR-TB versus standard long-term regimens</i></p> <p>Chair : Rajendra Prasad, Jai Kishan, Indira Kumari, Anand Kumar</p> <p>For shortened regimens. Surya Kant</p> <p>vs</p> <p>For standard long-term regimens Subir Kumar Dey (12 + 4 + 1 mins each)</p> <p>Q & A (10 mins)</p>	<p>Symposium on Tuberculosis – II Chair : C Chandrasekhar, K K Chopra, Rupak Singla, Gajendra Vikram Singh</p> <p>NTEP - Newer Updates. K S Sachdeva (20 mins)</p> <p>Non-tuberculous mycobacterial diseases - a systematic review of published Indian literature on NTM from 1981-2020. S K Sharma (20 mins)</p> <p>Q & A (5 mins)</p>	<p>Symposium on OSA - II <i>OSA in Adults in COVID-19 times</i></p> <p>Chair : Dhruvajyoti Roy, Sonia Dalal, Sumita Agarwal, Sitesh Roy</p> <p>Sleep Medicine and COVID-19: The beginning of a new era. J C Suri (15 mins)</p> <p>Diagnostic and C-PAP therapy in OSA in the context of COVID-19 pandemic. Pratibha Dogra (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Debate on COVID-19 - II <i>Shared ventilation in COVID-19 acute crisis</i></p> <p>Chair : Mrinal Sircar, Malay Sarkar, Ajay Verma, Aakanksha Chawla Jain</p> <p>For shared ventilation. Ajmal Khan</p> <p>vs</p> <p>Against shared ventilation. Kumar Doshi (12 + 4 + 1 mins each)</p> <p>Q & A (10 mins)</p>	<p>Debate on ILD <i>Antifibrotic drugs in non-IPF pulmonary fibrosis (non-IPF-PF) : Useful or Not Useful</i></p> <p>Chair : Sujeet Rajan, Priya Ramachandran, Sheetu Singh</p> <p>Useful. Sandeep Katiyar</p> <p>vs</p> <p>Not Useful. Mayank Saxena (12 + 4 + 1 mins each)</p> <p>Q & A (10 mins)</p>
15:15 - 16:30	<p>Symposium on National Guidelines, Consensus reports & Position papers - II</p> <p>Chair : (Brig.) M S Barthwal, Manoj Agarwal, Amit Dedun, S Naidu</p> <p>Indian Society of Critical Care Medicine Experts Committee Consensus Statement on ICU Planning and Designing (2020) . Dhruva Chaudhry (15 mins)</p> <p>Management of interstitial lung diseases: A consensus statement of the Indian Chest Society (ICS) and National College of Chest Physicians - India [NCCP(I)] (2020) . Sheetu Singh (15 mins)</p> <p>Clinical practice guidelines 2019, Indian consensus-based [Joint ICS-NCCP(I)] recommendations on pneumococcal vaccination for adults. Raja Dhar (15 mins)</p> <p>Clinical practice guidelines 2019, Indian consensus-based [Joint ICS-NCCP(I)] recommendations on influenza vaccination in adults. A G Ghoshal (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on Tuberculosis - III <i>TB-HIV</i></p> <p>Chair : K B Gupta, B O Tayade, Tushar Patel, K P Suraj</p> <p>Treatment of latent tuberculosis in HIV co-infected. Gajendra Vikram Singh (15 mins)</p> <p>A novel tuberculosis point-of-care urine lipoarabinomannan assay for patients with HIV. Akhilesh Kunoor (15 mins)</p> <p>Prophylactic prednisone to prevent paradoxical tuberculosis-associated IRIS in HIV-infected patients. Rajiv Garg (15 mins)</p> <p>Immunotherapy and immunomodulation in HIV and TB. Anil K Jain (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Grand Rounds</p> <p>Chair : A S Sachan, Reshmi Nair, Roseleen Kaur Bali, Aditya Jindal</p> <p>Clinical & Radiographic Correlation (15:15 - 16:05) K. Ravikrishnan (U.S.A.) =====</p> <p>Industry Session (ASTRA ZENECA) (25 mins) (16:05 - 16:30)</p> <p>Severe Eosinophilic Asthma - Practical tips to identify right patients and the biologics available for use. Padmeshri Randeep Guleria (20 mins)</p> <p>Q & A (5 mins)</p>	<p>International Symposium (U.K.) on Respiratory Infections</p> <p>Chair : M Munavvar (UK)</p> <p>COVID-19 Management and the ERS COVID-19 Guidelines. James D Chalmers (UK) (20 mins)</p> <p>BTS MDR Clinical Advisory Service - Key learning points from a standardised approach to the Management of MDR-TB. Om Min Kon (UK) (20 mins)</p> <p>Stepwise Management of Adults with Bronchiectasis in 2021. Adam Hill (UK) (20 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on Critical Care : The need of the hour - II</p> <p>Chair : NT Awad, M L Gupta, Shivesh Prakash (Australia), Nagarjuna Maturu</p> <p>No sedation, sedation, and light sedation protocols in critically ill, mechanically ventilated patients in the ICU. R Vijai Kumar (15 mins)</p> <p>High flow nasal cannula in acute hypoxemic respiratory failure. Shallesh Bihari (Australia) (20 mins)</p> <p>Mean arterial pressure (MAP) targets in critically ill patients with septic shock. Muthu Valiappan (15 mins)</p> <p>Lactate clearance is a useful biomarker for the prediction of all-cause mortality in critically ill patients. Rajesh Chawla (15 mins)</p> <p>Q & A (10 mins)</p>

16:30 - 18:30	<p>ICS ORATIONS Chair : D. J. Christopher (President) Rajesh Swarnakar (Secretary) ICS - Dr. S. N. Tripathy Presidential Oration Award. Pulse Oximetry in Clinical Practice. Sudhir Chaudhri ICS - Dr. K. J. R. Murthy Oration Award. Cardiopulmonary Exercise Testing: a valuable addition to the pulmonology armamentarium. T. Balamugesh ICS - Dr. C. V. Ramakrishnan Oration Award. Air Pollution and Lung Health. Raj Kumar. ICS - Dr. O. A. Sarma Oration Award. TB free India - How the dream can come true. Salil Bhargava</p>	ORATIONS IN HALL A	ORATIONS IN HALL A	ORATIONS IN HALL A	ORATIONS IN HALL A
18:30 - 19:30	<p>ICS Annual General Body Meeting</p>				
19:30 - 21:00	CULTURAL PROGRAM				

SATURDAY, 30th JANUARY 2021					
TIME	HALL - A	HALL - B	HALL - C	HALL - D	HALL - E
9:00 - 10:15	<p style="text-align: center;">Symposium on Pulmonary Vascular Disorders - II</p> <p>Chair : Ajit Vigg, Deependra Kumar Rai, Nishant Chauhan, Atul Luhadia</p> <p>Novel imaging techniques in pulmonary hypertension.</p> <p style="text-align: center;">Jayaprakash B (15 mins)</p> <p>New therapeutic paradigms and guidelines in the management of pulmonary arterial hypertension.</p> <p style="text-align: center;">Harjit Dumra (15 mins)</p> <p>Sub-massive pulmonary embolism.</p> <p style="text-align: center;">K K Sharma (15 mins)</p> <p>Thrombo-prophylaxis – when, where and what.</p> <p style="text-align: center;">(Surg. Capt. Retd.) P S Tampi (15 mins)</p> <p style="text-align: center;">Q & A (15 mins)</p>	<p style="text-align: center;">Symposium on Miscellaneous Disorders - II</p> <p>Chair : A G Ghoshal, Prashant Prakash, Puneet Khanna</p> <p>Community-acquired respiratory pathogens versus infection by bio-threat agents - a challenge.</p> <p style="text-align: center;">A K Janmeja (15 mins)</p> <p>Delivering telemedicine interventions in chronic respiratory disease.</p> <p style="text-align: center;">Arti Shah (15 mins)</p> <p>Lung diseases in women.</p> <p style="text-align: center;">Vijayalakshmi Thanasekaraan (15 mins)</p> <p>The aging lung.</p> <p style="text-align: center;">A K Abdul Khader (15 mins)</p> <p style="text-align: center;">Q & A (15 mins)</p>	<p style="text-align: center;">Symposium on COVID-19 : The Disaster of the Century - IV</p> <p>Chair : Zia Hashim, Ashok Kumar Singh, Karn Mehra</p> <p>Rapid, point-of-care antigen and molecular-based tests for diagnosis of SARS-CoV-2 infection.</p> <p style="text-align: center;">Angshuman Mukherjee (15 mins)</p> <p>Antibody and serological tests for identification of current and past infection with SARS-CoV-2.</p> <p style="text-align: center;">Pranav Ish (15 mins)</p> <p>False Negative Tests for SARS-CoV-2 Infection - Challenges and Implications.</p> <p style="text-align: center;">Alok Nath (15 mins)</p> <p>Risk stratification in cases of COVID-19.</p> <p style="text-align: center;">Fathahudeen Abdul (15 mins)</p> <p style="text-align: center;">Q & A (15 mins)</p>	<p style="text-align: center;">Symposium on Mycotic infections - I</p> <p>Chair : (Brig.) B N Panda, Ashok Shah, Atul Luhadia</p> <p>Nocardia infections in solid organ transplantation.</p> <p style="text-align: center;">Manoj Panigrahi (15 mins)</p> <p>Chronic pulmonary aspergillosis.</p> <p style="text-align: center;">Inderpaul Singh (15 mins)</p> <p>Invasive fungal infections.</p> <p style="text-align: center;">Jayalakshmi T K (15 mins)</p> <p>Fungal Infections in ICU: when to begin treatment.</p> <p style="text-align: center;">Veerottam Tomer (15 mins)</p> <p style="text-align: center;">Q & A (15 mins)</p>	<p style="text-align: center;">Symposium on Pulmonary Imaging - II</p> <p style="text-align: center;">Lung Ultrasound : The Pulmonologist's diagnostic tool.</p> <p>Chair : P S Shajahan, Priya Ramchandran, Praveen Valsalan, Pavan Kumar Biraris</p> <p>Point-of-care lung ultrasonography (POCUS) versus chest radiography in diagnosis of pneumonia in paediatric and adult population.</p> <p style="text-align: center;">Asmita Mehta (15 mins)</p> <p>Lung ultrasonography for the early management of pulmonary lesions in COVID-19 pandemic.</p> <p style="text-align: center;">Swarnjeet Bhullar (15 mins)</p> <p>Contrast enhanced ultrasound (CEUS) for assessment of pleural-pulmonary changes with reference to COVID-19 disease.</p> <p style="text-align: center;">Richa Gupta (15 mins)</p> <p>CEUS guided trans-thoracic biopsy in peripheral pulmonary and mediastinal lesions.</p> <p style="text-align: center;">Prince James (15 mins)</p> <p style="text-align: center;">Q & A (15 mins)</p>

<p>Symposium on Respiratory Allergy Chair : H Paramesh, Gautam Bhagat, Raj Bhagat, Gautam Modi Selection of Allergens, Pollen Calendar and impact of climate change on allergens. A B Singh (15 mins) Subcutaneous Immunotherapy. V K Jain (15 mins) Sublingual Immunotherapy. K V Nagendra Prasad (15 mins) Food Allergy. Raj Kumar (15 mins) Newer developments in Allergen Immunotherapy. Naveen Arora (15 mins) Guidelines for Practice of Allergy and Immunotherapy in India. S N Gaur (15 mins) Q & A (15 mins)</p>	<p>Symposium on Vaping A New Smoking Wave Chair : Vijayalakshmi T, Girija Nair, Pratibha Gogia Respiratory effects of e-cigarettes-are these safer than combustible tobacco products? (Brig.) Debajyoti Bhattacharya (15 mins) Electronic cigarette or vaping product use-associated lung injury (EVALI) - a new killer. Padma Shri Randeep Guleria (15 mins) Harmful effects of tetrahydrocannabinol (THC),vitamin E or vitamin E acetate containing E- cigarettes. Sourin Bhuniya (15 mins) Vaping and second-hand effects. Parul Mirigpuri (15 mins) E-cigarette effectiveness as a smoking cessation intervention. Bharat Gopal (15 mins) Smoking and COVID-19. Lancelot Pinto (15 mins) Q & A (15 mins)</p>	<p>Symposium on ILD - II Chair : Virendra Singh, Vishwanath Gella, Mayank Saxena, Nirupam Sharan Phenotypes in ILD. Sahajal Dhooria (15 mins) Progressive fibrosing interstitial lung disease. (Col.) Vikas Marwah (15 mins) Familial interstitial lung disease. Deepak Talwar (15 mins) Role of biomarkers including e-Nose technology in the management of interstitial lung disease. Barney Isaac (15 mins) Acute exacerbation of interstitial lung disease. Naveen Dutt (15 mins) Diagnosis of Hypersensitivity Pneumonitis - Focus on 2020 Clinical Practice Guidelines . Sujeet Rajan (15 mins) Q & A (15 mins)</p>	<p>Symposium on Pulmonary Imaging - III Radiation related and other risks with pulmonary imaging techniques Chair : C Ravindran, Anant Mohan, Mansi Gupta, Mukesh Goyal Radiation exposure from medical imaging - time to regulate. Anuradha Singh (15 mins) Does X-ray backscatter scanner screening at airports cause radiation risk? M Aslam (UAE) (15 mins) Concerns on radiation risk in paediatric CT - time for dose reduction. Raghava Rao (15 mins) Effect of acoustic noise during in-utero Ultrasound and MR imaging on neonatal cochlear function and foetal growth. Nitesh Gupta (15 mins) Gadolinium-based and other contrast agents - are these a health risk? Sudhir Kumar (15 mins) Guidelines for diagnostic imaging during pregnancy and lactation. Shital Patil (15 mins) Q & A (15 mins)</p>	<p>Practice-changing Research in Pulmonary Imaging Chair : Asmita Mehta , Salil Bendre, Laxmikant Yenge, Noufal Poongadan Lung Ultrasound for Diagnosis of Pneumonia in Children. Richa Gupta (8 mins) Histological validation of pulmonary infarction detected with contrast-enhanced ultrasound in patients with negative computed tomography pulmonary angiogram: A case series. Priya Ramchandran (8 mins) Radiologic, Pathologic, Clinical, and Physiologic Findings of Electronic Cigarette or Vaping Product Use-associated Lung Injury (EVALI). Gaurav Gupta (8 mins) Detection and imaging of gadolinium accumulation in human bone tissue by micro- and submicro-XRF. Ketaki Utpat (8 mins) Findings of lung ultrasonography of novel corona virus pneumonia during the 2019-2020 epidemic. Prince James (8 mins) Q & A (10 mins) ===== Practice-changing Research in Smoking Chair : P Ravindran, P K Thomas, Anurag Agarwal (Delhi) Smoking Cessation, Weight Change, Type-2 Diabetes and Mortality. A J Dabawala (8 mins) A Randomized Trial of E-Cigarettes versus Nicotine-Replacement Therapy. Gourahari Pradhan (8 mins) Association of the US Outbreak of Vaping-Associated Lung Injury with perceived harm of E-Cigarettes compared with Cigarettes. Deepak Aggarwal (8 mins). Severe Pulmonary Disease associated with E-Cigarette-Product Use - Interim Guidance. (Brig.) Debajyoti Bhattacharya (8 mins) Evaluation of Second-Hand Exposure to E Cigarette Vaping under a Real Scenario : Measurements of Ultrafine Particle Number concentration and size distribution and comparison with traditional tobacco smoke. Sourin Bhuniya (8 mins) Q & A (10 mins)</p>
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10:15 - 12:00

12:00 - 13:30	<p>Symposium on Tuberculosis - III Chair : Rohit Sarin, Amita Nene, Amitesh Gupta COVID-TB Synergy. Zarir Udhwadia (15 mins) Autophagy: A new strategy to manage tuberculosis. Sanjeev Nair (15 mins) Whole genome sequencing. Chitra Irvatham (15 mins) Newer vaccines in TB - status and constraints in development. K B Gupta (15 mins) Recent advances in management of female genital TB. J B Sharma (15 mins) Q & A (15 mins)</p>	<p>Symposium on Asthma - II Chair : J Unnithan, Jyoti Pattnaik, Nishtha Singh, Parul Vadgama A Real-World-Based approach in the management of asthma. C Ravindran (15 mins) Precision medicine in childhood asthma. (Brig.) Ashok Rajput (15 mins) As-needed budesonide-formoterol versus maintenance budesonide in mild asthma. Lavina Mirchandani (15 mins) Montelukast and neuropsychiatric adverse effects. Lalita Fernandes (15 mins) Bronchial thermoplasty in severe asthma: controversies, progress and uncertainties. Amit Dhamija (15 mins) Q & A (15 mins)</p>	<p>Symposium-cum-Panel Discussion Lung as a Mirror of Systemic Diseases Moderator : Agam Vora Respiratory Involvement in Cardiac disorders. G S Winder (10 mins) Respiratory involvement in Thyroid disorders . Ketan Mehta (10 mins) Lungs and Diabetes mellitus. Mangesh Tiwaskar (10 mins) Lungs and other Endocrine disorders Shashank Joshi (10 mins) Lungs and Rheumatic disorders. Milind Nadkar (10 mins) followed by Panel Discussion (30 mins) Q & A (10 mins)</p>	<p>Symposium on COVID-19 : The disaster of the Century - V Chair : Fathahudeen Abdul, Angshuman Mukherjee, Saurabh Mandliwar COVID-19 and the elderly. Pradyumna Sharma (15 mins) Vitamin D in COVID-19. K C Agarwal (15 mins) Prone positioning in awake, non-intubated patients with acute respiratory failure due to COVID-19. Nitin Abhyankar (15 mins) Use of high-flow nasal oxygen in COVID-19. Lalit Singh (15 mins) Post-COVID Pulmonary Fibrosis. Anand Jaiswal (15 mins) Q & A (15 mins)</p>	<p>Symposium on Sepsis Chair : G C Khilnani, Parthiv Mehta, Neel Thakker, Raghava Rao Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). Deepak Talwar (15 mins) The Surviving Sepsis Campaign update 2018: the 1 hour bundle. Brijesh Prajapat (15 mins) SOFA & qSOFA scores, SIRS criteria, and NEWS & MEWS scoring for assessment of sepsis. Samir Sahu (15 mins) Management of Sepsis-Induced Immunosuppression. Mradul K Daga (15 mins) Stem cell-based therapies for sepsis. Davis Paul (15 mins) Q & A (15 mins)</p>
13:30 - 14:00	LUNCH BREAK				

<p>Bangladesh Primary Care Respiratory Society (BPCRS) International Symposium on Primary Respiratory Care</p> <p>Chair : V K Arora, Narendra Bhatta (Nepal), Ritisha Bhatt</p> <p>Systematic review of clinical effectiveness, component, and delivery of pulmonary rehabilitation in low-resource settings. GM Monsur Habib (Bangladesh) (12 mins)</p> <p>Safe re-opening of private primary respiratory care practices in Bangladesh during the COVID-19 pandemic: a practical guide. SM Rowshan Alam (Bangladesh) (12 mins)</p> <p>Engaging with stakeholders in a research programme to promote implementation of pulmonary rehabilitation in Bangladesh: Challenges and opportunities. Aftab Uddin (Bangladesh) (12 mins)</p> <p>Life style modification in prevention, and care of chronic respiratory diseases. Muhammad Jahangir Kabir (Bangladesh) (12 mins)</p> <p>Continuing professional education for general practitioners on COPD : feasibility of a blended learning approach in Bangladesh. Mohd. Nazim Uzzaman (Bangladesh) (12 mins)</p> <p>Q & A (30 mins)</p>	<p>Symposium on Tuberculosis - IV</p> <p>Chair : P Ravindran, Bornali Datta, B K Menon, Shyam Krishnan</p> <p>Serological biomarkers for monitoring response to treatment of tuberculosis. Salil Bhargava (15 mins)</p> <p>Fixed-dose combinations of drugs versus single-drug formulations for treating pulmonary tuberculosis – an update. Radha Munje (15 mins)</p> <p>Six-month therapy for abdominal tuberculosis. Poulomi Chatterji (15 mins)</p> <p>Shortened treatment regimens (4 months) versus the standard regimen for drug-sensitive pulmonary tuberculosis. Rohit Sarin (15 mins)</p> <p>Treatment outcomes after early initiation of anti-retroviral therapy for HIV-associated tuberculosis. IS Gilada (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on Artificial Intelligence</p> <p>Chair : P S Shankar, (Air Commodore) Ajay Handa, Prince James, Ketaki Utpat</p> <p>Role of artificial intelligence in long term management of respiratory diseases. Raja Dhar (15 mins)</p> <p>Artificial intelligence outperforms pulmonologists in the interpretation of pulmonary function tests. Arun Sampath (15 mins)</p> <p>Artificial intelligence in lung imaging : widening horizons. Pajaniyel R (15 mins)</p> <p>Management of pulmonary nodules and role of artificial intelligence. Mohan Kumar Thekkinkattil (15 mins)</p> <p>Application of Bayesian analysis for artificial intelligence in Pulmonary medicine. Anurag Agarwal (Delhi) (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on Respiratory Infections - III (Pneumonia)</p> <p>Chair : R K Jenaw, Ansuman Mukhopadhyay, Subodh Pandey, Tanushree Gahlot</p> <p>Empirical antibiotic regimens in a rapidly changing landscape of resistance. Bornali Datta (15 mins)</p> <p>Procalcitonin (PCT) as a biomarker to distinguish between bacterial and viral infections. (Col.) S P Rai (15 mins)</p> <p>Childhood pneumonia. Sangeeta Sharma (15 mins)</p> <p>Duration of antibiotic therapy for CAP in the era of personalized medicine. C Ravindran (15 mins)</p> <p>Corticosteroids in Community-Acquired Pneumonia. Abhay Uppe (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on Lung Cancer - II</p> <p>Multidisciplinary Approach to Pulmonary Oncology Tumor Board (Tata Memorial Centre)</p> <p>(14:00 - 16:00) (120 mins)</p> <p>Chair : Sandeep Tandon</p> <p>Moderator (Panel Discussion) : Maheema Bhaskar</p> <p>Moderator (Q & A) : Pavankumar Biraris</p> <p>MDT Co- Ordinator : Prakash S</p> <p>Panelists :</p> <p>George Karimundackal (Thoracic Surgery & Surgical Oncology)</p> <p>J P Agarwal (Thoracic Radiation Oncology)</p> <p>Kumar Prabhhash (Thoracic Medical Oncology)</p> <p>Nilendu Purandare (Nuclear Medicine)</p> <p>Rajiv Kaushal (Thoracic Pathology)</p> <p>Jayita Deodhar (Palliative Medicine)</p> <p>Amit Janu (Radiodiagnosis & Interventional Radiology)</p> <p>Pavankumar Biraris (Pulmonary Medicine)</p> <p>(90 mins)Q & A (30 mins)</p>
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14:00 - 15:30

<p>15:30 - 16:30</p>	<p>Practice-changing Research in COVID-19 - II Chair : Subir Kumar Dey, Sushant Meshram, Santosh Kumar (Agra), Sonam Spalgais A Randomized trial of Hydroxychloroquine as Post-exposure Prophylaxis for COVID-19. Poonzughali Rajaji (8 mins) Efficacy and safety of early prone positioning combined with HFNC or NIV in moderate to severe ARDS: a multi-center prospective cohort study. Prashant Prakash (8 mins) Feasibility and physiological effects of prone positioning in non-intubated patients with acute respiratory failure due to COVID-19 (PRON-COVID): a prospective cohort study. Neel Thakkar (8 mins) Human umbilical cord-derived mesenchymal stem cell therapy in patients with COVID-19: a phase 1 clinical trial. Ravi Dosi (8 mins) Q & A (8 mins) ===== Industry Session (GSK) (20 mins) (16:10 - 16:30) Chairs : Sarvinder Singh, Emilio Pizzichini (Brazil) Burden of Burst and Maintenance OCS in Severe Asthma. P. Arjun (10 mins) Q & A (10 mins)</p>	<p>Debate on Artificial Intelligence Chair : R Pajaniwal, Parvez Ahmad, Santosh Kumar (Lucknow), Pavan Tiwari Modern technological advancements can substitute for the role of clinicians in the management of diseases. Possibly Yes. Arjun Khanna vs No. A R Paramez (12 + 4 + 1 mins each) Q & A (5 mins) ===== Industry Session (ASTRA ZENECA) (20 mins) (16:10 - 16:30) Importance of setting up Severe Asthma clinics. Deepak Talwar (15 mins) Q & A (5 mins)</p>	<p>Debate on COVID-19 - III Chair : Suresh Koolwal, R P Meena, Arun Sampath, Shikha Jindal Gupta Online Management of COVID-19 Right or Wrong ? Right. P R Gupta vs Wrong. Mayank Mishra (12 + 3 mins each) Q & A (5 mins) ===== Late Breaker Session (30 mins) (16:00 - 16:30) Current Status of vaccine against COVID-19. P K Thomas (15 mins)</p>	<p>Symposium on Lung Transplantation (16:00 - 18:00) (120 mins) Chair : R K Dewan, Nasser Yusuf, Rajan Santosham, Karunakara Padhy Lung Transplant : purpose, procedure, and risks. RMPL Ramanathan (15 mins) Lung transplantation : past, present, and future. KR Balakrishnan (15 mins) Selection of candidates for lung transplantation. Sumita Agrawal (15 mins) Expanding the donor pool- extended donor criteria in lung transplantation. Suresh Rao (15 mins) Lung transplantation for and during COVID-19. Apar Jindal (15 mins) Infection prophylaxis and management of viral infection. Allan Glanville (Australia) (20 mins) Lung transplantation : success and survival. Vaidehi Kaza (USA) (15 mins) Q & A (10 mins)</p>
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<p>International Symposium on Pediatric Pulmonology Chair : Sangeeta Sharma, Santhakumar S, Saurabh Karmakar, Pranav Ish Primary Ciliary Dyskinesia - Diagnosis and Management. Nisha Bhatta (Nepal) (20 mins) High Resolution Transthoracic Ultrasound in Evaluation of Pediatric Mediastinal Lymphadenopathy. Priyanka Naranje (20 mins) Pediatric and Neonatal airway Endoscopy - Current status and the way forward . Fabio Midulla (Italy) (20 mins) Transitioning Patients from Paediatric to Adult NIV services. Milind Sovani (UK) (20 mins) Q & A (10 mins)</p>	<p>IUAT-LD (The Union) International Symposium A Comprehensive Approach for Tuberculosis Care and Lung Health Chair : Guy Marks (The Union), Rhea Lobo (The Union) Building back the TB response after the initial COVID-19 impact in India. K S Sachdeva (15 mins) Addressing Co-morbidities as part of a comprehensive approach to lung health. Paula Fujiwara (France) (15 mins) Occupational Risk factors for lung infections. Rodney Ehrlich (South Africa) (15 mins) Post lung infection health : What is needed? Jamilah Meghji (UK) (15 mins) Q & A (30 mins)</p>	<p>Nepalese Respiratory Society (NRS) International Symposium Responding to Pulmonary Diseases in the Era of COVID-19 : Unprecedented Times, Unprecedented Challenges Chair : Rajesh Solanki, Surya Kant, Sudhir Chaudhri, Indranil Halder Outpatients Management of COPD in the COVID-19 Era : The Known, the Unknown and the Controversies. Ramesh Chokhani (Nepal) (20 mins) Managing Pulmonary Tuberculosis in the COVID-19 Era : Responding to Vital Clinical Cross-Talks. Raj Mishra (Nepal) (20 mins) Adoption and Adaptation of Pulmonary -Telemedicine during and beyond COVID-19. Bhatta (Nepal) (20 mins) Q & A (30 mins)</p>	<p>Viet Nam Respiratory Society (VNRS) International Symposium Chair : Ngo Quy Chau (Viet Nam) (Details Awaited) Q & A (15 mins)</p>	
<p>European Respiratory Society (ERS) International Symposium on Sepsis Chairs : Simon Tiberi (UK), Catia Cilloniz (Spain) Role of non-invasive respiratory assistance in sepsis. Raffaele Scala (Italy) (20 mins) Personalised medicine in Sepsis. Lieuwe Bos (The Netherlands) (20 mins) Management (Diagnosis and Treatment) of HAP / VAP. Antoni Torres (Spain) (20 mins) Q & A (30 mins)</p>	<p>Symposium on Thoracic Surgery Chairs : S K Sarkar, Rajashekara Reddy, RMPL Ramanathan, Apar Jindal Surgery in Lung Cancer - Post radiotherapy and chemotherapy. Nasser Yusuf (15 mins) Lung resection surgery in TB today. R K Dewan (15 mins) Role of thoracoplasty in the present era. Rajan Santosham (15 mins) Current status on lung transplantation. Arun Nair (UK) (20 mins) Surgery for Chest Trauma Karunakara Padhy (15 mins) Q & A (10 mins)</p>	<p>Turkish Thoracic Society (TTS) International Symposium on COVID-19 Turkish Page of the COVID-19 Book Facilitators : Oya Itil (Turkey), Nurdan Kokturk (Turkey) How has Turkey responded to the COVID-19 threat? Fusun Oner Eyuboglu (Turkey) (20 mins) Air pollution in the COVID-19 era. Hasan Bayram (Turkey) (20 mins) What have we done in the ICU against COVID-19 threat? Begum Ergun (Turkey) (20 mins) Q & A (30 mins)</p>	<p>American Thoracic Society (ATS) International Symposium on COPD Chair : Juan Celedon (USA) Early COPD : Does finding cases impact future risks? Fernando J. Martinez (USA) (20 mins) Biomarkers and imaging in COPD : tailoring treatment Mei-Lan King Han (USA) (20 mins) Treating COPD in the 21st Century : What is beyond Triple Therapy Bartolome Celli (USA) (20 mins) Q & A (30 mins)</p>	<p>Cleveland Clinic International Symposium on Interventional Pulmonology Moderator : Atul Mehta (USA) Interventional Pulmonology innovations for 2025. Tanmay Panchabhai (USA) (20 mins) Ice in the Airways. Sameer K. Avasarala (USA) (20 mins) EBUS-TBNA in the developing world. Pratibha Gogia (20 mins) Management of Recurrent Pleural Effusion. Satish Kalanjeri (USA) (20 mins) Q & A (10 mins)</p>

16:30 - 18:00

18:00 - 19:30

19:30 - 20:00	<p>Industry Session (CIPLA) (30 mins) Raising the Standard of COPD Care COPD Management in India : Need of Triple Therapy. Raja Dhar (10 mins). Optimizing COPD Management with Single-inhaler Triple Therapy. MeiLan King Han (USA) (20 mins).</p>	<p>Industry Session (GSK) (30 mins) Complete versus partial depletion of eosinophils and its clinical implications Chair : Anand Jaiswal Eosinophils - Physiological role and role in severe asthma and Partial vs Complete Depletion. Agam Vora (10 mins) Implications of partial vs complete eosinophils depletion on efficacy and safety of anti IL-5 agents and ITCs . Emilio Pizzichini (Brazil) (10 mins) Q & A (10 mins)</p>	<p>Industry Session (ABBOTT) (30 mins) Role of Urinary antigen test in Diagnosis of Pneumonia. Agam Vora (20 mins) Q & A (10 mins)</p>	<p>Industry Session (HETERO HEALTHCARE) (30 mins) Tulobuterol transdermal patch – A novel approach in Asthma and COPD management. P Prabhudesai (20 mins) Q & A (10 mins)</p>	<p>Industry Session (FUJIFILM) (30 mins) Endobronchial Tuberculosis – Bronchoscopic Management. Hari Kishan Gonuguntla (20 mins) Q & A (10 mins)</p>
20:00 - 21:00	CULTURAL PROGRAM				

SUNDAY, 31st JANUARY 2021					
TIME	HALL - A	HALL - B	HALL - C	HALL - D	HALL - E
5:01 - 10:06	<p>Symposium on Mycotic Infections - II Chair : Manoj Panigrahi, P Arjun, Avya Bansal, Ajo Jose Anti-fungal therapy : Present and the future. (Brig) B N Panda (15 mins) Anti-fungal agents for preventing fungal infections in non-neutropenic critically ill patients. Avdresh Bansal (15 mins) Untargeted antifungal treatment to balance risks and benefit. Venugopal Jaganathan (15 mins) Emergence of resistance to antifungal drugs. Kiran Vishnu Narayan (15 mins) Q & A (15 mins)</p>	<p>Symposium on Critical Care : The Need of the Hour - III Chair : Rajesh Chawla, Samir Sahu, Akhilesh K, Deepti Rathee Stress ulcer prophylaxis with proton pump inhibitors or histamine-2 receptor antagonists in adult intensive care patients. Rajnish Gupta (15 mins) Nutrition in ICU. Alladi Mohan (15 mins) Thrombo-prophylaxis in critical care. Aditya Jindal (15 mins) Musical interventions in ICU. Parthiv Mehta (15 mins) Q & A (15 mins)</p>	<p>Symposium on International Guidelines, Consensus reports & Position papers - II Chair : P R Gupta, S Yuvarajan, A D Shukla, Ashish Prakash Treatment of Drug-Resistant Tuberculosis. An Official ATS/CDC/ERS/IDSA Clinical Practice Guideline (2019). R P Meena (15 mins) Treatment of adult obstructive sleep apnea with positive airway pressure: an American academy of sleep medicine clinical practice guideline (2019). Unnati Desai (15 mins) Uniportal video-assisted thoracic surgery lobectomy: a consensus report from the Uniportal VATS Interest Group (UVIG) of the European Society of Thoracic Surgeons (ESTS) (2019). Marco Scarci (Italy) (20 mins) Management of malignant pleural effusions: an official ATS/STS/STR clinical practice guideline (2018). Reshmi Nair (15 mins) Q & A (10 mins)</p>	<p style="text-align: center;">Debates</p> <p>Chair : S K Luhadia, N K Jain, Jayaprakash B, Muthu Valiappan Debate on Tuberculosis - II Can we eliminate Tuberculosis by 2025 ? No. Bornali Datta vs Yes. Sanjeev Nair (12 + 4 + 1 mins each) Debate on Critical Care Daily routine versus on-demand chest radiography in adult ICU patients - does it affect quality of care ? Daily CXR. Davis Paul vs On demand CXR. G C Khilnani (12 + 4 + 1 mins each) Q & A (5 mins)</p>	<p>Practice-changing Research in Interventional Pulmonology Chair : Ujjwal Parakh, Pratibha Singhal, Mahendra Kumar, Aditya Chawla Pleural dye marking of lung nodules by electromagnetic navigation bronchoscopy. Suraj Verma (8 mins) Fiducial marker placement with electromagnetic navigation bronchoscopy: a subgroup analysis of the prospective, multicenter NAVIGATE study. Varun Patel (8 mins) Electromagnetic navigation bronchoscopy for peripheral pulmonary lesions: one-year results of the prospective, multicenter NAVIGATE study. Ruchi Dua (8 mins) A systematic review and meta-analysis of robotic versus open and video-assisted thoracoscopic surgery approaches for lobectomy. Laxmikant Venge (8 mins) Role of high-definition bronchoscopy in histopathological diagnosis of bronchogenic carcinoma according to bronchial vascular patterns. Santhakumar S (8 mins) Image enhancement technology in bronchoscopy: a prospective multicentre study in lung cancer. Noufal Poongadan (8 mins) Learning Electromagnetic Navigational Bronchoscopy and Percutaneous Transthoracic Needle Biopsy (LEAP): a pilot study. Ashish Agarwal (8 mins) A systematic review and cost effectiveness analysis of reusable vs. single-use flexible bronchoscopes. Deepak Muthreja (8 mins) Q & A (11 mins)</p>

<p>Symposium on Air Pollution and Climatic change Chair : A K Janmeja, A B Singh, Kamal Jodhani, A R Paramez Air Pollution and health. Padma Shri Randeep Guleria (15 mins) Climate change, air pollution and respiratory allergy. Raj Bhagat (15 mins) Ambient air pollution and obstructive airway disease. Sudhanshu Kalra (15 mins) Climate change, global warming, respiratory infections and intensive care. Gourahari Pradhan (15 mins) Lungs in warming world. Jogesh Sarma (15 mins) Global emission of greenhouse gases & the greenhouse effect. Arun Chowdary Kotaru (15 mins) Q & A (15 mins)</p>	<p>Symposium on Tuberculosis - V Newer drugs for Drug-Resistant TB Chair : G C Ahir, Salil Bhargava, Chitra Iravatham, Poulomi Chatterji Linezolid for drug-resistant pulmonary tuberculosis. K K Chopra (15 mins) Bedaquiline : current status. Rupak Singla (15 mins) Delamanid : A bet on the wrong horse, Does it now have a role in drug-resistant TB? V K Arora (15 mins) Pretomanid: a new hope for drug-resistant TB. V Vinod Kumar (15 mins) BPAL and BPaMZ regimens for the treatment for tuberculosis. Rajesh Solanki (15 mins) Newer ATDs in pipeline. Amita Nene (15 mins) Q & A (15 mins)</p>	<p>Symposium on COVID-19 - The Disaster of the Century - VI Transmission of SARS-CoV-2 infection through aerosol generating procedures Chair : G N Srivastava, Alok Nath, Pradyuma Sharma, Piyush Arora The risk through nebulisation. Malay Sarkar (15 mins) The threat with non-invasive ventilation procedures. Neetu Jain (15 mins) How safe are oxygen delivery procedures - simple nasal cannula, high flow nasal cannula? Mehra (15 mins) Risk of infection and precautions to be taken during pulmonary function testing. Gopal Raval (15 mins) Cardiopulmonary resuscitation. Ashok K Singh (Delhi) (15 mins) Other aerosol generating procedures Anurag Agarwal (Dehradun) (15 mins) Q & A (15 mins)</p>	<p>International Symposium on COPD Chair : Sanjeev Mehta COPD in India . Sanjeev Mehta (15 mins) Can Phenotyping COPD lead to Personalized Medicine? Sidney Braman (USA) (20 mins) Eosinophilic COPD - a real entity? Nicola Hanania (USA) (20 mins) The co-morbidities of COPD : mechanisms and disease impact. Barry Make (USA) (20 mins) The 'scope' of treating COPD : use of valves. Mehta (USA) (20 mins) Vishisht Q & A (10 mins)</p>	<p>Symposium on Interventional Pulmonology - II Chairs : Ravindra Mehta, P Chhajed, Karan Madan, Veerottam Tomer Flexible bronchoscopy and the MDR pathogens. V R Pattabhiraman (15 mins) Bronchoscopy in the elderly with co-morbidities – how safe ? (Lt. Gen. Retd) BNBM Prasad (15 mins) Therapeutic Bronchoscopy. T Balamugesh (15 mins) Bronchoscopic ablation of peripheral lung tumours. Rajiv Goyal (15 mins) Endobronchial stenting for airway obstruction. Prashant Chhajed (15 mins) Awake Thoracoscopy. R Narasimhan (15 mins) Q & A (15 mins)</p>
<p>Panel Discussion on TB - II Management of latent TB in countries with high prevalence of disease Moderator : N K Jain Panelists : A D Shukla, Ajay Lanjewar, Anitha Kumari, Kumar Utsav Samaria, P T James, Sanjeev Sinha, Savita Jindal Q & A (10 mins)</p>	<p>Panel discussion on Asthma - II Use of long-term inhaled corticosteroids and risk of developing co-morbidities / diseases Moderator : Mohd. Sabir Panelists : Hanmant Varudkar, Jyoti Patnaik, Lingadevi T, M L Gupta, Nishtha Singh, (Col.) Ram Deoskar, S K Agarwal Q & A (10 mins)</p>	<p>Panel Discussion on COPD - II Mixing of drugs in Nebulization Moderator : P D Motiani Panelists : Adesh Kumar, Atul Luhadia, D K Manoj, Mohd. Shameem, Rahul Sharma, S K Chhabra Q & A (10 mins)</p>	<p>Symposium on COPD - III Chair : Ashok Mahashur, Kumar Doshi, Gaurav Gupta, Nitin Jain 6 Best Papers in COPD. Rakesh Bhargava (20 mins) Debate on COPD - II Glycopyrronium bromide versus tiotropium bromide : which to use as a long-acting muscarinic antagonist for the treatment of obstructive airways disease ? Glycopyrronium . Suresh Koolwal vs Tiotropium. Salil Bendre (12 + 4 + 1 mins each) Q & A (5 mins)</p>	<p>Panel Discussion on Interventional Pulmonology Oesophageal Ultrasound (EUS) in Pulmonary Medicine Moderator : Rajiv Goyal Panelists : Aditya Chawla, Ashish Agarwal, Karan Madan, Mahendra Kumar, Ujjwal Parakh, Veerottam Tomer Q & A (10 mins)</p>

10:15 - 12:00

12:00 - 13:00

LUNCH BREAK	
13:00 - 14:00	<p style="text-align: center;">Symposium on Lung Cancer - III Chair : Padma Shri D Behera, Anand Jaiswal, Paramjyothi G K, Irfan Ismail Ayub Multiple primary lung cancer: a rising challenge. P R Mohapatra (15 mins) Navneet Singh (15 mins) Updates in targeted therapy for NSCLC. Molecular targeted therapy in lung cancer other than Non-squamous NSCLC. J K Saini (15 mins) Surgery versus Lung stereotactic body radiation therapy (SBRT) for early-stage non-small cell lung cancer in the very elderly. (Surg. Capt. Retd.) P S Tampi (15 mins) Surgery in lung cancer. Harit Chaturvedi (20 mins) Q & A (10 mins)</p>
14:00 - 15:30	<p style="text-align: center;">Symposium on COVID-19 : The disaster of the Century - VII All About Masks, Respirators and PPE Chair : Narayan Mishra, K C Agarwal, Nitin Abhyankar, Shubhra Jain What are different types of masks and respirators and what are their filtering efficiency levels (N, R, and P). Abha Mahashur (15 mins) Respirators versus surgical/medical masks. Amina Mobashir (15 mins) What is powered air-purifying respirator (PAPR)? Aakanksha Chawla Jain (15 mins) How to de-contaminate respirators (N-95) for re-use. Pushpendra Verma (15 mins) What are different components and types of PPE kits? Jayalakshmi T K (15 mins) Q & A (15 mins)</p>
14:00 - 15:45	<p style="text-align: center;">Symposium on COPD - IV (14:00 - 15:45) Chair : Dhiman Ganguly, Mohd. Sabir, Mahavir Modi, M Aslam (UAE) Once-Daily Single-inhaler Triple versus Dual Therapy in Patients with COPD. Mansi Gupta (15 mins) Possibilities and limitations of inhaled corticosteroids in COPD. Ashok Mahashur (15 mins) Anxiolytics and sedatives in COPD. Anil Sontakke (15 mins) What is new in GOLD 2020 ? Rajiv Pallwal (15 mins) Non-invasive ventilation in COPD - Misguided by Guidelines. Vikram Sarbhai (UAE) (15 mins) Smoker's cough - Nothing but Pre-COPD Mohammad Azizur Rahman (Bangladesh) (20 mins) Q & A (10 mins)</p>
14:00 - 15:45	<p style="text-align: center;">International Symposium on Asthma Chair : Sanjeev Mehta How asthma biomarkers can direct therapy. Nicola Hanania (USA) (20 mins) Linda Rogers (USA) (20 mins) Asthma in the Elderly- a different disease? Sidney Braman (USA) (20 mins) followed by Discussion (30 mins) Biologics : Are they ready for prime time ? Advantages and Limitations . Sanjeev Mehta</p>
14:00 - 15:45	<p style="text-align: center;">Symposium for International Guest Speakers - II Chair : D J Christopher, Raja Dhar, Rajesh Swarnakar, Deepak Muthreja Respiratory Mucosal Barrier - Normal versus Diseased. P K Vedanthan (USA) (20 mins) Airway Inflammation and early immune response in COVID-19 patients. Hari Shankar Sharma (The Netherlands) (20 mins) Thoracoscopy for Undiagnosed Pleural Effusion. Pyng Lee (Singapore) (20 mins) COVID-19 considerations in the Intensive Care Unit. Atul Malhotra (USA) (20 mins) Q & A (10 mins)</p>

<p>American College of Chest Physicians (ACCP) CHEST International Symposium on Asthma</p> <p>Moderator : Steven Q Simpson (USA)</p> <p>Advances in Asthma Management - A Spotlight on Biologics.</p> <p>Sandhya Khurana (USA) (20 mins)</p> <p>The implications of Asthma and Management during the COVID-19 Pandemic.</p> <p>Diego J Maselli (USA) (20 mins)</p> <p>An Update on Asthma Guidelines.</p> <p>Megan Conroy (USA) (20 mins)</p> <p>Q & A (30 mins)</p>	<p>Symposium on Respiratory Infections - III</p> <p>Therapy in the Post-antibiotic Era</p> <p>Chair : Samir Sahu, Kapi Salgia, Parul Mrigipuri, Amina Mobashir</p> <p>Therapy for infectious diseases beyond antibiotics in the Post-antibiotic era.</p> <p>George D'Souza (15 mins)</p> <p>Antimicrobial peptides and metal nanoparticles as future strategies.</p> <p>Mohan Kumar Thekkinkattil (15 mins)</p> <p>Bacteriophages in the battle against MDR pathogens.</p> <p>Vishak Acharya (15 mins)</p> <p>The lung microbiome, gut-lung axis and probiotics in lung infections.</p> <p>Rohit Kumar (15 mins)</p> <p>Curcumin as an efflux pump inhibitor.</p> <p>Kamal Jodhani (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on Emerging trends in inhalational/nebulized drug delivery (15:45 - 17:00)</p> <p>Chair : Sundeep Salvi, Vishnu Sharma, Sushmita Roychowdhury, Naveed Shah</p> <p>Inhaled antibiotics and mucolytics as an adjunctive therapy in chronic lower respiratory infections including cystic fibrosis, bronchiectasis, especially with Pseudomonas infections.</p> <p>Vishal Chopra (15 mins)</p> <p>Inhaled therapy in pulmonary hypertension.</p> <p>Loganathan N (15 mins)</p> <p>Role in NTM, mycotic and viral respiratory infections.</p> <p>Shikha Jindal Gupta (15 mins)</p> <p>Palliative respiratory care in terminally ill patients.</p> <p>Rajam Iyer (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on OSA in Adults - III</p> <p>Chair : Dipti Gothi, Pratibha Dogra, Ashok Kumar Singh, Unnati Desai</p> <p>Drug therapy for OSA in adults.</p> <p>Pavan Tiwari (15 mins)</p> <p>Positional therapy in the management of obstructive sleep apnoea.</p> <p>Saurabh Mittal (15 mins)</p> <p>Adherence to C-PAP – a major hurdle in the management of OSA and novel interventions to improve its usage.</p> <p>(Air Commodore) Ajay Handa (15 mins)</p> <p>Usage of opioid, hypnotic, and sedating medications on sleep-disordered breathing in adults with OSA.</p> <p>Himanshu Garg (15 mins)</p> <p>Bariatric surgery in OSA – how useful?</p> <p>B P Singh (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on High Altitude Travel and Altitude Illnesses</p> <p>Chair : Ravindra Sarnaik, Neeraj Gupta, P A Mahesh, S K Chhabra</p> <p>The lung at high altitude.</p> <p>Parvez Ahmad (15 mins)</p> <p>Travel to high altitude with pre-existing lung disease.</p> <p>Naveed Shah (15 mins)</p> <p>Air travel hypoxaemia and safe air travel in COPD patients.</p> <p>Narendra Khippal (15 mins)</p> <p>Hypoxia altitude simulation test, pre-flight assessment, and fitness to fly.</p> <p>Sameer Singhal (15 mins)</p> <p>Q & A (15 mins)</p>
<p>Symposium on Natural Disasters and threat to lung health</p> <p>Chair : (Surg. Capt.) P S Tampi, Shashi Bhushan, V Vinod Kumar, Shital Patil</p> <p>Thunderstorm asthma.</p> <p>Frank Thien (Australia) (20 mins)</p> <p>Heat waves, sand and dust storms.</p> <p>Sonali Trivedi (15 mins)</p> <p>Volcano eruptions.</p> <p>P S Shankar (15 mins)</p> <p>Burning of crops and forest fires.</p> <p>V K Arora (15 mins)</p> <p>Q & A (10 mins)</p>	<p>Symposium on Miscellaneous Disorders - III</p> <p>Chair : A K Abdul Khader, Sudanshu Kalra, Ritabrata Mitra, Lingadevi T</p> <p>The beauty and power of breath.</p> <p>Sundeep Salvi (15 mins)</p> <p>Health 3-D bioprinting: Is this the future of organ transplantation?.</p> <p>Vishnu Sharma (15 mins)</p> <p>An update on Gene therapy in lung diseases.</p> <p>Praveen Valsalan (15 mins)</p> <p>Virtual consultations in COVID times.</p> <p>Priyank Jain (15 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium for International Guest Speakers - III</p> <p>Chair : P D Motiani, S N Gaur, Manoj Goel</p> <p>Policy decisions and COVID-19.</p> <p>Vikram Sarbhai (UAE) (20 mins)</p> <p>Why early prevention of exacerbation is most important intervention in COPD management?</p> <p>Mukesh Singh (UK) (15 mins)</p> <p>Hospital management of severe asthma- pearls and pitfalls.</p> <p>Vivek Iyer (USA) (15 mins)</p> <p>Management of COVID-19 patients with Respiratory failure in the NHS</p> <p>Anand Singh (UK) (15 mins)</p> <p>Q & A (10 mins)</p>	<p>International Symposium on Post-COVID-19 Pulmonary Fibrosis</p> <p>Introduction.</p> <p>Sanjeev Mehta (5 mins)</p> <p>COVID Lung Disease - Clinical Perspectives of imaging in the COVID-19 Pandemic.</p> <p>Suhail Raoof (USA) (45 mins)</p> <p>Summary and closing remarks</p> <p>Sanjeev Mehta (10 mins)</p> <p>Q & A (15 mins)</p>	<p>Symposium on Critical Care - IV</p> <p>An update on NIV</p> <p>Chair : M K Daga, Vijay Hadda, Neetu Jain, Ashesh Dhungana (Nepal)</p> <p>NIV use to prevent reintubation and in peri-operative period.</p> <p>Gyanendra Agarwal (15 mins)</p> <p>Non-invasive ventilation assisted bronchoscopy in hypoxicemic patients.</p> <p>Mrinal Sircar (15 mins)</p> <p>Non-invasive ventilation - lessons from COVID-19.</p> <p>Mark Elliott (UK) (20 mins)</p> <p>Long-term home NIV.</p> <p>(Col.) Vikas Marwah (15 mins)</p> <p>Q & A (10 mins)</p>
<p>18:15 - 19:00</p>	<p>VALEDICTORY FUNCTION</p>			

NAPCON PG QUIZ



POST-GRADUATE QUIZ IN RESPIRATORY DISEASES

an Academic Initiative of

NATIONAL COLLEGE OF CHEST PHYSICIANS (INDIA)



For all medical students, continuing medical education (CME) programmes, seminars, updates, workshops and conferences form an integral part of their training apart from the bedside clinical teaching, ward rounds and lectures imparted at medical colleges or teaching institutions. Quiz competition comes as a refreshing change from all these academic activities to enhance and fine-tune their learning and it is something they look forward to with excitement and enthusiasm. To encourage and recognize the budding potential in our Chest Physicians of tomorrow, National College of Chest Physicians (India) undertook the initiative to conduct Post-graduate Quiz Competition in Respiratory diseases with the objective to promote scientific temper in PG students of Pulmonary medicine in India, state-wise as well as nationally since 2019, and to acknowledge and reward this young talent identified among PG students of Pulmonology through a national level academic platform.

The NCCP(I) State PG quiz in Respiratory diseases in 2020 will be organised in different states, keeping nationally renowned faculty in Pulmonary medicine at teaching institutes as state PG quiz anchors. The first two winners in order of merit in each state PG quiz will be provided the opportunity to participate in the All-India PG Quiz competition during Virtual NAPCON 2020 with Exciting Prizes and Awards.

For Details visit website www.virtualnapcon2020.com



POST-GRADUATE QUIZ IN RESPIRATORY DISEASES
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State / Region	PG Quiz Anchor	From (Institute)
Uttarakhand	Dr. Girish Sindhwani	AIIMS, Rishikesh
Uttar Pradesh	Dr. Surya Kant	King George Medical University, Lucknow
Jammu and Kashmir	Dr. Naveed Shah	Government medical college, Srinagar
Haryana	Dr. Dhruva Chaudhry	PGIMS, Rohtak
Himachal Pradesh	Dr. Malay Sarkar	Indira Gandhi medical college, Shimla
Punjab	Dr. Vishal Chopra	Government medical college, Patiala
Delhi	Dr. Vivek Nangia	Max Superspecialty hospitals, Delhi
Odisha	Dr. Narayan Mishra	MKCG medical college, Berhampur
West Bengal	Dr. Shelly Shamim	Calcutta National Medical College, Kolkata
Rajasthan	Dr. R. P. Takhar	Government medical college, Kota
Gujarat	Dr. Savita Jindal	AMC municipal medical college, Ahmedabad
Maharashtra	Dr. Sushant Meshram	Government medical college, Nagpur
Karnataka	Dr. Shashi Bhushan	Bangalore medical college & research institute, Victoria Hospital, Bengaluru
Kerala	Dr. P S Shajahan	Government T D medical college, Alapuzzha
Tamil Nadu	Dr. V. Vinod Kumar	GHTM, Tambaram sanatorium, Chennai
Puducherry	Dr. S. Yuvarajan	SMV medical college, Puducherry
Andhra Pradesh and Telangana	Dr. Alladi Mohan	Sri Venkateswara Institute of Medical Sciences, Tirupati
Madhya Pradesh and Chhatisgarh	Dr. Trinath Dash	Jawaharlal Nehru hospital and research institute, Bilai
Bihar and Jharkhand	Dr. Saurabh Karmakar	AIIMS, Patna
ALL – INDIA PG QUIZ GRAND FINALE	Dr. Vishnu Sharma Dr. Rajesh Venkat	NAPCON 2020 (VIRTUAL)

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1002 ABSTRACTS SUBMITTED

There are 3 categories of Award :

1. NCCP (I) – Prof. Dr. S. N. Gaur Young Scientist Award (Oral Presentation)
2. ICS – Dr. J. C. Kothari Young Scientist Award (Oral Presentation)
3. NAPCON 2020 Award (Oral and E-Poster) in 12 categories

CATEGORIES FOR ABSTRACTS

ASTHMA	COPD	ILD
TUBERCULOSIS	COVID-19	INFECTIONS
INTERVENTIONAL PULMONOLOGY	CRITICAL CARE	LUNG CANCER
PFT	SLEEP DISORDERS	OTHERS

- ☑ Presenter for NCCP (I) – Prof. Dr. S. N. Gaur Young Scientist Award and ICS – Dr. J. C. Kothari Young Scientist Award sessions should not be more than 35 years of age by 27th January 2021 and should be the First Author and Presenter of the abstract.
- ☑ Oral Presentations will be Live Online in Hall F and Posters at the E-Poster Exhibition
- ☑ Certificate of Oral Paper/Poster Presentation will be provided as a soft copy after the conference.



**NCCP(I) – PROF. DR. S. N. GAUR’s
YOUNG SCIENTIST AWARD**

No.	Name	Title of Abstract
1	Shibini P	Factors Predicting the diagnostic yield of EBUS-TBNA in sampling mediastinal and hilar lymph nodes
2	Muniza Bai	Assessment Of Alveolar Capillary Membrane Permeability Using Tc99m-Dtpa Aerosols In Patients With Diffuse Systemic Sclerosis – A Hospital-Based Cross-Sectional Study
3	Rucha Sane	Risk Factors of Post-COVID Fibrosis
4	D Suresh	Prevalence Of Metabolic Syndrome Among Cases of COPD And Its Correlation With Bode Index And C Reactive Protein Titres
5	Anjaly KC	A Prospective Study On Correlation Between Ultrasonographic Evaluation Diaphragmatic Thickness, Excursion And Spirometer in COPD Patients
6	Sharad Bagri	Pulmonary Function In Cured Pulmonary Tuberculosis Cases
7	Shona Arlin Christopher	Predictors And Prognostic Factors In A Large Pulmonary Embolism Series
8	Ahmed Safwan	Evaluation Of Inflammatory Biomarkers And Quality Of Life In Asthma, COPD And Asthma –COPD Overlap
9	Shyam Washani	Evaluation of Criteria For Clinical Control In Patients With COPD - A Hospital Based Prospective Study



**ICS – Dr. J. C. KOTHARI
YOUNG SCIENTIST AWARD**

No.	Name	Title of Abstract
1	Sameer Arbat	Clinical Profile of COVID 19 Positive Patients Admitted to a Tertiary Care Hospital
2	Roshan Kumar M	Demographic & clinical profile of COVID-19 patients admitted at a tertiary care hospital in South India
3	Anand V	The effect of early CPAP therapy for OSA in patients with chronic kidney disease
4	Jyothi Mariam Jose	PROGNOSTIC SIGNIFICANCE OF LEUKOCYTE DIFFERENTIALS IN COVID 19
5	Aritra Mahapatra	Profile of DPLD (Diffuse Parenchymal Lung Disease) patients in a district of West Bengal; a cross-sectional study in Burdwan Medical College (BMCH) and Hospital, Purba Bardhaman
6	Anirban Gandhi	Clinico-pathological Profile of Bronchogenic Carcinoma Patients attending Burdwan Medical College and Hospital: A Cross-Sectional study
7	Tarang Kulkarni	Treatment of undiagnosed airflow obstruction in patients with well controlled obstructive sleep apnea leads to improvement in symptom scores and sleep quality
8	Shona Arlin Christopher	Assessment of RV dysfunction as predictors of severity in Pulmonary Embolism

NAPCON 2020 AWARD - ORAL PAPERS

WEDNESDAY - 27-01-2021 (HALL F)

9:30 – 11:00

ASTHMA

No.	Name	Title of Abstract
1	AABID SHAFI WANI	CROSS-SECTIONAL STUDY TO ASSESS THE LEVELS OF SERUM MAGNESIUM LEVELS AS AN INDICATOR OF ASTHMA SEVERITY AMONG PATIENTS ATTENDING PULMONARY MEDICINE DEPARTMENT OF TERTIARY CARE CENTER
2	Aishwarya C	Effect of Vitamin D3 supplementation on the control of Bronchial Asthma – Prospective study
3	ARAVIND	Association of psychiatric comorbidity in asthma
4	ASHISH BANSAL	PREVALENCE AND DEMOGRAPHICAL VARIATION OF ASTHMA COPD OVERLAP (ACO) IN PREVIOUSLY DIAGNOSED OAD PATIENTS OF SOUTHERN RAJASTHAN.
5	NATESH S A	A Prospective study of prevalence of Severe Asthma with Fungal Sensitization, and an open labelled, randomized controlled trial of Itraconazole in patients having Severe Asthma with Fungal Sensitization
6	LUBAIBA K	A CROSS -SECTIONAL STUDY OF DEPRESSION AND ANXIETY IN ASTHMA PATIENTS ATTENDING TERTIARY CARE CENTRE IN NORTH KERALA
7	Midhun Mohan K	ASSOCIATION BETWEEN OBESITY AND LEVEL OF CONTROL OF ASTHMA
8	Mobeen Quadri	Correlation of Diabetes and asthma in young Adults: a Case Study
9	PRASHAMSA CHELIMALLA	STUDY OF CLINICAL PROFILE OF BRONCHIAL ASTHMA PATIENTS ASSOCIATED WITH FOXP3 GENE POLYMORPHISMS
10	Roopanshi Jain	Quantitative Correlation between values of Serum specific IgE with grades of skin prick test and their clinical utility

11:00 – 12:30

COPD - I

No.	Name	Title of Abstract
1	AHAMED RAFAD	Comparison of COPD patients on single inhaler and two separate inhalers for triple therapy
2	ALEKYA KALLA	Study of association of severity of Chronic obstructive pulmonary disease with Matrix metalloproteinase (MMP) gene promoter polymorphisms
3	ANIKET MONDAL	A study of Modified DECAF score in predicting hospital outcomes in patients of acute exacerbation of chronic obstructive pulmonary disease
4	ANUJ KUMAR PANDEY	Socio-demographic profile, clinical parameters, and inflammatory markers in chronic obstructive pulmonary disease (COPD)
5	ANUPAM PRAKASH	EVALUATION OF ANTHROPOMETRY, BODY COMPOSITION ANALYSIS IN ASTHMA AND COPD AND ITS CORRELATION WITH SEVERITY
6	B KARNIHA	PREDICTORS OF EXERCISE INDUCED DESATURATION IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE
7	BALACHANDAR	HAND GRIP AND ENDURANCE IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE
8	DEESHA GHORPADE	Developing a COPD Screening Questionnaire: Qualitative insights from patients and chest physicians about their experiences on COPD
9	DHIRESH JAISWAL	To study blood eosinophilia and sputum eosinophilia in chronic obstructive pulmonary disease patients.

10	KANDAVEL	Effect of hyperglycaemia on duration of hospital stay and rate of mortality in patients of Chronic Obstructive Pulmonary Disease in acute exacerbation
12:30 – 13:45		
MISCELLANEOUS - I (PAPERS)		
No.	Name	Title of Abstract
1	A VIGNESH	A STUDY ON SPUTUM SMEAR AND CULTURE CONVERSION, ADVERSE DRUG REACTIONS AND TOLERABILITY OF BEDAQUILINE IN PATIENTS WITH DRUG RESISTANT TUBERCULOSIS
2	AJIT KUMAR	DIAGNOSTIC EVALUATION OF COMPUTED TOMOGRAPHY GUIDED BIOPSY IN SUSPECTED LUNG MALIGNANCY
3	AKHIL BABU C	STUDY OF IMPULSE OSCILLOMETRIC LUNG FUNCTION INDICES IN HEALTHY ADULTS AGED 20 TO 60 YEARS.
4	CHETAN PRAJAPATI	ROLE OF BRONCHOALVEOLAR LAVAGE EXAMINATION CLINICALLY AND RADIOLOGICALLY SMEAR NEGATIVE PULMONARY TUBERCULOSIS
5	DEEP KOTHARI	A STUDY OF YIELD OF MEDICAL THORACOSCOPY IN UNDIAGNOSED PLEURAL EFFUSION – A RETROSPECTIVE STUDY
6	J SOUNDARIYAN	Prediction of progression risk in patients with covid -19 pneumonia – THE CALL SCORE
7	MONICA BANSAL	AN EVALUATION OF RISK FACTORS FOR DEVELOPING PULMONARY FIBROSIS IN COVID19 PATIENTS
8	SRIDEVI DORA	COMORBIDITIES AS RISK FACTORS FOR DEVELOPMENT OF PULMONARY SEQUALAE IN MODERATE TO SEVERE CASES OF COVID19
13:45 – 15:45		
LUNG CANCER - INTERESTING CASES - I		
No.	Name	Title of Abstract
1	A ARTHI	MALIGNANCY MASQUERADING AS ORGANIZING PNEUMONIA
2	Abinaya S	ACUTE PULMONARY THROMBOEMBOLISM IN MALIGNANCY
3	Alekhya Lakkam	RARE CASE OF SIGNET RING CELL ADENOCARCINOMA OF PULMONARY ORIGIN AND PTB CONCURRENCE IN A YOUNG MALE MISDIAGNOSED AS COVID 19 PNEUMONIA
4	Asha Undrajarapu	Double trouble
5	BEERA JOSEPH	MALIGNANCY MASQUERADING AS PULMONARY ASPERGILLOSIS
6	BENJAMIN WILLIAMS	RESCUE “Y STENTING” FOR LIFE-THREATENING CRITICAL AIRWAY OBSTRUCTION SECONDARY TO AN AGGRESSIVE ANTERIOR MEDIASTINAL MASS
7	Dharamendra Kumar Gupta	Bronchial Carcinoid
8	DS S V B Murali Krishna	A CASE OF 35 YEAR MALE PATIENT WITH EMPYEMA THORACIS AND SOLITARY FIBROUS TUMOUR OF PLEURA
9	GUNJAN SHARMA	A RARE PLEURAL TUMOUR WITH RARE PRESENTATION
10	JAANAKHI V M	Recurrent Spontaneous Pneumothorax in a Patient with Soft Tissue Sarcoma on Pazopanib Treatment– A Rare Presentation
11	JITENDRA SINGH	PULMONARY SARCOMATOID: A RARE PULMONARY CARCINOMA
12	JOFIN GEORGE	Clival Metastases Causing Diplopia: An Unusual Presentation of Bronchogenic Carcinoma
13	Kausalya Sahu	Pulmonary Lymphoma in a suspected case of neuroendocrine tumour - A diagnostic dilemma
14	KOTHAPALLY SAI DHEDEEPYAA	A case report - Miliary lung metastasis due to papillary thyroid carcinoma mimicking Miliary tuberculosis
15	MITHEN KR	EWINGS SARCOMA OF PLEURA

15:45 – 18:00

TUBERCULOSIS - MOLECULAR DIAGNOSTICS

No.	Name	Title of Abstract
1	AKHIL K R	PREVALENCE AND PATTERN OF GENE MUTATION OF ISONIAZID AND/OR RIFAMPICIN RESISTANCE IN SMEAR POSITIVE PULMONARY TB CASES PRESENTING TO A TERTIARY CARE HOSPITAL IN WESTERN MAHARSHTRA
2	Arjun Bhatnager	Isoniazid Resistance : Genetic Pattern, Treatment Outcome And Relevance Of High Dose Isoniazid In Therapy
3	ARYA RAMACHANDRAN	BAND PATTERN ANALYSIS OF MUTATIONS IN H-MONO RESISTANT TB PATIENTS BY LINE PROBE ASSAY AND TREATMENT OUTCOMES IN PATIENTS ATTENDING GHCCD, VISAKHAPATNAM
4	Basanth Kumar Patil	To study the utility of Cartridge based nuclear acid amplification test in patients with presumptive Extra-pulmonary Tuberculosis
5	Diti Gandhasiri	Efficacy of Cartridge based nucleic acid amplification test in the diagnosis of tubercular pleural effusion
6	Jaya Sravani Donepudi	COMPARATIVE STUDY OF CATRIDGE BASED NUCLEIC ACID AMPLIFICATION TEST(CBNAAT) AND LINE PROBE ASSAY(LPA) IN DETECTING THE DRUG RESISTANCE IN TUBERCULOSIS PATIENTS
7	MANSOOR AHMAD KHAN	ROLE OF CARTRIDGE-BASED NUCLEIC ACID AMPLIFICATION TEST (CBNAAT) IN EXTRA PULMONARY TUBERCULOSIS- A PROSPECTIVE STUDY
8	PALLAVI BAJPAI	TO STUDY THE OCCURRENCE OF MDR – TB IN CASES OF GENITAL TUBERCULOSIS IN FEMALES OF FERTILE AGE GROUP THROUGH NAAT ON MENSTRUAL BLOOD
9	PAULAMI PALCHOWDHURY	EVALUATION OF THE PREVALENCE OF ISONIAZID MONORESISTANT PULMONARY TUBERCULOSIS CASES BY LINE PROBE ASSAY IN A TERTIARY CARE HOSPITAL IN EASTERN INDIA
10	PIYALI SARKAR RAJAT AGARWAL	To compare the sensitivity of smear microscopy with CBNAAT in BAL of patients of suspected Pulmonary Tuberculosis in our tertiary care centre
11	Pravendu Pramanik	Efficacy of CBNAAT in Diagnosis of Tubercular Pleural Effusion among Adult Patients Attending Tertiary Hospital
12	SAKSHI DUBEY	Diagnostic yield of bronchoalveolar fluid among sputum AFB and CBNAATNegative presumptive pulmonary tuberculosis patients: An observational study
13	VIGNESH N	THE ROLE OF CB-NAAT IN DIAGNOSING TB LYMPHADENITIS AND CORRELATION WITH FNAC- A PROSPECTIVE CROSS SECIONAL STUDY
14	Vinatha Kodam	Evaluation of sputum and BAL CBNAAT among the suspected cases of nodular Tuberculosis
15	VIPUL KUMAR	Rifampicin Resistance in New Pulmonary Tuberculosis Patients with Type2 Diabetes Mellitus
16	Yadvendra Singh	The place of “CBNAAT” in diagnosis of EPTB versus the “Gold standard” MGIT Culture, and it’s importance in diagnosis of Drug Resistant EPTB
17	Yash Jagdhari	CLINICAL AND MOLECULAR-DST PROFILE OF PATIENTS DIAGNOSED WITH EXTENSIVELY DRUG RESISTANT TUBERCULOSIS

MOVE TO HALL A – INAUGURAL PROGRAMME

7 P.M.

THURSDAY - 28-01-2021 (HALL F)**9:00 – 10:15****INFECTIONS - INTERESTING CASES**

No.	Name	Title of Abstract
1	AISHWARYA ALAVANDAR	Pleural Nocardiosis
2	Anand V	A Middle aged Gentle man with Community acquired pneumonia, empyema and acute transient deafness
3	ANEESHA KONDURU	PULMONARY MANIFESTATIONS OF A CASE OF SCRUB TYPHUS: SUSPECT EARLY AND TREAT PROMPTLY
4	Nitheesha	MULTIPLE INFECTIONS IN A PATIENT WITHOUT IMMUNOSUPPRESSION
5	Pratheeb Kumar	A CASE OF THORACIC ACTINOMYCOSIS
6	RAFIYA SHAIK	FATAL DUAL FUNGAL INFECTION IN AN IMMUNOCOMPROMISED : RARE CASE REPORT
7	SATISH KORAT	PULMONARY MUCORMYCOSIS IN A POST PNEUMONECTOMY PATIENT
8	SHILPA CHANDRAN	RHINOSPORIDIOSIS: AN UNUSUAL PRESENTATION
9	SINDHU RAVALI	A CASE OF PULMONARY MUCORMYCOSIS
10	Suyash Singh Rathore	Concomitant Pleural infection of Mycobacterium Tuberculosis and Burkholderia Cepacia in a COVID positive patient

10:15 – 11:30**INTERVENTIONAL PULMONOLOGY - I**

No.	Name	Title of Abstract
1	ANIKET MONDAL	A DESCRIPTIVE STUDY OF ENDOSCOPIC PRESENTATIONS IN SUSPECTED BRONCHOGENIC CARCINOMA AND THEIR CORRELATION WITH HISTOPATHOLOGY AT THE INSTITUTE OF RESPIRATORY DISEASES, SMS MEDICAL COLLEGE, JAIPUR
2	Asha Nair	PROCEDURAL SATISFACTION AMONG PATIENTS IN USING 1% OR 2% LIGNOCAINE AS LOCAL ANAESTHETIC IN ENDOBRONCHIAL ULTRASOUND
3	DHANISHA C P	DIAGNOSTIC UTILITY OF ULTRASOUND GUIDED PERCUTANEOUS TRANSTHORACIC CORE NEEDLE BIOPSY .
4	G Sivakalyani	A STUDY ON EFFECT OF STREPTOKINASE IN MULTILOCULATED PLEURAL EFFUSION & COMPLEX EMPYEMA
5	Krutesh Tripathi	Usefulness of Galactomammann in BAL and its correlation with serum galactomammann and microbiological confirmation in 'probable' Invasive Pulmonary Aspergillosis
6	M Brighton	Role of pleural biopsy in exudative pleural effusions
7	Mathew Varghese	Incidence and severity for significant bleeding during TBLB in patients with no clinical risk factors for bleeding
8	PAPIA MONDAL	ROLE OF ULTRASOUND AND CT GUIDED FNAC AND TRU CUT BIOPSY IN THE DIAGNOSIS OF INTRA-THORACIC LESIONS
9	PRIYANK GOYAL	Diagnostic yield of fiberoptic bronchoscope guided biopsy in diagnosing various histopathological subtypes of lung carcinoma in Kumaon region of Uttarakhand
10	RAJENDRA PRASAD	A Study Of Exudative Pleural Effusions- Relationship Between Thoracoscopic Findings and Type Of Lesion On Histopathology

11:15 – 13:15**TUBERCULOSIS - I**

No.	Name	Title of Abstract
1	Ajay Rao	CA125 as marker to monitor response of anti tuberculosis treatment

2	Ananthu Joseph	PROPORTION OF TUBERCULOSIS PATIENTS SWITCHING OVER FROM FDC TO LOOSE DRUGS DUE-TO ADR
3	ANAYA M PRAKASHKAR	A STUDY OF DIAGNOSTIC VALUE OF PLEURAL FLUID ADENOSINE DEAMINASE (ADA) LEVEL IN CASES OF PLEURAL EFFUSION
4	ANISH	WEIGHT SCALAR CURVE AS A FIELD SURROGATE TOOL FOR ASSESSING TREATMENT RESPONSE IN TUBERCULOSIS PATIENTS
5	BEERA NITHIN JOSEPH	THE IMPACT OF TUBERCULOSIS ON LEUCOCYTES
6	BHANU PRATAP PANDEY	PREVALENCE OF PULMONARY ARTERIAL HYPERTENSION IN PATIENTS OF HEALED PULMONARY TUBERCULOSIS AND ITS ASSOCIATION WITH QUALITY OF LIFE
7	Jyothi Mariam Jose	IMMUNONUTRITIONAL STATUS AND PULMONARY CAVITATION IN PATIENTS WITH TUBERCULOSIS
8	K. Venugopal	EVALUATION OF CAUSES OF LATE REPORTING OF PULMONARY TB CASES TO MICROSCOPIC CENTRE IN A SOUTH KERALA DISTRICT
9	KOMAL CHAUDHARY	SCREENING OF HEALTHCARE AND NON-HEALTH CARE WORKERS FOR PREVALENCE OF LATENT TUBERCULOSIS INFECTION at INSTITUTE OF RESPIRATORY DISEASES, SMS MEDICAL COLLEGE, JAIPUR
10	M Rajeev Naik	A STUDY ON SPUTUM INDUCTION IN THE DIAGNOSIS OF SMEAR NEGATIVE OR SPUTUM SCARCE PRESUMPTIVE TUBERCULOSIS IN HIV PATIENTS IN A TERTIARY CARE CENTER IN TELANGANA
11	MAINAK MUKHERJEE	A COMPARATIVE STUDY ON EFFECTS OF SUBSTANCE DEPENDENCE ON NEWLY DIAGNOSED PULMONARY TUBERCULOSIS AND NEWLY DIAGNOSED DRUG RESISTANT PULMONARY TUBERCULOSIS PATIENTS
12	Meghana Yadav Mekala	STUDY TO EVALUATE THE ROLE OF CHEST RADIOGRAPH AND SPUTUM SMEAR FOR AFB IN FOLLOW UP OF PULMONARY TUBERCULOSIS PATIENTS WHO COMPLETED A FULL COURSE OF ANTI TUBERCULOSIS THERAPY
13	MOHD ANAS KHAN	BURDEN OF PRE-EXTENSIVE DRUG RESISTANT AND EXTENSIVE DRUG RESISTANT PULMONARY TUBERCULOSIS AMONG MULTI DRUG RESISTANT PULMONARY TUBERCULOSIS PATIENTS
14	Mudra Khare	A study of clinical profile of cases of MDR-TB and evaluation of challenges faced in initiation of second line Anti tuberculosis treatment for MDR-TB cases admitted in drug resistance tuberculosis centre
15	NITIN	BEDAQUILINE in management of MDR and XDR TB patients

13:15 – 15:15

COVID-19 - I

No.	Name	Title of Abstract
1	A S Adaikkalavan	The role of initial and follow up CT chest imaging in the management of COVID 19 pneumonia
2	Ajeet Singh Thakur	A RETROSPECTIVE STUDY OF RESPONSE OF TOCILIZUMAB IN THE TREATMENT OF SEVERE COVID-19 PATIENTS IN A DEDICATED COVID HOSPITAL
3	AMARNATH P PRASAD	Pneumothorax in COVID 19 patients: A retrospective study at tertiary care center.
4	Anchal Jain	Commonly associated comorbidity with increased risk of developing COVID 19 disease: A Retrospective study.
5	Aneri Parekh	Knowledge, Attitude and Practices about COVID 19 among resident doctors of Government Medical College and Sir. T Hospital, Bhavnagar
6	ARUN PANDIYAN	IMPACT AND HEALTH OUTCOMES IN HEALTH CARE WORKERS POST COVID 19 IN A TERTIARY HEALTH CARE CENTRE.
7	ARYA RAMACHANDRAN	CLINICO-RADIOLOGICAL PROFILE OF MODERATE AND SEVERE COVID 19 CASES
8	AUDIPUDI SWETHA	A STUDY OF CORRELATION BETWEEN CLINICAL PRESENTATION AND INFLAMMATORY BIO-MARKER LEVELS IN SARS COV2 PATIENTS Presented to GGH, Vijayawada.
9	AYUSH GOEL	Clinico-pathological correlation in fatal COVID-19 Infection using Post-mortem Minimally Invasive Tissue Sampling: The First Case series from India

10	Frank Mohan	Impact of N95/FFP2 on health care professionals during COVID 19 pandemic by the assessment of ABG, ESR, ECG and Spirometry
11	HIMANSHU MITTAL	Impact of COVID-19 outbreak on Non-COVID-19 chronic respiratory diseases diagnostic practice in India : a survey report (2020)
12	INDRANIL BANERJEE	A PILOT STUDY ON THE ASSESSMENT OF SERUM SEROTONIN LEVELS IN PREDICTING DISEASE SEVERITY AND ITS' ROLE AS A NOVEL BIOMARKER IN COVID-19 PATIENTS AT A TERTIARY CARE HOSPITAL IN SOUTH INDIA
13	Irgam Srinivas Reddy	A observational study between inflammatory markers and symptatology in COVID 19 patients
14	JAYAVIGNESH J	OUTCOME OF REMOTE VIRTUAL TELEMONITORING AND TREATMENT OF MILD – MODERATE COVID-19 PATIENTS IN HOME CARE SETUP
15	Jyothi Geetha Mohankumar	COVID –when the public become fighters

15:15 – 17:15
CRITICAL CARE

No.	Name	Title of Abstract
1	A J Mahendran	Experience of CLABSI prevention measures in a medical ICU in a tertiary care hospital
2	Aishwarya Thambi	PREVALENCE OF VENOUS THROMBOEMBOLISM IN PATIENTS WITH ACUTE EXACERBATION OF COPD
3	CHETANA GONDI	OUTCOME OF NON-INVASIVE VENTILATION IN COVID-19 PATIENTS
4	K SURENDAR REDDY	AWAKE PRONE NIV IN PATIENTS TREATED WITH SEVERE COVID-19 PNEUMONIA AT TERTIARY CARE CENTRE
5	Kovuri Venkatesh	To analyze demographic profile of COVID ARDS deaths in a tertiary centre
6	LOVELEEN SHARMA	Optimization of Bi-level Positive Airway Pressure (BPAP) titration in patients with acute exacerbation of Chronic Obstructive Pulmonary Disease using Diaphragm Thickness Fraction (DTF) as an ultrasound index of diaphragm contractility.
7	P A AJITHER	EFFECTIVENESS OF NON INVASIVE POSITIVE PRESSURE VENTILATION IN PULMONARY TUBERCULOSIS SEQUELAE
8	P. ALEKYA REDDY	OUTCOMES OF HIGH FLOW NASAL CANNULA AND NON-INVASIVE VENTILATION IN PATIENTS WITH COVID-19 -A RETROSPECTIVE OBSERVATIONAL STUDY
9	RISHNA RAVINDRAN	Pneumonia severity index compared to CURB-65 in predicting the outcome of community acquired pneumonia -a prospective study.
10	RITAMVARA OLI	Association of relationship between initial hypoxia and BNP in patients with severe COPD exacerbation requiring NIV (A case control study).
11	Saktheesh R	Significance of monitoring Pro BNP levels in acute exacerbation of various respiratory diseases in patients without underlying left ventricular dysfunction
12	SHONA ARLIN CHRISTOPHER	Comparison of 3 prediction scores for diagnosis of Pulmonary Embolism
13	SWETA NANDY	A STUDY OF CLINICAL, RADIOLOGICAL AND MICROBIOLOGICAL PROFILE OF VENTILATOR ASSOCIATED PNEUMONIA WITH SPECIAL REFERENCE TO RISK FACTORS FOR INFECTION WITH MDR BACTERIA
14	VAIBHAV PADASHETTI	SERUM COPEPTIN AND SERUM ALBUMIN AS MARKERS OF SEVERITY OF COMMUNITY ACQUIRED PNEUMONIA
15	Vipin Chandra	SIGNIFICANCE OF pH AND pCO ₂ IN DETERMINING THE OUTCOME OF NON-INVASIVE VENTILATION IN ACUTE EXACERBATION OF COPD

17:15 – 18:15
ILD

No.	Name	Title of Abstract
1	Ancy Elsa Thomas	Treatment Response in Pulmonary Sarcoidosis
2	Ashish Prakash	Post COVID diffuse parenchymal lung disease(DPLD) – a new entity

3	BELINDA ANET	A STUDY OF CLINICAL AND RADIOLOGICAL PROFILE IN PATIENTS WITH INTERSTITIAL LUNG DISEASE (ILD) IN A TERTIARY CARE SETUP
4	Dipanshu Jain	Prevalence of Pulmonary Hypertension in different kind of Interstitial Lung diseases at a tertiary care center : A study of 109 subjects
5	Preeti Vidyasagar	Clinical and investigational profile of Sarcoidosis and Utility Of CT scan in prognostication
6	RIKSOAM CHATTERJEE	A COMPARATIVE STUDY OF CASES OF IDIOPATHIC PULMONARY FIBROSIS WITH DIFFUSE PARENCHYMAL LUNG DISORDERS OF KNOWN ASSOCIATIONS
7	SUTHIRTH VAIDYA	Accurate Quantification of Fibrosis Patterns in Interstitial Lung Disease Patients from Chest Imaging using Artificial Intelligence

FRIDAY - 29-01-2021 (HALL F)**9:00 – 10:15****OTHERS - I**

No.	Name	Title of Abstract
1	AMAL RAJ	ASSESSMENT OF RESPIRATORY HEALTH IN FLOURMILL WORKERS
2	Anas S	ARE WE HANDLING USED METERED DOSE INHALERS SAFELY? – A CALL FOR ACTION TO ADDRESS AN ENVIRONMENTAL HAZARD
3	Divyanshi Rana	To assess the success of a standardized pharmacotherapy based treatment plan for smoking cessation among individuals motivated to quit smoking
4	Gaurav Kumar Jain	Clinical Evaluation of Dispersion and Deposition of Exhaled Droplets during Nebulization Using 3-D Gamma Scintigraphy
5	Krishnika Ravichandran	EVALUATION OF THE EFFICACY OF MODIFIED HOME BASED PULMONARY REHABILITATION
6	Momkesh Bairwa	A cross-sectional observational study of cases of acute dyspnoea in chronic silicosis patients to plan better management strategy
7	NATESH	A COMPARISON AMONG THREE GROUPS OF COVID 19 RTPCR POSITIVE SYMPTOMATIC PATIENTS WITH CLINICAL, HEMATOLOGICAL AND RADIOLOGICAL PARAMETERS.
8	Ratan Kumar	THE COMPARISON OF EFFECTIVENESS OF CASE BASED LEARNING WITH CONVENTIONAL TEACHING IN UNDER GRADUATES IN RESPIRATORY MEDICINE DEPARTMENT
9	S CHANDRASEKAR	Efficacy of Oscillating Positive Expiratory Pressure (OPEP) therapy in patients with Bronchiectasis – A Prospective clinical study
10	SEJAL RADIA	PULMONARY CAVITIES – AN ARRAY OF DIVERSE PRESENTATIONS IN 153 PATIENTS IN A TERTIARY CARE HOSPITAL

10:15 – 11:30**INTERVENTIONAL PULMONOLOGY - II**

No.	Name	Title of Abstract
1	RAJESH AGRAWAL	CT SCAN VS FOB- IN EVALUATION OF HEMOPTYSIS DUE TO UNKNOWN CAUSE
2	Robin Chowdhary	The yield and safety profile of endobronchial ultrasound guided transbronchial needle aspiration (EBUS TBNA) in diagnosing the patients with mediastinal lymph nodes and peribronchial lesions at a tertiary care hospital in western Maharashtra
3	Sapan Kumar	Swift Acute emergency Personal Novel video laryngoSCOPE (SAPNOSCOPE) - An innovative solution and potential game-changer on the horizon for intubation in resource-limited countries.
4	Suvarna Kalli	DIAGNOSTIC ROLE OF BLIND CLOSED PLEURAL BIOPSY IN UNDIAGNOSED CASES OF EXUDATIVE PLEURAL EFFUSION
5	Umang Shah	Efficacy & Safety of Radial EBUS guided Cryo Transbronchial Lung Biopsy vs Forceps Biopsy in diagnosis of Diffuse Parenchymal Lung Disease and Peripheral Pulmonary Lesions
6	VINOD KURMI	ROLE OF POVIDONE IODINE IN PLEURODESIS IN CASE OF RECURRENT PNEUMOTHORAX

7	Vinodha K	Etiological evaluation of Non resolving pneumonia by Fiber optic bronchoscopy
8	VISHNU K	STRETCHING THE LIMITS OF THORACOCENTESIS – PLEURAL MANOMETRY IN MASSIVE PLEURAL EFFUSION - DO ELASTANCE VALUES PREDICT OUTCOME ?

11:30 – 13:30

COVID-19 - II

No.	Name	Title of Abstract
1	KOMAL SINGH	Seroprevalence of anti-SARS-CoV-2 IgG antibody in hospitalized patients: Results of the first hospital-based sero-survey from India
2	MADHURI KALYANI K	Study of inflammatory markers in relation to radiological findings in COVID- 19 patients
3	Meenakshi Bhakare	VIEW SCORE: an early warning score to detect possible complications among COVID-19 patients.
4	MERIN THOMAS	Study of relationship between blood groups and clinical outcome in COVID 19 infection
5	MOHANABALAMURUGAN V	PROGNOSTIC VALUE OF LEUCOCYTOSIS, LYMPHOPENIA AND NLR IN COVID-19 DISEASE SEVERITY
6	MONISHA ANANDAN	UTILITY OF VARIOUS INFLAMMATORY MARKERS IN PREDICTING OUTCOMES OF HOSPITALIZED PATIENTS WITH COVID-19 PNEUMONIA: A SINGLE CENTRE EXPERIENCE
7	Mythri G	Serum Ferritin and IL-6 levels in COVID-19 patients: A prognostic biomarker and Early predictor of Disease Severity
8	N Namratha	Chest radiographic patterns and its outcome in assessing severity of COVID19
9	Oruganti Sindhuja	The study of presentation of COVID positive CKD patients presented to GGH Vijayawada during pandemic
10	Poojitha Bai	FOLLOW UP STUDY OF CLINICAL AND RADIOLOGICAL PROFILE OF COVID-19 SURVIVORS 2 MONTHS AFTER RECOVERY
11	R ANAND	CLINICAL USEFULNESS OF EOSINOPENIA IN DIFFERENTIATING COVID-19 SUSPECT VERSUS OTHER FLU LIKE ILLNESSES IN OUTPATIENT SETUP.
12	R Nikhilesh	PREVALENCE OF ACUTE KIDNEY INJURY IN COVID-19: A HOSPITAL BASED OBSERVATIONAL STUDY
13	Roshan Kumar	Clinical characteristics and outcome of patients with severe acute respiratory infection (SARI) during COVID pandemic of a tertiary care hospital in Chennai
14	S GOKULAKRISHNAN	ASSESSING THE EFFECTIVENESS OF VIRTUAL BREATHING THERAPY IN SARS- COV2 POSITIVE PATIENTS UNDER TELE HOME CARE TREATMENT
15	Sagar Bhagat	Comparative Effectiveness of Favipiravir in COVID-19 patients with Multiple (≥ 2) or Less Comorbidities

13:30 – 15:30

LUNG CANCER – INTERESTING CASES- II

No.	Name	Title of Abstract
1	N Bhanuteja	ORGANISING PNEUMONIA AFTER DOCETAXEL BASED CHEMOTHERAPY
2	NAZIA BANU	A CASE OF ENDOBRONCHIAL HAMARTOMA
3	NITIN	AN ATYPICAL PRESENTATION OF PANCOAST TUMOUR
4	NIVOTHINI B	NEUROSARCOMA INHABITING POSTERIOR MEDIASTINUM AND RETROPERITONEUM: A CASE REPORT
5	Pournami Balasundaran	Ewing's pnet of chest wall (Askins tumour)
6	PRAKHAR SHARMA	Déjà vu: Different Etiologies, Similar Faces
7	PRASHANT MISHRA	CASE REPORT OF TRACHEOESOPHAGEAL FISTULA IN ESOPHAGEAL CARCINOMA
8	PRATHYUSHA ALAKUNTA	A rare case of Pulmonary synovial sarcoma
9	Pronoy Sen	RARE CASE OF PRIMARY PULMONARY PLASMACYTOMA

10	Ramya Priya	ASKIN'S TUMOR IN ADULT: A RARE CLINICAL ENTITY- REPORT OF TWO CASES
11	Sangavi R	An interesting case of metastatic malignant melanoma with tracheobronchopathia osteochondroplastica
12	Simeon Malle	AN UNUSUAL CASE OF A PLEURAL MASS
13	VIJENDRA CHOUHAN	Recurrent right-side pleural effusion mimicking malignancy: Pseudo-Meigs Syndrome

15:30 – 16:30

OTHERS – INTERESTING CASES - I

No.	Name	Title of Abstract
1	Abirami Dharmalingam	An unexpected "Rock Garden" in the lung : Tracheobronchopathia osteochondroplastica
2	ALEKYA KALLA	A CASE REPORT OF POSSIBLE PULMONARY LYMPHANGIOLEIOMYOMATOSIS WITH H1N1 INFECTION
3	Archit Manohar	Bloody Tale Of A Lilliputian Lung – A Case Of Swyer-James Syndrome
4	Asha Undrajarapu	A rare case of adult Kasabach-Merritt Syndrome
5	Astha Guliani	A rare case of Hamman Syndrome
6	JAGRUTI AHIR	RIGHT SIDED PNEUMOTHORAX IN A KNOWN CASE OF CASTLEMAN'S DISEASE WITH THYMOMA WITH LICHEN PLANUS : A RARE CASE REPORT
7	K PRIYANKA	PULMONARY ARTERIOVENOUS FISTULA AN UNUSUAL CAUSE OF HEMOTHORAX
8	KRISHNAPRIYA S KUMAR	A RARE CASE OF CASTLEMAN DISEASE VARIANT OF POEMS SYNDROME WITH PULMONARY TUBERCULOSIS

16:30 – 17:30

OTHERS – INTERESTING CASES- II

No.	Name	Title of Abstract
1	Mohammed Abdul Basith	Vogt-Koyanagi-Harada Syndrome With cavitory lung disease
2	R THANUJA	FAMILIAL SPONTANEOUS PNEUMOTHORAX - A DIAGNOSTIC CHALLENGE
3	RADHIKA MUDUGANTI	Spontaneous esophagopleural fistula-A rare case report
4	RAVINUTHALA PURNIMA	A CASE REPORT OF ACQUIRED BRONCHO-BILIARY FISTULA
5	S Pugazhendhi	Solve me if you can-instant orthopnea revisited
6	Sanjai Narayanasamy	A discreet pancreatic pseudo cyst presenting as recurrent pleural effusion
7	Ujwal Jain	Mounier-Kuhn Syndrome- A Rare Case Report
8	VARAYURI AKHILA	JOBS SYNDROME-A RARE CASE REPORT

17:30 – 18:30

MISCELLANEOUS - CASES

No.	Name	Title of Abstract
1	A Abidini	RARE COMPLICATION OF COVID-19 – RHINO-ORBITAL MUCORMYCOSIS
2	Karmay Shah	Pneumothorax in COVID-19 positive patients: a retrospective case series
3	Munira Shapurwala	A young woman with NSIP masquerading as Bilateral pneumonia
4	Rita Gojiya	A RARE CASE OF ISOLATED PULMONARY LANGERHANS CELL HISTIOCYTOSIS
5	Shraddha Tewari	Case series on peripheral neuropathy in patients on treatment for drug resistant tuberculosis
6	Anvesha Tummala	Arcane finding of pancreaticopleural fistula and pseudocyst of pancreas causing pleural effusion

SATURDAY - 30-01-2021 (HALL F)**9:00 – 10:15****OTHERS – KARTAGENER'S SYNDROME
BEST CASE PRESENTATION**

No.	Name	Title of Abstract
1	AHMED SAFWAN	TWO SIBLING WITH KARTAGENER'S SYNDROME TREATED AS BRONCHIAL ASTHMA
2	AIYUSH JAIN	An adult infertile male with KARTAGENER syndrome developing Cor pulmonale: A rare syndrome with serious complication.
3	CHANDRA PRAKASH SHARMA	AN UNUSUAL CAUSE OF BRONCHIECTASIS IN A MIDDLE AGED MAN
4	D.SHIVA KUMAR NAYAK	KARTAGENERS SYNDROME- UNUSUAL PRESENTATION
5	G Sivakalyani	A CASE OF PRIMARY CILIARY DYSKINESIA WITH KARTAGENER SYNDROME
6	Gyan Prakash Verma	A CASE REPORT OF KARTAGENERS SYNDROME
7	INDRANIL BANERJEE	KARTAGENER'S SYNDROME: A CASE SERIES OF VERSATILE PRESENTATIONS AT A TERTIARY CARE HOSPITAL IN KANCHIPURAM
8	Jignesh Gengadiya	A rare case of kartagener's syndrome presenting at tertiary care center
9	Oruganti Sindhuja	A case of primary ciliary dyskinesia with kartegeners syndrome
10	SRIDEVI D.S.S.V.	A RARE CASE OF SIEWERT'S SYNDROME PRESENTED WITH FULL BLOWN BRONCHIECTASIS

10:15 – 11:45**COVID-19 - III**

No.	Name	Title of Abstract
1	Sagar Panchal	Real-world Experience with Favipiravir for Treatment of mild – moderate COVID-19 in India
2	Sangavi R	HIV and COVID19 coinfection -Clinical characteristics and outcome during this pandemic
3	Santhosh Kumari K R	Study of comparison between Lymphocyte to neutrophil ratio and neutrophil to monocyte ratio as predictor of mortality in COVID19 infection.
4	Shama Sharma	BLOOD UREA AND SERUM CREATININE LEVEL IN PREDICTING IN-HOSPITAL MORTALITY OF COVID -19 PATIENTS
5	Shilpa KV	IMPACT OF COVID 19 PANDEMIC ON MENTAL HEALTH AND WELL BEING OF SCHOOL STUDENTS
6	SHOBHIT GUPTA	Study of Baricitinib 4mg for critically ill ICU patients with COVID-19 infection
7	SOWMYA KONGARA	PULMONARY SEQUELAE IN DISCHARGED PATIENTS OF COVID19
8	Sunaina Kharb	Correlation between inflammatory markers and radiological presentation in COVID-19 patients positive patients
9	SUNIL YADAV	MY EXPERIENCE AS BUDDING PULMONOLOGIST IN COVID ICU TO OBSERVE DIABETES MELLITUS IN COVID 19 PATIENT
10	TEJAS SURI	Randomized controlled trial of Ivermectin in patients with mild and moderate COVID-19
11	YASHASHWINI A	A study of De Ritis ratio and biochemical parameters in COVID 19 patient

11:45 – 13:15**INFECTIONS**

No.	Name	Title of Abstract
1	ADITYA A	Knowledge ,Perception and barriers of Optimal Mask usage among General Public
2	AJITHA RAJ	DO CLINICORADIOLOGICAL FACTORS PREDICT AETIOLOGY OF NON-RESOLVING
3	CAROL HANNAH BABU	ASSESSMENT OF SEVERITY OF BRONCHIECTASIS USING MODIFIED REIFF SCORE, SPIROMETRY AND SPUTUM CULTURE

4	G.Lohitha Sri Gouri	PREVELANCE AND RISK FACTORS FOR DRUG RESISTANCE IN PATIENTS WITH LOWER RESPIRATORY INFECTIONS IN HEALTHCARE ASSOCIATED INFECTION - A SINGLE CENTRE STUDY FROM EASTERN INDIA
5	JAGADEESH MANIKANTA	A RANDOMIZED CONTROL TRIAL TO COMPARE EFFICAY OF NEBULIZED AMPHOTERECIN B WITH THAT OF ORAL ITRACONAZOLE IN PATIENTS WITH PULMONARY ASPERGILLOMA
6	PRIYANKA RAY	A STUDY OF MICROBIOLOGICAL PROFILE AND SENSITIVITY PATTERN IN PATIENTS WITH EXACERBATION OF BRONCHIECTASIS IN A TERTIARY CARE HOSPITAL
7	RIHANA BASHEER	ASSESSMENT OF LUNG ULTRASONOGRAPHY AS A TOOL FOR FOLLOW UP OF COMMUNITY ACQUIRED PNEUMONIA
8	RISHAB RAMPRADEEP	Reliability and Effectiveness of Pneumonia Scoring Systems (MuLBSTA and Modified FluA-p) as Predictors of Disease Severity and Mortality in Patients Infected with SARS-CoV-2
9	SAYANI BOSE	PREVALENCE OF INFLUENZA IN THE PANDEMIC SEASON AMONG THE COVID-19 NEGATIVE SARI AND ILI CASES ADMITTED IN TERTIARY CARE HOSPITALS OF WEST BENGAL
10	SHARON ANNE THOMAS	Antimicrobial resistance of acinetobacter baumannii of lower respiratory tract and mortality- a cross-sectional study from a tertiary care teaching hospital in Kerala
11	SHRADDHA PATEL	Study of clinical profile of 40 patients of lung abscess
12	Viral Nanda	To study the utility of Respiratory Biofire in the management of adults with acute respiratory infections

13:15 – 14:30

PFT

No.	Name	Title of Abstract
1	DIVYA SURENDRAN	Prevalence of post bronchodilator reversibility and factors influencing it among the patients presenting with dyspnea: A tertiary care centre experience
2	HIMA B	DIAGNOSTIC STABILITY OF A SINGLE SPIROMERY AS OPPOSED TO REPEAT SPIROMETRY FOR AIRWAY OBSTRUCTION IN SUSPECTED COPD PATIENTS
3	Krishna Chaitanya Bolla	Impact of exposure of coal dust from coal stockpile on pulmonary function in South Indian coal terminal workers
4	MANU SIVA	The Peak Inspiratory Flow Rate improvement in patients discharged following acute exacerbation of Chronic Obstructive Pulmonary Disease based on the type of inhaler prescribed.
5	NAYEEM KADIR K	CORRELATION OF SPIROMETRIC PARAMETERS WITH PERIPHERAL EOSINOPHILIA LEVELS AMONG GARDENERS
6	Priyadarshini Raykar	Asymptomatic small airway obstruction in traffic police personnel . A case control study
7	Pusarla Mounica	Post tubercular sequelae and quality of life in adequately treated patients of pulmonary tuberculosis
8	Sunil Kumar	A follow up study of post infectious obliterative bronchiolitis in adults and comparative analysis with chronic obstructive pulmonary disease
9	VARDHELLY RAMESH	ROLE OF PULMONARY FUNCTION TESTS AMONG DHABA WORKERS.
10	Vishal More	To study the importance of home spirometry and spirometer supported lung exercises as an interventional and supportive tool in respiratory treatment

15:00 – 17:00

NAPCON 2020 ALL-INDIA PG QUIZ

17:15 – 18:15

LUNG CANCER

No.	Name	Title of Abstract
1	Aparna Suresh	lung cancer in non smokers - A clinicopathological analysis
2	Arya Ramachandran	CLINICO-PATHOLOGICAL PROFILE OF MALIGNANT PLEURAL EFFUSION
3	Deepanshu Chawla	To study the utility of Serum LDH : Pleural fluid ADA ratio in identifying Exudative Pleural Effusions
4	JITENDRA KUMAR BAIRWA	A PROSPECTIVE STUDY TO EVALUATE ADVANCE LUNG CANCER INFLAMMATION INDEX (ALI) AS A PROGNOSTIC MARKER TO PREDICT SURVIVAL OUTCOME IN PATIENTS WITH LUNG CANCER
5	POTLURI BABY SWETA	SOCIAL AND CLINICAL FACTORS ASSOCIATED WITH NON-SMALL CELL LUNG CANCERS- A HOSPITAL BASED OBSERVATIONAL STUDY
6	PRIYA N	IMPACT OF LUNG ONCOLOGY MULTI-DISCIPLINARY TEAM (MDT) MEETINGS ON THE MANAGEMENT OF PATIENTS WITH LUNG TUMOURS IN A TERTIARY CARE CENTRE IN SOUTHERN INDIA.
7	SUTHIRTH VAIDYA	Assisted Detection of Lung Nodules from Chest Imaging using Artificial Intelligence
8	SWATI LOCHAB	To study the profile of lung carcinoma patients at a tertiary care centre: a 8 year study

18:15 – 19:30

CONSULTANTS – BEST PAPER

No.	Name	Title of Abstract
1	Deepak Talwar	Survey to Understand Physicians' Perspectives on Home Maintenance Nebulization (HMN) for COPD
2	Deepak Talwar	Prevalence of Sub-optimal PIFR at Discharge in Indian Patients of AE-COPD
3	Jayalakshmi T K	A study of infection latency and determination of quarantine period in hospital staff with COVID-19.
4	Raja Dhar	Safety and effectiveness of Pirfenidone 1800 mg and above in patients with Idiopathic Pulmonary Fibrosis: results from post marketing study
5	Rajani Bhat	The impact of an innovative multimodality online education program in palliative care for COVID-19 in low and middle income countries
6	Rashmi Ranjan Das	Role of clinical criteria and oxygen saturation measure in the diagnosis of pneumonia in children aged 2 to 59 months: A multicenter, prospective observational study
7	Sonia Dalal	SWITCH TO SALMETEROL/FLUTICASONE SYNCHROBREATHE® FROM PREVIOUS INHALER IMPROVES ASTHMA OUTCOMES- A POST HOC ANALYSIS OF THE EVOLVE STUDY
8	Sujeet Rajan	Physicians' Perspectives and Practice Patterns in India on the Diagnosis and Treatment of Interstitial Lung Disease (IN-ILD survey)

9	Uday Kakodkar	Diagnostic yield of Various Bronchoscopic techniques for Evaluation of Lung Cancer: A Retrospective Analysis Comparing endobronchially Visible and Non-visible Lesions
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SUNDAY - 31-01-2021 (HALL F)**9:00 – 10:15****SLEEP DISORDERS**

No.	Name	Title of Abstract
1	AHAMED RAFAD	CLINICAL PROFILE OF PATIENTS WITH MODERATE TO SEVERE OBSTRUCTIVE SLEEP APNEA SYNDROME IN A CENTRE FROM SOUTH KERALA
2	Anshul Jain	Prevalence and correlates of restless leg syndrome (RLS) among patients of chronic obstructive pulmonary disease (COPD): A hospital based cross-sectional study
3	Asha Undrajavarapu / K S Kisku	Oxygen Desaturation Index by Overnight-oximetry and its correlation to Apnea-Hypopnea Index by Polysomnography by patients undergoing sleep study for Obstructive Sleep Apnea(OSA)
4	Gautam Sarawade	COMPARISON OF VARIOUS PRETEST PROBABILITY SCORES IN OBSTRUCTIVE SLEEP APNEA SYNDROME
5	JUVVA KISHAN SRIKANTH	A STUDY OF SLEEP PROFILE IN POST ICU SURVIVORS OF ACUTE RESPIRATORY DISTRESS SYNDROME
6	MANGU DEVI PRIYANKA	A NEW APPROACH FOR ASSESMENT OF SLEEPINESS AND PREDICTIVITY OF OBSTRUCTIVE SLEEP APNEA IN DRIVERS
7	NIMIT KHARA	How Doctors sleep during the COVID-19 pandemic: A survey
8	Puneet Komarla Nagendra	Obstructive Sleep Apnea Risk Assessment in End Stage Renal Disease Patients Undergoing Hemodialysis
9	RAHUL GHOSH	A STUDY OF SLEEP RELATED BREATHING DISORDER PATTERNS IN PATIENTS OF DIFFUSE PARENCHYMAL LUNG DISEASE IN A TERTIARY CARE HOSPITAL
10	SAURABH MISHRA	PREVALENCE OF PULMONARY HYPERTENSION IN OBSTRUCTIVE SLEEP APNOEA AND OVERLAP SYNDROME PATIENTS LIVING IN RURAL AND SUB-URBAN AREAS OF NORTH INDIA

10:15 – 11:45**OTHERS – DEVELOPMENTAL ANOMALIES****BEST CASE PRESENTATION**

No.	Name	Title of Abstract
1	Adil Jokhi	Unilateral lung hypoplasia in adult male :a rare case report
2	B AKSHAYA NAGINI	SCIMITAR SYNDROME: A RARE CASE
3	CARISHMA S	Unilateral Pulmonary Hypoplasia: a rare clinical presentation
4	GAYATHRI GOPINATH	A RARE CASE OF PULMONARY HYPERTENSION DUE TO PARTIAL ANOMALOUS PULMONARY VENOUS DRAINAGE
5	KRUNAL VINODCHANDRA THUMAR	MIDDLE LOBE APLASIA : A RARE CASE REPORT
6	NAVYA V S	SCIMITAR SYNDROME IN ADULT - A RARE CASE REPORT
7	PRAKHAR SHARMA	Saved by the Ultrasound: A case of mistaken identity
8	Prashanthi R	A rare case report of congenital cystic adenomatoid malformation(CCAM) of lung in an Adult
9	PUNEET SINGLA	A RAREST AND ATYPICAL OCCURENCE OF MARFAN'S SYNDROME WITH TETRALOGY OF FALLOT IN AN ADULT FEMALE PATIENT WITH BRONCHIECTASIS: A RARE CASE REPORT
10	SANGEETHA P	A RARE CONGENITAL DEVELOPMENTAL LUNG DISORDER WITH A RARE ASSOCIATION
11	TEJAS SOOD	A trio of congenital anomalies: A Rare Combination
12	TEJAWAT KUSHAL KUMAR	RARE CASE OF CONGENITAL CYSTIC ADENOID MALFORMATION WITH PULMONARY HYPOPLASIA

11:45 – 12:00

INTERVENTIONAL PULMONOLOGY

INTERESTING CASES

No.	Name	Title of Abstract
1	AMUTHA PRIYA SM	ROLE OF FLUOROSCOPY GUIDED ULTRATHIN FLEXIBLE BRONCHOSCOPE IN RETRIEVAL OF FOREIGN BODY LODGED IN DISTAL SUBSEGMENTAL BRONCHUS
2	Avinash Dal	TRANSSTERNAL-TRANSPERICARDIAL BRONCHOPLEURAL FISTULA CLOSURE
3	Benjamin Williams	DEMONSTRATION OF A NEW SIGN IN EBUS – “THE FLUID THRILL” SIGN
4	Brijesh Koyani	Bronchoscopic mucus plug removal in patient with COVID-19 on invasive mechanical ventilation & ECMO support
5	Karthika Prasad	ROLE OF VIDEO-ASSISTED THORACIC SURGERY IN NON-RESOLVING PNEUMONIA
6	N A Arun	PALLIATIVE TREATMENT OF MALIGNANT TRACHEAL TUMOR - A CASE REPORT
7	Pranav Modi	Post Covid Pynopneumothorax with Left Lower Lobe Parenchymal Bronchopleural Fistula - A case report
8	Sharon Aruna Cathy C	Endobronchial Leiomyoma of The Lung
9	Vidhi Jobanputra	Use of Bronchoscopy guided electrocautery and balloon dilatation as a treatment modality for a patient of benign tracheal stenosis.
10	Vishal Malviya	A RARE CASE OF INORGANIC FOREIGN BODY IN NON RESOLVING PNEUMONIA

12:00 – 13:15

COPD- II

No.	Name	Title of Abstract
11	MIKASH MOHAN	PLASMA FIBRINOGEN IN COPD – A CROSS SECTIONAL STUDY
12	Mohammed Ibrahim	How good are DLCO and echocardiography in predicting Pulmonary Hypertension in COPD?
13	MOHIT AGARWAL	Early vs non early desaturation during 6MWT in COPD patients. A follow up study
14	P Alekhya	A Comparative study of DECAF and BAP65 scores in predicting outcome of acute exacerbation of COPD
15	Prabhuram. J	Efficacy of home based pulmonary rehabilitation during COVID times in patients with Chronic Obstructive Pulmonary Disease (COPD)
16	PRATEEK GUPTA	PROFILE OF EXCESSIVE DYNAMIC AIRWAY COLLAPSE IN COPD PATIENTS
17	PRIYANKA SINGH	Biomass fuel exposure and COPD in females
18	RAMYA PRIYA	Study of variation in Neutrophil Lymphocyte Ratio and Platelet Indices in adult patients with stable and acute exacerbation of Chronic Obstructive Pulmonary Disease- A hospital based cross sectional comparative study
19	SHIVAM GUPTA	Cardiac evaluation by transthoracic echocardiography in patient with Chronic Obstructive Pulmonary Disease and correlation of findings with COPD severity
20	TESSA CHARLEY	RELATION OF ELECTROCARDIOGRAPHIC AND ECHOCARDIOGRAPHIC CHANGES WITH THE SEVERITY OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE

13:15 – 15:15

TUBERCULOSIS- II

No.	Name	Title of Abstract
16	Radhika Muduganti	Time to culture conversion with Bedaquiline containing regimen in preXDR and XDR tuberculosis patients at nodalDRTB centre,Warangal
17	Rathish M	A COMPARATIVE STUDY OF HYPERTONIC SALINE WITH ISOTONIC SALINE INDUCED SPUTUM IN DIAGNOSIS OF SPUTUM AFB NEGATIVE CLINICALLY SUSPECTED TUBERCULOSIS PATIENTS
18	Richu Bob Kurien	RISK FACTORS FOR DEVELOPMENT OF MULTIDRUG RESISTANCE IN TUBERCULOSIS

19	Rumki Das	A STUDY ON PREVALENCE AND TREATMENT OUTCOME OF EXTENSIVELY DRUG RESISTANT TUBERCULOSIS IN A NODAL DRUG RESISTANT TUBERCULOSIS CENTRE
20	Sachin Vidyasagar	Fighting the adverse drug reactions (ADR) due to anti tuberculosis therapy (ATT) during COVID 19 pandemic
21	Sanket Desai	COMPLETION PROFILE OF ISONIAZID PREVENTIVE THERAPY IN PLHIV AT ART CENTRE OF A TERTIARY CARE HOSPITAL
22	SHARAN KUMAR	OUTCOMES OF DIETARY COUNSELLING IN PATIENTS WITH PULMONARY TUBERCULOSIS
23	Shilpa K V	PITFALLS IN TOBACCO SMOKING CESSATION SERVICES- A CHALLENGE TO EFFECTIVE TUBERCULOSIS CONTROL PROGRAMME
24	SNEHA LEO	ACTIVE CASE FINDING FOR TUBERCULOSIS AMONG HEALTH CARE WORKERS IN A TERTIARY CARE CENTER
25	SOUMYADEEP GHOSH	COMPARATIVE STUDY BETWEEN SAME DAY SPUTUM SMEAR MICROSCOPY AND CONVENTIONAL SPUTUM SMEAR MICROSCOPY IN PATIENTS WITH PRESUMPTIVE PULMONARY TUBERCULOSIS
26	Sudarshan Mante	1 YEAR SERIAL FOLLOW –UP OF CLINICAL & RADIOLOGICAL STATUS OF TUBERCULOUS PLEURAL EFFUSION ON TREATMENT WITH ATT AND ORAL STEROIDS
27	SUNIL YADAV	A STUDY OF PROFILE OF EXTRAPULMONARY TUBERCULOSIS CASES DIAGNOSED IN A RURAL MEDICAL COLLEGE
28	Sushmita Vinod	TUBERCULOSIS PARADOX DURING THE NOVEL CORONA VIRUS PANDEMIC
29	TAMISHI SHARMA	A STUDY ON DRUG RESISTANCE PATTERN IN CASES OF DIABETES WITH PULMONARY TUBERCULOSIS
30	VISHALI K	Ultra sound features of tuberculous lymphadenitis

15:15 – 17:15

TUBERCULOSIS – INTERESTING CASES

No.	Name	Title of Abstract
1	AMIT CHAUHAN	COMPLEX TRACHEOBRONCHIAL STENOSIS-A RARE COMPLICATION OF ENDOBRONCHIAL TUBERCULOSIS
2	ANURAG TRIPATHI	BCGOSIS: WHEN A BOON TURNS INTO BANE
3	Aparna Suresh	Caverno-cutaneous fistula-A rare clinical case
4	A Asha Fathima	Intractable anoperineal disease of tuberculosis
5	DHIVYA BHARATHI S	POST-TUBERCULOSIS FIBROSING MEDIASTITIS
6	Kodati Bindu	MDR TB IN PAROTID GLAND
7	MANISHA JAIN	A RARE CO-OCCURRENCE OF TAKAYASU'S ARTERITIS AND TUBERCULOSIS
8	Manu Siva	Rare Presentation of Tuberculosis as a Mediastinal Mass with Tracheo-mediastinal Fistula and its complete resolution with Anti-Tubercular Treatment
9	PRADEEP CHAUDHARY	SPLENIC TUBERCULOSIS CLINICAL CASE
10	Rishab Rampradeep	UNUSUAL ACRAL PRESENTATION OF TUBERCULOSIS VERRUCOSA CUTIS
11	Sathish Kumar M	An auricular mystery revealed by Cartridge Based Nucleic Acid Amplification Test(CBNAAT)
12	Shreya Gudi	Addressing side effects of ATT
13	SIVASANKARI R	SCAR IN A TB PATIENT
14	Syed Shabbir Hussain	RETROPHARYNGEAL ABSCESS PRESENTING AS MDR-TB WITH PULMONARY INVOLVEMENT
15	V BHUVNESWARI	Endogenous lipoid pneumonia in association with pulmonary TB

17:15 – 18:15

YOUNG CONSULTANTS – BEST PAPER

No.	Name	Title of Abstract
1	Arjun Khanna	Perception and use of long-acting bronchodilators in COPD patients: A survey among Indian physicians
2	Lingadevi T	Effect of REM OSA and CPAP's impact- on REM related cardiovascular events
3	Nitin Goel	Clinico-radiological characteristics of Post COVID-19 at a tertiary pulmonary care centre
4	Pranav Ish	PROFILE OF SLEEP RELATED BREATHING DISORDERS IN PATIENTS WITH OVERLAP SYNDROME
5	Sameer Arbat	Utility of Bronchoscopy Safety Box – Barrier to COVID-19 among healthcare workers
6	Shreeja Nair	BCG vaccination status and COVID 19 outcome
7	Tarang Kulkarni	Post COVID Pulmonary Rehabilitation: New Frontier for Telemedicine?
8	Umang Shah	How Rapid Can "Rapid On-site Cytology Evaluation (ROSE)" Be - Our Experience with Toluidine Blue Staining - Concordance Between ROSE & Final Cytological Diagnosis On EBUS TBNA Samples

NAPCON 2020 AWARD - POSTER

ASTHMA - RESEARCH PAPERS

No.	Name	Title of Abstract
1	CHETANKUMAR PRAJAPATI	A STUDY OF SERUM SODIUM POTASSIUM CHLORIDE ABNORMALITY IN CHRONIC STABLE ASTHMATIC PATIENTS
2	GAGANDEEP KAUR	Prevalence of Allergic bronchopulmonary aspergillosis in patients with bronchial asthma:-A prospective study
3	HARSHITA RANI	A Study of prevalence and clinical relevance of hypersensitivity to cockroach and House Dust Mite(<i>D. farinae</i>) by skin prick test and its correlation with asthma severity
4	MANNAF ALI	STUDY OF SERUM MAGNESIUM LEVEL IN PATIENTS OF ASTHMA AND IT'S CORRELATION WITH LEVEL OF CONTROL OF
5	MOBEEN QUADRI	Study on correlation between sputum eosinophil count and absolute eosinophil count with the severity of asthma
6	MOHAMMAD SAMEER AHMED	Assessment of serum vitamin D in different severities of bronchial asthma
7	"MANISHA RAI P C KATHURIA"	Steroid-Sparing Effect of Omalizumab in Stage IV (Corticosteroid Dependent) Allergic Bronchopulmonary Aspergillosis
8	PRADEEP KUMAR DASARI	STUDY OF CLINICAL AND IMMUNOSEROLOGICAL PROFILE AMONG DIFFERENT TYPES OF ALLERGIC BRONCHOPULMONARY ASPERGILLOSIS (ABPA)
9	RASHMI RANJAN DAS	Children with asthma and blood eosinophilia: A retrospective cohort study
10	RAVI KANT PANDEY	A Study of prevalence and clinical relevance of hypersensitivity to pollens by Skin Prick Test
11	ROOPANSHI JAIN	Serum specific IgE is complimentary with skin prick test for detection of common respiratory aero allergen
12	ROOPANSHI JAIN	Correlation between Serum specific IgE with skin prick test for detection of common respiratory aero allergen
13	SAI RAMYA G	CLINICAL CHARACTERISTICS AND OUTCOME OF BRONCHIAL ASTHMA PATIENTS IN COVID-19 PNEUMONIA
14	TANMAY BHARGAVA	PREVALANCE OF ALLERGIC BRONCHOPULMONARY ASPERGILLOSIS IN PATIENTS WITH BRONCHIAL ASTHMA
15	VAISHALI NAIK	Comparison of in-vitro deposition of Formoterol/Budesonide (FBD) Synchrobreathe (SB with the FBD pressurized metered dose inhaler (pMDI)

ASTHMA - CASE REPORTS

No.	Name	Title of Abstract
1	AJEESH KP	An airway disorder diagnosed by virtue of attenuation of mucous.
2	ANKUR GUPTA	ABPA presenting as lung abscess
3	MUDRA KHARE	A rare case report of Eosinophilic Granulomatosis with polyangiitis
4	SUDHINI SREEJA REDDY	A CASE REPORT OF UNUSUAL PRESENTATION OF PSEUDOANEURYSM OF PULMONARY ARTERY AND INVASIVE ASPERGILLOSIS IN YOUNG BRONCHIAL ASTHMA PATIENT

COPD - RESEARCH PAPERS

No.	Name	Title of Abstract
1	AASTHA GUPTA	Evaluation Of Cardiovascular Changes In Patients With Chronic Obstructive Pulmonary Disease
2	ASAWALE KY	A Prospective, Observational Study to Evaluate Effectiveness and Safety of Fixed Dose Combination of Indacaterol Maleate 110 µg + Glycopyrronium Bromide 50 µg (IND/GLY 110/50 µg) in Stable Chronic Obstructive Pulmonary Disease (COPD) Patients.
3	B V SRI LAKSHMI CHITTAPULI	ASSESSMENT OF COGNITIVE FUNCTION IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE.
4	D PRIYA	COPD AND ITS CARDIAC MANIFESTATIONS IN A TERTIARY CARE HOSPITAL
5	DEEPAN V	THE DARK DEVOUR- A STUDY ON PROGNOSTIC IMPLICATIONS OF NIGHT TIME DYSPNOEA IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN A TERTIARY CARE HOSPITAL IN TELANGANA
6	DINESH KUMAR PATEL	COMPARISON OF SMOKER AND NONSMOKER CHRONIC OBSTRUCTIVE PULMONARY DISEASE PATIENTS ATTENDING RESPIRATORY MEDICINE OUT PATIENT DEPARTMENT
7	EVELIN ROY	Efficacy Of Vaccination In Preventing COPD Exacerbation
8	GAURANG AURANGABADKAR	TO STUDY THE INCIDENCE AND CLINICAL PROFILE OF LUNG CANCER IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE
9	HAADI NIZAR AHAMMED	EFFICACY OF SUBLINGUAL BACTERIAL LYSATES IN STABLE COPD - A CASE CONTROL STUDY
10	HARITHA SREE CH	A COMPARITIVE STUDY OF BODE INDEX AND GOLD STAGING IN PREDICTING NUMBER AND OUTCOME OF EXACERBATIONS IN STABLE COPD PATIENTS
11	K Alekya	Evaluation of tuberculosis-associated chronic obstructive pulmonary disease at a tertiary care hospital: A case-control study
12	Kinshuk Sarbhai	Study of Prevalence and Pattern of Infections in Acute Exacerbations of Obstructive Airway Disease (OAD).
13	Krishnapriya Kumar	A CROSS-SECTIONAL STUDY ON CORRELATION OF MICROALBUMINURIA WITH DISEASE SEVERITY IN STABLE COPD PATIENTS
14	LAVANYA SV	PREVALENCE OF CHRONIC KIDNEY DISEASE AMONG CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN COMPARISON WITH OTHER CHRONIC RESPIRATORY DISEASES
15	M MANASA	Nocturnal oxygen desaturation in patients with chronic obstructive pulmonary disease : A predictor of morbidity
16	MOHIT AGARWAL	A follow up study with respect to exacerbation in COPD patients and its correlation with 6 minute walk distance.
17	MOHIT AGARWAL	The importance of 6MWT variables and their clinical significance with respect to exacerbation: A follow up study
18	NEETHU K	IMPROVED DIAGNOSIS OF EXACERBATIONS OF COPD USING EXACT-PRO QUESTIONNAIRE
19	OMKAR PRASAD RATH	A COMPARATIVE STUDY BETWEEN COPD ASSESSMENT TEST AND SAINT GEORGE'S RESPIRATORY QUESTIONNAIRE IN EVALUATING HEALTH RELATED QUALITY OF LIFE IN PATIENTS OF COPD

20	P SRAVANI	DECAF score : A prognostic indicator in patients with acute COPD exacerbations
21	PEDAMALLA SRAVANTHI	ROLE OF CAT SCORE IN COPD PATIENTS
22	PASUPULETI SAI DRUTHI	CLINICO SOCIAL PROFILE OF NON SMOKERS HAVING CHRONIC OBSTRUCTIVE LUNG DISEASE.
23	PRAKASH K	Prevalence of Anemia in COPD and its Etiology based on peripheral smear
24	RAJEEV KUMAR CHAUHAN	Role of Pulmonary Rehabilitation in COPD
25	RAJESH SAHU	Comparative study of inflammatory markers in Type2 diabetes mellitus between COPD and non- COPD patient
26	ROHIT BHINGARDEVE	CRP IN COPD PATIENTS
27	RUCHIRA ROY	To Study the Prevalence of Osteoporosis and Metabolic Syndrome Among Female Chronic Obstructive Pulmonary Disease Patients at A Rural Tertiary Care Centre of North India
28	SUJATA MAHADIK	In-vitro drug deposition of indacaterol 110mcg/glycopyrronium 50mcg using dry powder inhaler: Comparison of two drug-device combinations
29	SAJIN MATHEW	Prevalence and Risk Factors for Coronary Artery Disease (CAD) in patients of COPD
30	SANDIP DAS	A COMPARATIVE STUDY OF RISK FACTORS, CARDIOVASCULAR COMORBIDITIES, C-REACTIVE PROTEIN AND BLOOD EOSINOPHIL COUNT AMONG MALE AND FEMALE PATIENTS WITH STABLE CHRONIC OBSTRUCTIVE PULMONARY DISEASE
31	SONALI JADHAV	Efficacy and safety of Budesonide given in combination with Glycopyrronium + Formoterol in Indian COPD patients: Post-hoc analysis of the Glycopyrronium + Formoterol Phase 3 study
32	SRUTHI R	EFFECT OF LONG TERM OXYGEN THERAPY IN COPD – A PROSPECTIVE OBSERVATIONAL CLINICAL STUDY
33	V Ch S Sai SNIGDHA SRI Veeramalla	CULTURE SENSITIVE PATTERN AND BACTERIOLOGICAL PROFILE IN SPUTUM CULTURE AMONG PATIENTS OF ACUTE EXACERBATION OF COPD
34	VARSHA RAJ MEENA	A PROSPECTIVE STUDY OF THYROID DYSFUNCTION AND CLINICAL PROFILE IN COPD PATIENTS IN A TERTIARY CARE CENTRE

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No.	Name	Title of Abstract
1	ATHUL THULASI	A CASE OF NOISY BREATHING
2	DHINESH KUMAR	Recurrent Spontaneous Pneumothorax in a COPD patient
3	Gyan Prakash Verma	Case of secondary spontaneous pneumothorax with AE OF COPD
4	HEMALATHA DARSİ	CASE OF VANISHING LUNG SYNDROME
5	SREERAG VARIOR	ALPHA 1 ANTITRYPSIN DEFICIENCY - AN UNDER RECOGNIZED CAUSE OF EMPHYSEMA

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No.	Name	Title of Abstract

1	Chaitanya Kiran Gara	A study of different patterns of interstitial lung diseases in a tertiary health care Centre
2	DEV KUMAR	EVALUATING THE ROLE OF HRCT IN ETIOLOGICAL DIAGNOSIS OF ILD
3	JEESHITHA MARAM REDDY	SARCOPENIA IN CONNECTIVE TISSUE DISEASE ASSOCIATED INTERSTITIAL LUNG DISEASE (CTD-ILD)
4	KAUMUDI DEVI	THE CO-RELATION BETWEEN EXERCISE CAPACITY AND PULMONARY HYPERTENSION IN DIFFERENT TYPES OF INTERSTITIAL LUNG DISEASES IN A TERTIART CARE CENTRE IN INDIA
5	MONICA BANSAL	AN EVALUATION OF RISK FACTORS FOR DEVELOPING PULMONARY FIBROSIS IN COVID19 PATIENTS
6	MUNIZA BAI	EARLY DETECTION OF INTERSTITIAL LUNG DISEASE IN SYSTEMIC SCLEROSIS – WHERE DO WE STAND?
7	NANDITHA REDDY	Clinical Profile of patients with Connective Tissue Disorder Related Interstitial Lung Disease - An observational study
8	Samiksha Kamble	ROLE OF TRANSBRONCHIAL LUNG BIOPSY IN HYPERSENSITIVITY PNEUMONITIS
9	Sanjai Narayanasamy	Clinicoradiological profile of ILD in a tertiary care centre in coastal India
10	Sujeet Karn	A MULTIDISCIPLINARY APPROCH FOR THE CLINICAL, RADIOLOGICAL, HISTOPATHOLOGICAL & SEROLOGICAL PROFILE IN PATIENTS WITH INTERSTITIAL LUNG DISEASE

ILD – CASE REPORTS

No.	Name	Title of Abstract
1	AMIT GOYAL	A Case of Connective Tissue Disorder Associated Interstitial Lung Disease Mimicking COVID-19
2	ANIL SONTAKKE	Chemical pneumonitis due to recurrent micro aspirations – A rare case presentation
3	ASHA NAIR	SARCOIDOSIS WITH CNS INVOLVEMENT
4	ATHUL THULASI	AN UNUSUAL CTDILD IN A YOUNG MALE
5	BELINDA ANET	PULMONARY ALVEOLAR PROTEINOSIS (PAP) MASQUERADING AS COMMUNITY ACQUIRED PNEUMONIA–A CASE REPORT AND REVIEW OF LITERATURE.
6	Bhumin Patel	Familial IPF presenting as Cystic Lung Disease
7	G UDAYA SANKAR	Sarcoidosis mimicking malignancy
8	HARITHA SREE CH	A RARE CASE REPORT OF LYMPHANGIOLEIOMYOMATOSIS ASSOCIATED WITH TUBERCULOSIS
9	INDRANIL BANERJEE	AN INTERESTING CASE OF NEUROFIBROMATOSIS ASSOCIATED LUNG DISEASE
10	K SARAVANAN	A CASE STUDY OF ATYPICAL SARCOIDOSIS MISDIAGNOSED AS A MILIARY TUBERCULOSIS
11	KAMMARA VINOD	Post COVID ILD with UIP pattern – A case report
12	KRISHNAPRIYA KUMAR	SYSTEMIC SCLEROSIS SINE SCLERODERMA: A RARE ENTITY
13	M RAJEEV NAIK	HERMANSKY PUDLAK SYNDROME - A CASE REPORT
14	Mohd Afaque	A CURIOUS CASE OF DYSPNEA LABELLED AS FUNCTIONAL DYSPNEA
15	MOHAMMAD SAMEER AHMED	A CASE REPORT OF PULMONARY FIBROSIS IN HERMANSKY PUDLAK SYNDROME (HPS)

16	MOHAMMAD SAMEER AHMED	A CASE REPORT OF PULMONARY LYMPHANGIOLEIOMYOMATOSIS MIMICKING like CHILDHOOD ASTHMA
17	M V RAMA GOPINATH	Case of sjogrens syndrome with rare clinical presentation ,NSIP, Bronchiectasis with pulmonary hypertension
18	Nazmy Abdul Latheef	Case of nitrofurantoin induced aggravation of rheumatoid arthritis- associated interstitial lung disease
19	P Sravani	A RARE CASE OF NON – FAMILIAL IDIOPATHIC PULMONARY FIBROSIS IN A YOUNG MALE ATHLETE
20	Pranav Ish	COVID-19 with pulmonary sequelae- primum non nocere
21	RAMEES NAJEEB	Appearance of new radiographic consolidations in a recovering patient of mild to moderate COVID-19 : A case of secondary organizing pneumonia
22	RAMYA SAI P	CPFE:A new entity within the spectrum of smoking related ILD
23	RIKSOAM CHATTERJEE	A 12 YEAR GIRL WITH EXTENSIVE SKIN LESIONS, MUSCLE WEAKNESS AND RAPIDLY PROGRESSIVE SHORTNESS OF BREATH
24	RITA GOJIYA	A RARE CASE OF ISOLATED PULMONARY LANGERHANS CELL HISTIOCYTOSIS
25	SAURABH KUMAR MALL	HERMANSKY-PUDLAK SYNDROME : A CASE REPORT
26	SAURABH MISHRA	A CASE OF SERONEGATIVE SCLERODERMA WITH ILD, SUBCUTANEOUS EMPHYSEMA AND PNEUMOMEDIASTINUM
27	SHITAL PARMAR	DRUG INDUCED HYPERSENSITIVITY PNEUMONITIS IN SUSPECTED CASE OF N-COVID 19
28	SINDHU MASTILA	A CASE REPORT OF PULMONARY ALVEOLAR PROTEINOSIS (ILD) IN A PATIENT WITH ALCOHOLIC DEPENDENCE SYNDROME
29	SONAL GOYAL	Pulmonary Lymphangioleiomyomatosis and Role of Pleurodesis: A Rare Case Report
30	SOWMYA KONGARA	A RARE CASE OF RECURRENT PNEUMOTHORAX ASSOCIATED WITH BOURNEVILLE DISEASE
31	SURABHI JAGGI	Interstitial lung disease with Chiladiti sign
32	Veena E R	An unusual case of rapidly progressing mucinous adenocarcinoma of lung mimicking interstitial lung disease

TUBERCULOSIS - RESEARCH PAPERS

No.	Name	Title of Abstract
1	A Hariharan	A PROSPECTIVE STUDY ON EVALUATION OF EFFICACY OF BEDAQUILINE IN PATIENTS WITH PRE XDR & XDR TB
2	ACHAL SINGH	TO EVALUATE EFFICACY SAFETY AND COMPLIANCE OF BDQ CONTAINING REGIMEN IN MDR/XDR TUBERCULAR PATIENTS
3	Anees Ahmad	To Evaluate RNTCP treatment services among patients, family satisfaction and social response in select tuberculosis unit in Kanpur district
4	ATAL BIHARI MEENA	TREATMENT OUTCOME OF MULTIDRUG RESISTANT TUBERCULOSIS (MDR-TB) IN A STUDY AT TERTIARY LEVEL
5	Gunjan Sharma	ASSOCIATION OF LOW SERUM VITAMIN D IN PULMONARY TB PATIENT
6	JAGRUTI AHIR	USEFULLNESS OF FNAC IN DIAGNOSIS OF TUBERCULAR LYMPHADENITIS

7	KRISHNA PATEL	A STUDY OF ADVERSE DRUG REACTIONS OF ANTI-TUBERCULAR DRUGS, DURING THE TREATMENT OF MULTIDRUG RESISTANT TUBERCULOSIS (MDR-TB) AND EXTENSIVELY DRUG RESISTANT TUBERCULOSIS (XDR-TB)
8	Mona Vohra	CLINICAL AND LABORATORY PROFILE OF PATIENTS WITH TB/HIV COINFECTION: A CASE SERIES OF 19 PATIENTS
9	Pretty Radhakrishnan	INCIDENCE OF ANTITUBERCULOUS DRUG INDUCED HEPATOTOXICITY IN NEWLY DETECTED CASES OF TUBERCULOSIS
10	RESHMA S BABU	STUDY OF SPUTUM SMEAR AND CULTURE CONVERSION IN DRUG RESISTANT TUBERCULOSIS CASES TREATED UNDER PRAGMATIC MANAGEMENT OF DRUG RESISTANT TUBERCULOSIS AT AVBRH HOSPITAL
11	SARIKA RAVULA	IMPACT OF SOCIOECONOMIC, EDUCATIONAL STATUS AND LIVING CONDITIONS ON TREATMENT OF TUBERCULOSIS
12	Shabna A	OUTCOME OF PATIENTS WITH LYMPHNODE TUBERCULOSIS TREATED UNDER RNTCP - AN OBSERVATIONAL STUDY
13	SRIKEERTHI S	IMPACT OF POOR GLYCEMIC CONTROL ON TREATMENT OUTCOME OF DIABETIC PULMONARY TUBERCULOSIS PATIENTS
14	UMESH PARMAR	Prevalence of PAH in treated case of PTB
15	VATSAL GUPTA	EVALUATION OF CLINICAL, PHYSIOLOGICAL AND RADIOLOGICAL PARAMETERS IN TREATED PULMONARY TUBERCULOSIS PATIENTS
16	VIGNESH A	A STUDY ON SPUTUM SMEAR AND CULTURE CONVERSION, ADVERSE DRUG REACTIONS AND TOLERABILITY OF BEDAQUILINE IN PATIENTS WITH DRUG RESISTANT TUBERCULOSIS
17	Vinod Pal	Profile of cases of complications in patients of Pulmonary Tuberculosis
18	VISHAL MALVIYA	STUDY OF DIAGNOSTIC YIELD OF BRONCHOSCOPIC SAMPLE IN SPUTUM SMEAR NEGATIVE TUBERCULOSIS

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1	AHMED SAFWAN	DRUG INDUCED ERYTHRODERMA AND HEPATITIS TO ALL 1st LINE ANTI-TUBERCULAR DRUGS- A RARE CASE
2	AKSHADA VERNEKAR	Disseminated Millitary Silicotuberculosis - A case Report and Review
3	ALEKHYA LAKKAM	A Clinical Dilemma in COVID 19 Pandemic : Missed CARCINOMA & TB coincidence.
4	ALEKYA KALLA	A CASE REPORT OF POTT SPINE WITH LEFT GLUTEAL ABSCESS AND CUTANEOUS TUBERCULOSIS
5	AMIT GOYAL	A Case of Pulmonary Non Tuberculous mycobacteria Mimicking Pulmonary Tuberculosis
6	AnuSree S C	SPECTRUM OF RARE CUTANEOUS ADVERSE REACTIONS TO FIRST LINE ANTITUBERCULOSIS DRUGS
7	Arulmurugan D	Multifocal tuberculosis : Many faces of an old menace
8	AUDIPUDI SWETHA	A CASE OF SPUTUM POSITIVE PULMONARY KOCH'S IN RT-PCR POSITIVE SARS CoV2 PATIENT
9	ASHA FATHIMA	Left fibular Osteomyelitis as early generalization of disseminated tuberculosis

10	Avani Rajput	Atypical Presentation
11	AYUSH PANDEY	Right Tubercular Hydropneumothorax with pulmonary Tuberculosis with Thrombocytopenia with Moderate Anemia
12	B Divya	Pulmonary tuberculosis and TB verrucosa cutis-can they coexist?
13	C Praneetha	A rare case report of Miliary TB presenting with Secondary Amenorrhea
14	Chetan Khedkar	Uncommon presentation of scrofuloderma in era of anti- tubercular treatment
15	Divyanjali	KOCH'S THYROIDITIS
16	D SHIVA KUMAR NAYAK	PRIMARY EXTRAPULMONARY MDR TB IN IMMUNOCOMPETENT ADULT PRESENTING WITH PLEURAL EFFUSION
17	G REETU SINGH	A RARE CASE PRIMARY TUBERCULAR OSTEOMYELITIS OF STERNAL MANUBRIUM WITH INVOLVEMENT OF STERNOCLAVICULAR JOINT
18	GOUTHAMI KR	TUBERCULOSIS MASTITIS PRESENTING AS BREAST ABSCESS
19	Harsha Jain	Treating Wegener's Granulomatosis and Tuberculosis – Double trouble
20	Ijas V I	Endotracheal tuberculosis masquerading as tracheal mass
21	JAANAKHI V M	A RARE CASE OF PRIMARY MULTIDRUG RESISTANT TUBERCULOSIS OF THE BREAST
22	JITENDRA KUMAR CHOUDHARY	AN ENDEMIC DISEASE DISGUISED AS BEHCET'S DISEASE
23	K SHYAMALA PRAGNYA	Pulmonary Tuberculosis presenting as subcutaneous emphysema and pneumomediastinum without pneumothorax
24	KAMMARA VINOD	Tubercular pleural effusion in a case of COVID-19 infection
25	KHUSHBOO KHURANA	ISONIAZID INDUCED EXFOLIATIVE DERMATITIS IN A PATIENT WITH RENAL AGENESIS
26	Kovuri Venkatesh	AN UNUSUAL PRESENTATION OF TUBERCULOSIS
27	Kunchala Anand	A rare case of laryngeal tuberculosis
28	Madhulika Singh	Isoniazid Induced Alopecia: A Rare Case Report
29	MANGU DEVI PRIYANKA	A RARE COMPLICATION OF PLEUROPARENCHYMAL TUBERCULOSIS - A CASE REPORT
30	MANJUL KUMAR BAJPAYEE	Pott spine
31	Mathivadhani A	Turn up like a bad penny- A case of BCG induced Tuberculous abscess
32	NARENDRA TENGLI	Tubercular Mastitis A Rare Clinical Entity
33	NATESH G	CHOLESTEROL PLEURISY: A RARE COMPLICATION OF TUBERCULOSIS.
34	OMKAR MALANDKAR	Tuberculosis masquerading as a connective tissue disorder in a 32 yr old female
35	PRIYADHARSHINI S	TUBERCULOMA EN PLAQUE-CAVERNOUS SINUS SYNDROME-A CASE OF EXTRAPULMONARY TUBERCULOSIS
36	Rishab Rampradeep	An Unusual Case of Hepatitis B Masking Omental Tuberculosis
37	S Madhan	Tuberculosis of the oral cavity - An uncommon presentation of common disease.
38	SANTOSHHAMMIGI P HAMMIGI	A RARE CASE OF ANKLE-FOOT MULTIDRUG RESISTANT TUBERCULOSIS
39	SHAIK UMAR PASHA	A CASE OF PLEURAL TUBERCULOSIS MASQUERADING AS MALIGNANCY
40	SHIV KUMAR PANDEY	A RARE CASE OF ORO-FACIAL TUBERCULOSIS
41	Shraddha Tewari	Case series on peripheral neuropathy in patients on treatment for drug resistant tuberculosis
42	SHRUTI NARAYAN GUDHANE	Left Main Bronchial Stenosis: TB or not TB?
43	SINDHU MASTILA	TUBERCULOSIS MASQUERADING AS POSTERIOR MEDIASTINAL MASS

44	SUDHA SAGAR S	A CASE REPORT OF EXUDATIVE PLEURAL EFFUSION WITH DUAL ETIOLOGY
45	SUMIT KUMAR JAIN	A RARE CASE OF CUTANEOUS MULTI-DRUG RESISTANT TUBERCULOSIS
46	Sushmita Vinod	COVID-19 LOCKDOWN DELAYS DIAGNOSIS OF PRIMARY MDR-TB: A Case Report
47	Uma Sharma	A rare case of non HIV CD4 lymphocytopenia leading to opportunistic infection
48	Vaishali Rohit	Secondary Pneumothorax: A rare presentation of Silicotuberculosis
49	VARAYURI AKHILA	A RARE CASE PRESENTATION OF A COMMON DISEASE-DISSEMINATED TUBERCULOSIS AS CHYLOUS ASCITES
50	VEMULA SURESH	COVID -19 in tuberculosis:case reports
51	VIGNESH A	DIFFERENT PRESENTATION OF CUTANEOUS TUBERCULOSIS –CASE SERIES

COVID-19 – RESEARCH PAPERS

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1	Aiswarya Thambi	Knowledge Attitude And Practises Of Healthcare Workers Towards COVID-19
2	ALEENA MATHEW	POST COVID PULMONARY COMPLICATIONS – A CROSS SECTIONAL STUDY
3	ARYA RAMACHANDRAN	MORBIDITY AND MORTALITY INDICATORS IN COVID 19 PATIENTS ADMITTED IN TERTIARY CARE CENTRE,ANDHRA PRADESH
4	BHARAT GOYANI	LYMPHOPENIA AND NEUTROPHILIA AS A MARKER OF SEVERITY IN PATIENTS WITH COVID 19
5	BHAVANA SHANKAR NADONI	Correlation of S.LDH in prognostication of COVID 19
6	CAROL HANNAH BABU	ASSOCIATION OF THROMBOCYTOPENIA WITH SEVERITY AND OUTCOME OF COVID-19
7	DIANA DAVID	DIAGNOSTIC AND PROGNOSTIC SIGNIFICANCE OF EOSINOPHIL COUNTS TO CRP LEVELS AND IN ASSESSING SEVERITY OF ILLNESS IN COVID 19 CASES.
8	FIFI FRANCIS	CLINICODEMOGRAPHIC PROFILE OF PATIENTS RECOVERED FROM COVID 19 IN A TERTIARY CARE CENTRE
9	Imrana Masood	Role of Favipiravir in COVID-19 patients, an emerging option in COVID.
10	INDU PRIYA	Platelet to lymphocyte ratio (PLR) to predict severity of COVID-19
11	J Soundhariyan	Prediction of progression risk in patients with COVID -19 pneumonia – THE CALL SCORE
12	JANNELA BHAVANARAYANA	MORTALITY PREDICTORS FOR PATIENTS WITH COVID-19 PNEUMONIA CAUSED BY SARS-CoV-2
13	Jaya Sravani Donepudi	LOW VITAMIN-D LEVELS: IS IT A RISK FACTOR FOR COVID-19 INFECTION?
14	Jayalakshmi TK	Study of Likelihood of infection with COVID 19 based on source of exposure to infection among hospital staff
15	K CHARAN LAKSHMI	STUDY OF CLINICO RADIOLOGICAL PROFILE IN COVID-19 PATIENTS
16	Kakumanu Divya Sravani	SIGNIFICANCE OF INFLAMMATORY MARKERS ON SEVERITY AND MORTALITY IN COVID-19
17	KALAGIRI SAI SAMRAT	POST-COVID PULMONARY COMPLICATIONS IN PATIENTS WITH MODERATE AND SEVERE COVID PNEUMONIA
18	Kaushani Patel	Clinical profile of SARS-CoV-2 Patients in a tertiary health care centre

19	MERIN THOMAS	EOSINOPHIL COUNTS- A NOVEL MARKER TO DETERMINE THE SEVERITY OF COVID 19 INFECTION
20	NINA JOY	STUDY ON TEMPORAL PRESENTATIONS OF POSTCOVID SEQUELAE IN PATIENTS ATTENDING TO RESPIRATORY OUT PATIENT DEPARTMENT IN A TERTIARY CARE HOSPITAL
21	Parshwa Naik	Correlation of Body Mass Index with COVID-19 infection in a Tertiary Health Care Centre.
22	Princee Patel	Spectrum of HRCT Thorax findings in 25 COVID-19 patients: A Retrospective study
23	Pudi Mounika	Profile of immunological markers in COVID-19 patients
24	Rafeeka Keyzare	CLINICAL CHARACTERISTICS AND FOLLOW UP OF ELDERLY PATIENTS WITH NON SEVERE COVID-19 DISEASE
25	S Vijetha	CLINICAL PROFILE OF SARS-CoV-2 INFECTED PATIENTS ATTENDING A RURAL MEDICAL COLLEGE HOSPITAL
26	Sagar Bhagat	Favipiravir Effectiveness in High Risk Moderate COVID-19 Patients – A Retrospective study
27	Sagar Panchal	Effectiveness of Favipiravir in COVID-19 patients with Risk Factors for Mortality
28	Santhosh Kumari K	Study of association between severity of Anemia and severity of COVID 19 illness in patients in tertiary center, Bengaluru
29	Shama Sharma	STUDY OF RELATIONSHIP BETWEEN ELECTROLYTE IMBALANCE AND SEVERITY OF COVID 19 DISEASE
30	Sindhu Ravali	Role of intravenous dexamethasone in hospitalized RT-PCR positive SARS-CoV-2 patients in a tertiary care hospital
31	Sneha Jacob	EFFICACY OF REMDESIVIR IN MODERATE TO SEVERE PATIENTS OF COVID-19
32	SRI LAKSHMI	Relation of diabetes mellitus with mortality in COVID19 patients: A retrospective study.
33	SRI DEVI D.S.S.V.	COMORBIDITIES AS RISK FACTORS FOR DEVELOPMENT OF PULMONARY SEQUALAE IN MODERATE TO SEVERE CASES OF COVID19
34	SUNIL YADAV	Study of correlation of inflammatory markers and symptomatology in post COVID-19 follow up in OPD of dedicated COVID hospital
35	Suthirth Vaidya	Accurate and Automated Quantification of COVID19 Disease Severity on Chest Imaging using Artificial Intelligence
36	TISA PAUL	A Systematic Review of clinical and laboratory parameters associated with increased severity among COVID-19 patients.
37	UPPILI GOUTHAMI	D-DIMER AS A PREDICTOR OF SEVERITY AND MORTALITY IN COVID 19 PATIENTS
38	Utkarsh Kumar Srivastava	Health Related Quality of life among the covid-19 positive health care individuals after 14 days of discharged
39	Vasavi Cheguri	Comparing inflammatory markers in COVID19 patients with disease severity at a tertiary care center : A retrospective study.
40	Venugopal	Disease Spectrum of Patients attending in a Post COVID Clinic of Kerala
41	VIJAY BABU R	Neutrophil-to-lymphocyte ratio as an independent predicting factor of mortality in patients with COVID 19 and its correlation with CT severity scoring
42	VITTHALRAO CHINTALWAR	CLINICAL AND DEMOGRAPHIC PROFILE OF MILD COVID 19 DISEASE

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1	Abhijeet Lonsane	IF NOT COVID ; THEN WHAT ????
2	Alekya A	A RARE CASE OF BILATERAL HYDROPNEUMOTHORAX POST COVID 19 PNEUMONIA
3	Anil Kairi	A Case of COVID-19 cystic air space,Sequelae
4	Anirudh Kumaran	Spontaneous Pneumomediastinum in a COVID pneumonia patient
5	ARAVIND RAJ K	PNEUMOMEDIASTINUM IN COVID 19
6	Ashish Prakash	The Perplexing COVID-19 RT-PCR Result In The COVID Pandemic
7	Baljeet Singh Virk	COVID-19 in a patient with thrombocytopenia
8	CHANDRAGIRI PRANAY SAI	A CASE OF COVID-19 WITH ACUTE HEPATITIS AND PNEUMOMEDIASTINUM
9	CHINTALAPATI NAGA SRIVANI	PNEUMOTHORAX AND PNEUMOMEDIASTINUM IN COVID-19
10	Dinakaran Umashankar	CASE SERIES ON COVID MIMICKERS
11	E SUJI	MAL-AERATION WITH RUINING CORONA
12	Karmay Shah	Pneumothorax in COVID-19 positive patients: a retrospective case series
13	Koustav Kumar Roy	MULTISYSTEM INVOLVEMENT IN SEVERE COVID 19 PATIENTS WITH PREVIOUS CO-MORBIDITIES
14	Mihir Gangakhedkar	Pandemic Pandemonium: Infrequent radiological presentations with COVID-19
15	Muthulakshmi S	POST COVID-19 PNEUMONIA COMPLICATED WITH GUILLIAN-BARRE SYNDROME
16	Om Padarabinda Dash	A case of spontaneous secondary pneumothorax following COVID 19 infection
17	PASUMARTHI CHINMAI SAI APARNA	MYOCARDIAL INJURY IN SEVERE COVID 19 INFECTION
18	Prasant Kunwar	An Asymptomatic Anterior mediastinal mass: A systemic approach to diagnosis
19	RAMEES NAJEEB	ATRIAL FIBRILLATION AND COVID-19 : A SERIOUS YET NOT UNCOMMON ASSOCIATION
20	RAMYA PRIYA	COVID-19 INFECTION AND TUBERCULOSIS- A VICE VERSA SCENARIO: A REPORT OF THREE CASES
21	Revanth Kumar Nakka	A STUDY OF PATHOLOGICAL FEATURES OF LUNG IN COVID-19
22	SAURABH TYAGI	Treatment plan in RTPCR negative but clinically-radiologically suspicious case of COVID-19(CASE REPORT)
23	Shaik Abdul Waseem	Spontaneous pneumothorax in a patient with covid 19 pneumonia
24	SUBHAPRADA MISHRA	ISOLATED PLEURAL EFFUSION IN COVID 19
25	TAMISHI SHARMA	ROLE OF IV IMMUNOGLOBIN IN A PATIENT WITH COVID-19 WITH BILATERAL LOWER LIMB DVT WITH IVC FILTER PLACED WITH APLA SYNDROME WITH THROMBOCYTOPENIA WITH OSA WITH PRE-DIABETIC STATUS WITH BMI-54.6
26	VAIBHAV PADASHETTI	COVID 19 AND PNEUMOTHORAX -RARE BUT NOT SELDOM

INFECTIONS – RESEARCH PAPERS		
No.	Name	Title of Abstract
1	ADITYA GAUTAM	Role of Chest Imaging in Diagnosis of Community Acquired Pneumonia

2	A J Mahendran	Experience of CLABSI prevention measures in a medical ICU in a tertiary care hospital in north India.
3	ALLAMPATI SREE SOWMYA	PAPER ON BI-DIRECTIONAL INCIDENCE OF COVID-19 AND TB
4	AMIT CHAUHAN	Study of Secondary Bacterial Pathogens infecting Patients of Pulmonary Tuberculosis and their Antibiotic Sensitivity at SMS Medical College, Jaipur
5	ANIRBAN MONDAL	STUDY OF CLINICORADIOLOGICAL PROFILE, TREATMENT AND OUTCOME OF LUNG ABSCESS PATIENTS ADMITTED IN A TERTIARY CARE HOSPITAL
6	ARITRA GANGULY	A STUDY ON CLINICO-RADIOLOGICAL PROFILE AND TREATMENT OUTCOME OF EMPYEMA THORACIS PATIENT ADMITTED IN A TERTIARY CARE HOSPITAL AT KOLKATA.
7	Arjunsinh Govil	Study of 50 cases of Empyema
8	K SHYAMALA PRAGNYA	Study of Clinical, Microbiological profile and treatment outcome of Pyopneumothorax in a Tertiary care Hospital.
9	NISNA MEDAPPIL	BACTERIOLOGICAL AND CLINICAL PROFILE OF COMMUNITY ACQUIRED PNEUMONIA(CAP) IN A TERTIARY CARE CENTRE
10	P TANUJA	IN PREDICTION OF SEVERITY OF COMMUNITY ACQUIRED PNEUMONIA (CAP), A DROP IS EQUIVALENT TO CRB 65
11	Saravanan MC	STUDY OF CLINICAL AND BACTERIOLOGICAL PROFILE OF COMMUNITY ACQUIRED PNEUMONIA IN A TERTIARY CARE CENTRE
12	SHIVAM PRIYADARSHI	Clinical and Bacteriological profile of patients with Community Acquired Pneumonia at rural tertiary care centre of Western U.P.
13	P Udayasree	A Clinical, Radiological and Microbiological profile of Lung abscess in a Tertiary care hospital
14	Subhash E	To assess the pulmonary sequela in patients of swine flu after treatment with no respiratory disease previously.

INFECTIONS – CASE REPORTS

No.	Name	Title of Abstract
1	A Abidini	Rare Complication of COVID19 :Rhino-orbital mucormycosis
2	Alwa Karunasree	Possible case of NTM
3	AMANPREET KAUR	A case of empyema necessitans due to interruption antitubercular treatment
4	AMIT GOYAL	ABPA without Bronchial Asthma with associated pulmonary aspergilloma-A Rare Entity
5	BATOEE RAM MEENA	An unusual cause of hemoptysis
6	Bhumika Madhav	Stenotrophomonas Maltophilia:A Rare cause of Pleural effusion
7	Bhumin Patel	Mucormycosis with positive Atoll Sign (Mucormycosis presenting as pneumonia)
8	E RAJU	MICROFILARIA IN PLEURAL EFFUSION ; A RARE CASE REPORT
9	Febi Ann Roy	Non Tuberculous Mycobacteria – Pulmonary Disease – A case series from a tertiary care centre
10	Kanchi S Sravani	A Rare case of Maggots at ICD site
11	KARTHIKA PRASAD	A JOURNEY TO NONTUBERCULOUS MYCOBACTERIAL INFECTION
12	KOTHAPALLY SAI DHEDEEPYAA	An uncommon case - A case report of Hepatopulmonary amoebiasis

13	LAKSHMI S	A RARE CASE OF DISSEMINATED MUCORMYCOSIS
14	LAKSHMINARAYANA JASTI	A rare case of chylothorax caused by probable <i>Paragonimus westermani</i>
15	M MALATHI	AMOEBIA IN PLEURAL ABODE
16	M RAJEEV NAIK	PLEURAL EMPYEMA SECONDARY TO RUPTURED AMOEBIC LIVER ABSCESS - A CASE REPORT
17	Prashamsa Chelimalla	CASE REPORT- MUCORMYCOSIS IN A DIABETIC FEMALE
18	Raghul Raj	PULMONARY MUCORMYCOSIS : A SUBACUTE FATAL LUNG DISEASE
19	RAHUL LAIYA	ISOLATED PULMONARY HYDATID CYST : A RARE CASE REPORT
20	ROOPANSHI JAIN	PULMONARY HYDATID WITHOUT LIVER INVOLVEMENT: A CASE SERIES
21	SATHISH CHANDAR REDDY	Nocardiosis in solid organ transplant recipients: a diagnostic conundrum
22	SHIV KUMAR PANDEY	A case of right sided septated pleura effusion with hydatid cyst of liver with cholelithiasis
23	SNEHA LEO	BACTERIAL PNEUMONIA CONCEALING PULMONARY GRANULOMATOSIS WITH POLY-ANGITIS- A DIAGNOSTIC DILEMMA
24	SOUMYADEEP GHOSH	A CASE OF CHRONIC CAVITORY PULMONARY ASPERGILLOSIS, A RARE ENTITY
25	SRISHTI GOUR	Post primary PTB / ASPERGILLOMA/ COVID SUSPECTED/ TRACTION BRONCHIECTASIS
26	SWADIP MISHRA	First Case Report of <i>Nocardia beijingensis</i> Infection in a COVID-19 Patient in India
27	Syed Mufthah	An unusual presentation of hemoptysis
28	THAMEE SHAHID	A Rare finding of <i>Aspergillus niger</i> as a cause of Pyopneumothorax in an Immuno-compromised Patient: A Case Report
29	H Vamshi Krishna	A Case Report: 42-Year-Old Female Presenting with Chronic Shortness of Breath and Cough
30	VATSAL GUPTA	ISOLATED PULMONARY CYSTICERCOSIS PRESENTING AS A MASS LESION
31	Vineet Kulkarni	Lung abscess with pneumothorax in a case of COVID-19 patient.
32	VINODHA K	Ruptured Hydatid Cyst - A case report

INTERVENTIONAL PULMONOLOGY – RESEARCH PAPERS

No.	Name	Title of Abstract
1	Akhilesh Tiwari	Comparison of Safety, Efficacy and Diagnostic value of Bronchoalveolar Lavage, Brush Cytology vs Endobronchial Lung Biopsy in Lung Masses
2	Ashwini Pednekar	Role of transbronchial lung biopsy in the diagnosis of diffuse parenchymal lung diseases
3	CHETAN PRAJAPATI	ROLE OF BRONCHOALVEOLAR LAVAGE EXAMINATION CLINICALLY AND RADIOLOGICALLY SMEAR NEGATIVE PULMONARY TUBERCULOSIS
4	DEEP KOTHARI	A STUDY OF YIELD OF MEDICAL THORACOSCOPY IN UNDIAGNOSED PLEURAL EFFUSION – A RETROSPECTIVE STUDY
5	DHANISHA C P	DIAGNOSTIC UTILITY OF ULTRASOUND GUIDED PERCUTANEOUS TRANSTHORACIC CORE NEEDLE BIOPSY IN PERIPHERAL LUNG MASSES
6	DHARANEESWARA REDDY	STUDY ON EVALUATION OF NON-RESOLVING PNEUMONIA IN PATIENTS ATTENDING TERTIARY CARE CENTER

7	DVN Rakesh Reddy	ROLE OF MEDICAL THORACOSCOPY IN EVALUATING PLEURAL EFFUSION
8	E RAJU	TO STUDY DIAGNOSTIC YIELD OF MEDICAL THORACOSCOPY IN MODERATE TO MASSIVE PLEURAL EFFUSIONS IN A TERTIARY CARE CENTER IN TELANGANA.
9	Harsh Yadav	Bronchoscopy: A diagnostic tool in sputum negative/non-producing patients
10	Kovvada Aswini	Aetiology and clinical profile of spontaneous pneumothorax in adults in a tertiary care hospital
11	Lakshmi	Bronchoalveolar lavage cellular analysis in conjunction HRCT chest imaging as a diagnostic intervention for patients with suspected ILD
12	LAKSHMI SHALINI M	ROLE OF MEDICAL THORACOSCOPY IN UNDIAGNOSED EXUDATIVE PLEURAL EFFUSIONS
13	NARABOINA SRAVANA SANTHI	DIAGNOSTIC YIELD OF FIBRE OPTIC BRONCHOSCOPY IN SUSPECTED CASES OF LUNG CANCER
14	NEERAJ KUMAR NAGAR	The Role of Medical Thoracoscopy done at the Government Medical College, Kota, Rajasthan; In cases of Haemorrhagic Pleural Effusions
15	PRASHANT MISHRA	YIELD OF FIBEROPTIC BRONCHOSCOPY IN SPUTUM SMEAR NEGATIVE PATIENTS OF PULMONARY TUBERCULOSIS
16	Shafin Babu	TO ASSESS THE DIAGNOSTIC YIELD AND SAFETY OF BRONCHOSCOPIC LUNG CRYOBIOPSY IN RADIOLOGICALLY DIAGNOSED MASS LESIONS OF LUNG
17	SURESH BABU	APPROACH TO LUNG CANCER
18	UMANG SHAH	Efficacy of AFB Culture and Gene Expert MTB / RIF Assay in diagnosis of Mycobacterium Tuberculosis on EBUS TBNA

INTERVENTIONAL PULMONOLOGY – CASE REPORTS

No.	Name	Title of Abstract
1	Amena Tahseen	TRACHEOESOPHAGEAL FISTULA AS A COMPLICATION OF TRACHEOSTOMY
2	AMIT JAIN	A forgotten foreign body in bronchus (self expectorated leading to bronchiectasis)
3	Anand Raja	Unusual case of Right lung Endobronchial mass
4	ARAVIND SAI KALINGA	FOREIGN BODY ASPIRATION: AN UNUSUAL PRESENTATION AND OUTCOME
5	Bhumika Madhav	Unusual foreign body with a bizarre entry path
6	Damini Somayaji	Diagnostic predicament of a case of Spontaneous Transudative chylothorax
7	Dasari Keerthana	Cholethorax
8	Mobeen Quadri	An Interesting Case of Non Resolving Pneumonia in Adult: A Case Report
9	Muniza Bai	DROP IN AIR FLUID LEVEL IN THE POST PNEUMONECTOMY SPACE – IS CHEST TUBE PLACEMENT ALWAYS A NECESSITY ?
10	Muthulakshmi S	CASE SERIES : ROLE OF STREPTOKINASE IN COMPLICATED PARAPNEUMONIC EFFUSION AND EMPYEMA
11	Navya VS	BRONCHOBILIARY FISTULA- A CASE REPORT
12	Pranav Modi	Recurrent Haemoptysis treated with Bronchial Artery Embolization in a known case of Chronic Cavitary Aspergillosis - A case report
13	Rafiya Shaik	LOCULATED PNEUMOTHORAX MASQUERADING AS VANISHING LUNG SYNDROME(VLS)

14	Rafiya Shaik	LOCULATED PNEUMOTHORAX MIMICKING AS BULLOUS LUNG DISEASE
15	RENJANA ANIRUDHAN	PNEUMOTHORAX MASKING BULLA- A CASE REPORT
16	SUMIT KUMAR JAIN	A RARE CAUSE OF UNILATERAL HAEMOPNEUMOTHORAX
17	VARDHELLY RAMESH	DOUBLE ESOPHAGEAL PERFORATION BY INGESTED FOREIGN BODY CAUSING ACUTE MEDIASTITIS

CRITICAL CARE – RESEARCH PAPERS

No.	Name	Title of Abstract
1	ANU KUMARI	Comparison of CURB-65 and Pneumonia Severity Index for predicting duration of hospital stay – A cross sectional study in tertiary care centre.
2	ARAVIND SAI KALINGA	INTRAVENOUS METHYLPREDNISOLONE AS A PULSE THERAPY FOR HOSPITALIZED SEVERE COVID-19 PATIENTS IN A TERTIARY CARE: OUR EXPERIENCE .
3	ARAVIND SAI KALINGA	EFFECTIVENESS OF REMDESIVIR IN PATIENTS WITH COVID -19 IN ICU AT A TERTIARY CARE CENTRE
4	ASHWINI NAIK	Cardiac Troponin I as an indicator for non-invasive ventilation as a treatment modality in acute exacerbation in COPD patients
5	BALAJI DASIRI	A STUDY OF INDICATIONS AND OUTCOME OF INVASIVE MECHANICAL VENTILATION IN A RESPIRATORY CARE UNIT OF A TERTIARY CARE HOSPITAL IN KOLKATA
6	Dinakaran Umashankar	RETROSPECTIVE ANALYSIS OF CASES DIAGNOSED WITH PULMONARY THROMBOEMBOLISM IN A TERTIARY CARE
7	Kamaljeet Singh	Study the utility of Tocilizumab in ICU admitted seriously ill COVID-19 patients
8	NEENU N	Convalescent Plasma Therapy In COVID 19 Acute Respiratory Distress Syndrome
9	Richie George	Prevalence of hyponatremia and its effects on outcome in COVID-19 : An experience from a tertiary care hospital
10	Robin Choudhary	Pulmonary embolism in COVID-19 patients- The real killer
11	S.Pugazhendhi	FACTORS PREDICTING THE OUTCOME OF NON-INVASIVE VENTILATION IN ACUTE RESPIRATORY FAILURE SECONDARY TO COPD EXACERBATION.
12	SAHANA K	OUTCOME OF NON INVASIVE VENTILATION IN PATIENTS WITH RESPIRATORY FAILURE INCLUDING COVID 19 AND FACTORS DETERMINING THE OUTCOME
13	SAMRUDDHI CHOUGALE	CHEST XRAY SCORING IN COVID-19: CORRELATION WITH DISEASE SEVERITY AND SHORT TERM OUTCOME
14	Shivam Priyadarshi	Comparison between CRB 65 score, Neutrophil-Lymphocyte Ratio, Absolute Neutrophil Count and Total Leukocyte Count as severity parameter to predict mortality in hospitalised patients of Community Acquired Pneumonia
15	SOIBAM PAHEL MEITEI	Prevalence and Characteristics of Venous Thromboembolism in Severe Exacerbation of Chronic Obstructive Pulmonary Disease
16	Sudipta Saha	A study of etiology and outcome in cases of acute and acute on chronic breathlessness admitted to Respiratory Medicine

CRITICAL CARE – CASE REPORTS

No.	Name	Title of Abstract
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1	Arjun Bhatnager	Acute Pancreatitis: A Mystical Subsequence of Upper GI bleeding in case of COPD with Acute Exacerbation
2	Ashutosh Singh	A rare case report of association of pneumonia with Posterior Reversible Encephalopathy Syndrome (PRES).
3	ATHUL C ANGAJ	VENTILATORY SUPPORT WITH THE USE OF NIV, NON-REBREATHABLE MASK AND PRONE VENTILATION IN A COVID PATIEN
4	D SURESH	SEPTIC PULMONARY EMBOLISM WITH TRICUSPID VALVE ENDOCARDITIS IN A CASE OF INTRAVENOUS DRUG ABUSER WITH BROKEN FAMILY BACKGROUND
5	KARTHIK K	VIPER BITERS LUNG
6	Karthik Tipparapu	ACUTE STROKE IN SEVERE COVID-19 DISEASE
7	Keerthi N S	Transfusion-related acute lung injury revisited: A case report
8	Kiran Ashok Balani	Acute pulmonary artery thrombosis, pneumatocele and pneumothorax as Post COVID-19 sequelae
9	MEGHA S MANGAL	A RARE CASE WITH COEXISTENT MULTIPLE POST-COVID COMPLICATIONS
10	MUKESH KUMAR RAIGAR	Pulmonary thromboembolism presenting as lung abscess - an unusual presentation
11	Rahul Kumar Gupta	An Unfortunate Triple Threat - Pulmonary Embolism, Pulmonary Tuberculosis and Probable Pulmonary Aspergillosis
12	RAMYA PRIYA	ACUTE RESPIRATORY FAILURE- FIRST MANIFESTATION OF ANA NEGATIVE AUTOIMMUNE DISEASE
13	RUCHA SANE	Post Covid 19 GBS (Guillain-Barre Syndrome)
14	S GOWTHAM	A RARE CASE OF ARDS ASSOCIATED WITH PULMONARY TUBERCULOSIS
15	K Srihitha	Gullain Barre syndrome (GBS) along with pulmonary embolism as late sequelae of Covid-19
16	Vipul Prakash	ALTERED SENSORIUM IN ICU WHICH RESPONDED TO BENZODIAZEPINES : A CASE STUDY
17	Wanbor Sungoh	A CASE SERIES OF PULMONARY THROMBOEMBOLISM

LUNG CANCER – RESEARCH PAPERS

No.	Name	Title of Abstract
1	AISHWARYA A P	A STUDY OF RADIOLOGICAL PRESENTATION IN BRONCHOGENIC CARCINOMA ALONG WITH PREVALENCE OF PULMONARY TB IN A TERTIARY CENTRE.
2	AJIT KUMAR	DIAGNOSTIC EVALUATION OF COMPUTED TOMOGRAPHY GUIDED BIOPSY IN SUSPECTED LUNG MALIGNANCY
3	B RAMYA KRISHNA	PROFILE OF SUBJECTS UNDERGOING MEDICAL THORACOSCOPY AT A TERTIARY LEVEL HOSPITAL
4	JITENDRA KUMAR BAIRWA	A Cross Sectional Study For Evaluation Of Carcinoembryonic Antigen In the Diagnosis Of NSCLC (Non-Small Cell Lung Cancer)
5	KAPIL TOMAR	Demographic and etiological characteristics of malignant pleural effusion in Kumaon region of Uttarakhand
6	Karan Raj Singhal	Assessment of clinical and pathological profile of Lung Malignancy cases
7	Naman Ajwani	Survival in Lung Cancer patient with treatment received

8	Pulkrit Basra	Impact of COVID-19 on diagnosis of lung carcinoma
9	Shailya Patel	A Study of types of Lung malignancy diagnosed with the help of flexible bronchoscopy at a tertiary care rural hospital
10	Shravani D	Clinicopathological profile and course of malignant pleural effusion in tertiary care teaching hospital

LUNG CANCER – CASE REPORTS

No.	Name	Title of Abstract
1	Ahmed Safwan	38 YEAR OLD MALE WITH NON RESOLVING PNEUMONIA
2	AISHWARYA ALAVANDAR	Invasive mucinous adenocarcinoma of lung
3	AMANPREET KAUR	SIMULTANEOUS OCCURRENCE OF LUNG CANCER AND PULMONARY TUBERCULOSIS: A RARE CASE REPORT
4	Anirudh Kumaran	Bilateral Chylothorax, Chylous Ascites in Non Hodgkins lymphoma
5	ANJALI RAWAT	A CASE REPORT: SMALL ROUND CELL CARCINOMA OF LUNG PRESENTED AS GROSS PLEURAL EFFUSION ADMITTED IN THE P.D.U. CIVIL HOSPITAL, RAJKOT, GUJARAT
6	ANU KUMARI	DUAL PRIMARY SYNCHRONOUS MALIGNANT TUMORS – A Case Report and Review
7	Anuthara Hareendran	A Rare Case of Primary Pulmonary Lymphoma
8	Apoorva Singh	Case presentation of squamous cell carcinoma in patient with COPD
9	Aravind Ram	An Interesting case of Tracheal tumor treated by Tracheal resection with reconstruction
10	Asha Undrajavarapu	Association of CLL with Multiple Primary Malignant Tumors
11	ASHISH KAUSHIK	Case of COVID 19 pneumonia with newly diagnosed CLL ; lessons to learn in persistent raised TLC
12	AVISHEK LAYEK	SOLITARY FIBROUS TUMOR IN A 50 YEAR OLD LADY
13	B GOWTHAMI	a rare case of solitary fibrous tumor of pleura as malignant pleural effusion
14	B SNEHA	MULTIPLE MYELOMA PRESENTING AS MALIGNANT MYELOMATOUS PLEURAL EFFUSION WITH PULMONARY TUBERCULOSIS
15	CH SUDHEER REDDY	ADENOCYSTIC CARCINOMA OF LEFT LUNG
16	Deepak Kumar Suthawal	Giant cell carcinoma of lung metastasis to skin and suboccipital swelling
17	DHANALAKSHMI S	A RARE CASE OF PULMONARY CARCINOSARCOMA
18	DHANISHA C P	A CASE REPORT -EMPYEMA - A RARE MANIFESTATION OF TERATOMA
19	DURGESH HIREKAR	Rare presentation of pulmonary metastases from Giant Cell tumor of bone
20	E RAJU	PLEURAL INVOLVEMENT IN CHRONIC MYELOID LEUKEMIA –AN EXTRA MEDULLARY BLAST CRISIS
21	Gautamram Karthik M	Tuberculous Pleural Effusion complicating Adult Lymphoblastic Lymphoma
22	GOKUL	A RARE CASE OF ADENOCARCINOMA IN YOUNG FEMALE
23	HARITHA SREE CH	CARCINOID LUNG MIMICKING PULMONARY ARTERY ANEURYSM
24	HARSHITA RANI	CASE REPORT OF BRONCHOGENIC CARCINOID
25	J K SRIKANTH	INTRA THORACIC-EXTRA SKELETAL EWINGS SARCOMA
26	JERIN D'SILVA	Non Hodgkins Lymphoma presenting as Recurrent Pleural Effusion

27	KOMAL CHAUDHARY	A unusual case of adenocarcinoma of lung with intrapulmonary miliary metastasis
28	KUNAL WAGHRAY	PLEURAL SARCOMA- A CASE REPORT
29	Manisha Challuri	A CASE REPORT - ATYPICAL PRESENTATION OF MEDIASTINAL MASS OBSCURED BY MASSIVE PLEURAL EFFUSION
30	MANISHA JAIN	JOINT TUMOUR OF THE LUNG:A RARE CASE OF PULMONARY SYNOVIAL SARCOMA
31	MEGHANA SUBHASH	Pulmonary inflammatory myofibroblastic tumor- A rare tumor presenting with diagnostic dilemma.
32	MUTHURAMAN	AN INTERESTING CASE OF HODGKINS LYMPHOMA
33	NETI THUMMAR	AN UNUSUAL PRESENTATION OF ADENOCARCINOMA OF LUNG AS NON-RESOLVING PNEUMONIA
34	ORUGANTI SINDHUJA	A rare case of endobronchial carcinoid
35	ORUGANTI SINDHUJA	A case of metastatic giant cell tumor to lungs
36	P SAI KRISHNA	AN UNSUAL PRESENTATION OF A RARE ENDOBRONCHIAL TUMOR
37	PALASH SAXENA	Pancoast tumor- a case report
38	Parthiban R	DIGGING DEEPER WITH USG GUIDED BIOPSY REVEALING THE HODGKINS TUMOUR
39	PRANZAL GARG	Giant cell tumor: A rare cause of lung mass
40	PRASHANT MISHRA	CASE REPORT OF ADENOCARCINOMA LUNG
41	Prashanthi R	A case of Adenocarcinoma of the lung mimicking pulmonary tuberculosis
42	Preetam Parida	Tubercular Pleural Effusion and Carcinoma Lung-A Dual Pathology Coexistence: A Case Report
43	Rahul Suri	Rare and varied presentations of bronchial carcinoid
44	Rahul Ugale	CHYLOTHORAX – A rare case presentation of Chylothorax secondary to Lymphoma
45	Ram Prasath	LUNG MALIGNANCY DISGUISED AS UNREMITTING DISTANT AGONY
46	RAVI KANT PANDEY	NEUROLOGICAL MANIFESTATION AS THE PRESENTING SYMPTOM OF LUNG CANCER
47	RUPAL NAIR	A Diagnostic Surprise: rare case of Primary Pulmonary Hodgkin's Lymphoma
48	S MATHIVADHANI	EVANS TUMOR AT AN ATYPICAL SITE
49	Saba Khanam	Lung cancer with Tuberculosis
50	Sameena	A curious case of gigantic tumor submerged in chest
51	Sanket Desai	BILATERAL HYDROPNEUMOTHORAX IN A CASE OF SQUAMOUS CELL CARCINOMA OF BUCCAL MUCOSA WITH CAVITATING LUNG METASTASIS
52	Santhosh Kumari KR	Effusion of Confusion
53	Sebin John	Benign Cystic Teratoma in Anterior Mediastinum with rupture into the lung parenchyma
54	SHIV KUMAR PANDEY	A RARE CASE OF BILATERAL LUNG PARENCHYMAL DISEASE IN COVID ERA
55	Soumya Swaroop Dash	A rare case of Solitary Fibrous tumor of Pleura in young female patient
56	SREE NIDHI G	SOLITARY FIBROUS TUMOUR OF PLEURA- A CASE REPORT.
57	SRUJANA MANDA	BILATERAL MULTINODULAR DISEASE, A MANIFESTATION OF ADENOCARCINOMA OF LUNG WITH PULMONARY METASTASIS
58	SURESH KUMAR	PHANTOM TUMOUR OF LUNG
59	VATSAL GUPTA	Rheumatoid Lung delay diagnosis of Adenocarcinoma for 8 months

60	Venna Abhilash Reddy	A rare case of primary pulmonary leiomyosarcoma in a young male
61	VINOD KUMAR KURMI	A RARE CASE OF GIANT SOLITARY FIBROUS TUMOUR OF PLEURA(SFTP)
62	VISHAL MALVIYA	A RARE CASE OF LEFT SIDE PLEURAL DUE TO METASTASIS RENAL CELL CARCINOMA

PFT – RESEARCH PAPERS

No.	Name	Title of Abstract
1	AAKANSHA SARDA	Radiological and functional assessment in moderate to severe COVID 19 patients post recovery
2	Aparna Nirmal	Evaluation of lung function in post COVID 19 patients at one month of recovery
3	ARUN M	Follow up of lung functions of kyphoscoliosis patients after correction surgery
4	Krishna Chaitanya Bolla	Impact of pulmonary rehabilitation on lung function, exercise capacity and Health-Related Quality of life in post-tuberculosis sequelae patients
5	Muthulakshmi S	A RETROSPECTIVE STUDY : DIFFERENCE IN FENO VALUES BETWEEN ASTHMA AND COPD PATIENTS
6	PRAJWAL SARKAR	EVALUATION OF CORRELATION OF SIX MINUTE WALK TEST WITH SPIROMETRIC INDICES IN CHRONIC OBSTRUCTIVE
7	PRAKASAM	ASSESSMENT OF ASTHMA CONTROL USING ASTHMA CONTROL TEST AND ITS CORRELATION WITH SPIROMETRY
8	Rishi Rana	To study the Pulmonary Function Test In Discharged COVID 19 Patients
9	Sarang Patil	Health at home in COPD patients
10	SHAFNA P	EFFECT OF PULMONARY REHABILITATION ON PHYSICAL AND FUNCTIONAL CAPACITY OF PATIENTS WITH COPD –A ONE YEAR FOLLOW UP STUDY
11	V Samanvitha	COMPARISON OF 6 MINUTE WALK DISTANCE WITH SPIROMETRIC CHARACTERISTICS IN OBSTRUCTIVE AND RESTRICTIVE LUNG DISEASES
12	VARAYURI AKHILA	A PROSPECTIVE STUDY ON EXERCISE LIMITATION IN PATIENTS WITH MILD CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN A TERTIARY CARE CENTRE IN TELANGANA
13	VIDYA S	Assessment of improvement in Exercise tolerance and Dyspnea score with Indacaterol/Glycopyrronium in patients with Chronic Obstructive Pulmonary Disease (COPD)

SLEEP DISORDERS – RESEARCH PAPERS

No.	Name	Title of Abstract
1	A Shashi Kumar	Evaluation of Obstructive sleep apnea in Chronic obstructive pulmonary disease patients
2	Amrutha Mohan V	KNOWLEDGE ATTITUDE AND PRACTICE OF OBSTRUCTIVE SLEEP APNOEA AMONG NONPULMONARY MEDICINE RESIDENT DOCTORS
3	ASHISH RANJAN	A STUDY ON UTILITY OF THE EPWORTH SLEEPINESS SCALE (SSC) IN IDENTIFYING OBSTRUCTIVE SLEEP APNOEA (OSA) IN COMPARISON WITH POLYSOMNOGRAPHY IN ADULT PATIENT WITH SYMPTOMS OF SLEEP DISORDERED BREATHING IN A TERTIARY CARE CENTER
4	Dipanshu Jain	Prevalence of Obstructive Sleep Apnea in Patients of with Chronic Obstructive Pulmonary Disease

5	Kanmani MK	THE PREVALENCE OF DIABETES MELLITUS IN OBSTRUCTIVE SLEEP APNEA SYNDROME
6	NIDHI SUDHAKAR	Prevalence and clinical features of REM OSA: a cross-sectional analysis of a hospital based population in south India
7	NITHIN KUMAR REDDY	HYPOXIC BURDEN AND COMORBIDITIES IN OBSTRUCTIVE SLEEP APNEA[OSA]
8	PRASHANT YADAV	ASSESSMENT OF DEPRESSION ,ANXIETY AND SLEEP DISTURBANCE IN COVID -19 PATIENTS AT TERTIARY CARE CENTRE OF NORTH INDIA
9	Prateek Agrawal	STUDY OF QUALITY AND PATTERN OF SLEEP IN COPD PATIENTS AND ITS CORRELATION WITH SEVERITY OF DISEASE
10	RAHUL	QUALITY OF SLEEP AND DAYTIME SLEEPINESS IN COPD AND ASTHMA
11	Sarang Patil	Modes of ventilation in treatment of OSAS
12	SAROJ MEENA	To determine the existence and pattern of sleep related breathing disorders in diagnosed patients of Bronchial Asthma
13	SATYAM AGARWAL	A STUDY ON THE RELATIONSHIP BETWEEN THE MALLAMPATI SCORING SYSTEM , THE BERLIN QUESTIONNAIRE , AND EPWORTH SLEEPINESS SCALE IN ADULT PATIENTS WITH SYMPTOMS OF SLEEP DISORDERED BREATHING IN A TERTIARY CARE CENTRE
14	Vipul Prakash	Comparison of cardiovascular parameters in COPD patients with and without sleep related breathing disorders

OTHERS – RESEARCH PAPERS

No.	Name	Title of Abstract
1	ATIT SHAH	A STUDY OF CLINICORADIOLOGICAL PROFILE OF BRONCHIECTASIS AT TERTIARY CARE CENTRE
2	D SURESH	To study the clinical factors associated with Pulmonary hypertension in Bronchiectasis patients in a tertiary care hospital
3	Dharamendra Kumar Gupta	Etiology of hemoptysis at institute of respiratory diseases, Jaipur
4	GEORGE ROSHAN PRASANTH D	Knowledge, Attitude and Practice of Tobacco Smoking Hazards and Smoking Cessation Among College Students
5	JIGAR J. KHANPARA	CLINICAL, LABORATORY AND RADIOLOGICAL PROFILE OF PATIENTS OF PLEURAL EFFUSION
6	KRISHNADAS M P	PREDICTORS OF SUCCESSFUL SMOKING CESSATION IN GENERAL POPULATION
7	PAYYAVULA VENKAIAH	CLINICORADIOLOGICAL, MICROBIOLOGICAL AND A VARIED CARDIOLOGICAL PROFILE OF BRONCHIECTASIS
8	Pulkit Basra	Age-wise distribution of etiological diagnosis of exudative pleural effusion: A 9-month observational study
9	Roshan Kumar M	Clinical features and outcome of Granulomatosis with polyangiitis (GPA) - Our Experience

OTHERS – CASE REPORTS

No.	Name	Title of Abstract
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Oral & Poster Abstracts

Title: EVALUATION OF INFLAMMATORY BIOMARKERS AND QUALITY OF LIFE IN ASTHMA, COPD AND ASTHMA – COPD

Name of Presenter: **DR. AHMED SAFWAN. M**

Authors (or Co-authors): **PROF. RAJKUMAR, DR. NITIN GOEL**

Institution/Author Organization: :

VALLABHBHAI PATEL CHEST INSTITUTE

BACKGROUND:

The aim of this study was to investigate inflammatory biomarkers in asthma, COPD and ACO and to compare and correlate the biomarkers with various parameters. Through this study we also assessed the quality of life in All 3 groups

METHODOLOGY:

Total no of 168 patients were recruited to this study and divided into 3 groups of 56 patients (BA, COPD & ACO). Absolute eosinophil count, S. total IgE, HsCRP, and Interleukins (4,5,6,8,13,17,33) were measured.

RESULTS:

AEC, total IgE, FeNO were significantly higher in the asthma group followed by ACO and least in COPD group of patients. IL 4 and IL 5 levels were significantly higher in asthma group than COPD group and IL 6 and IL8 were significantly higher in COPD group than asthma group. But these markers could not differentiate ACO from both groups except IL4 which was significantly higher in ACO group than COPD group. IL13, IL17 and IL33 levels were not significantly different between the 3 groups.

CONCLUSION:

Absolute eosinophil count, total IgE, FeNO and among interleukins IL4 are beneficial for distinguishing ACO from asthma and COPD in clinical practice. ACO patients had worst quality of life when compared with COPD and asthma group of patients.

Title: A Prospective study on correlation between ultrasonographic evaluation diaphragmatic thickness, excursion and spirometer in COPD patients

Name of Presenter: **Anjaly K C**

Authors (or Co-authors): -

Institution/Author Organization: **Aster Medicity, Kochi**

BACKGROUND:

Diaphragm examination by ultrasonography

may be helpful for evaluating the disease status and outcomes in COPD patients. The purpose of the present study was to investigate the relationship between diaphragmatic excursion, thickness and spirometry values in COPD patients, using diaphragmatic movements.

OBJECTIVES:

Primary objective was to compare diaphragmatic thickness and excursion in healthy persons and those diagnosed with COPD and secondary objective to evaluate ultrasound as a diagnostic tool for assessing diaphragmatic thickness and excursion in COPD patients and to correlate with spirometry values.

MATERIALS AND METHODS:

This was a prospective ,observational, cross sectional study conducted among patients with COPD. Sample size was calculated as 70 .

All COPD patients and healthy volunteers were subjected to USG of diaphragm.

RESULTS :

Diaphragm excursion at normal inspiration, deep inspiration, and while sniffing were significantly lower in COPD patients in comparison to healthy controls (P<0.01). Diaphragm thickness at end inspiration, end expiration, and diaphragm thickness fraction were significantly lower in COPD patients in comparison to controls (P<0.01). Interobserver and intra-observer variability among diaphragm function variables were very strong. There was a strong correlation between FEV1 and diaphragm excursion during deep inspiration and sniffing. Through this study we have formulated a linear equation to find out FEV1, that is $FEV1 = 2.99 - (0.042 \times \text{age}) + (0.224 \times \text{deep inspiration}) + (0.015 \times \text{sniffing})$. Clinical Implication: By using this equation we can predict a person's FEV1 value by just measuring his diaphragm movements using bedside ultrasonography and can predict risks for any major surgeries, can decide on treatment options for COPD patients and can also be used for prognosis and follow up while on inhaler therapy.

Title: PREVALENCE OF METABOLIC SYNDROME AMONG CASES OF COPD AND ITS CORRELATION WITH BODE INDEX AND C REACTIVE PROTEIN TITRES

Name of Presenter: **Dr. D. SURESH KUMAR**

Authors (or Co-authors): **Dr. D. Suresh**

Kumar(Junior resident) , Prof. Dr. Amitabha Sengupta, Prof. Dr. Somenath Kundu(HOD)

Institution/Author Organization : **IPGME & R**

INTRODUCTION

Metabolic syndrome is rapidly increasing in India and is more prevalent in chronic obstructive pulmonary disease compared to normal population. Systemic inflammation may play an important role to account for increased metabolic syndrome in COPD.

AIMS / OBJECTIVES

- 1.To evaluate the prevalence of metabolic syndrome in case of stable COPD compared to controls.
2. To identify correlation between FEV1 and components of metabolic syndrome
3. To study association of BODE INDEX and C-Reactive protein titre with metabolic syndrome among cases of COPD.

METHODOLOGY

Observational cross sectional study among 50 stable COPD cases(no exacerbation requiring hospitalization in last 1year, not on oral steroids , antidiabetics , antihypertensives and not having ischemic heart disease). 38 normal subjects taken as control. Metabolic syndrome parameters as per NCEP 2005 were evaluated along with spirometry, BODE INDEX and C-Reactive protein titre estimated by nephelometry. Statistical analysis was done by SPSS vers 26.0 software.

RESULTS :

Metabolic syndrome was seen in 16 % COPD cases compared to 3.2% among controls . COPD cases with metabolic syndrome had lower FEV1, higher smoking index , raised waist circumference ,raised systolic and diastolic blood pressure, raised fasting blood sugar, raised triglycerides with low HDL (p<0.005). BODE INDEX and c-Reactive protein titre were also significantly raised among COPD cases with metabolic syndrome.

Conclusion:

Management of COPD should focus not only on airflow limitations but also on systemic comorbidities like metabolic syndrome for better outcome.

Title: ASSESSMENT OF ALVEOLAR CAPILLARY MEMBRANE PERMEABILITY USING Tc99m-DTPA AEROSOLS IN PATIENTS

WITH DIFFUSE SYSTEMIC SCLEROSIS – A HOSPITAL-BASED CROSS-SECTIONAL STUDY

Name of Presenter: **MUNIZA BAI**

Authors (or Co-authors): **DHARM PRAKASH DWIVEDI, G VISHNUKANTH, NANDINI PANDIT, SIVARANJINI R, CHENGAPPA K G**

Institution/Author Organization:

JAWAHARLAL INSTITUTE OF POST GRADUATE MEDICAL EDUCATION AND RESEARCH

INTRODUCTION

Considering the frequency of lung involvement in systemic sclerosis and its impact on the prognosis, it is important to recognise patients with ILD early and treat them appropriately. One such modality that is understudied which can help in early diagnosis is by assessing changes of alveolar capillary permeability using Tc 99m DTPA aerosol lung scintigraphy.

OBJECTIVES

1. To assess the pulmonary alveolar capillary permeability in patients with diffuse scleroderma using Tc 99m DTPA aerosol scintigraphy.
2. To identify the association of alveolar capillary membrane permeability assessed by using Tc 99m DTPA aerosol scintigraphy with spirometry, high resolution computed tomography (HRCT) findings, modified rodnan skin score (MRSS), six minute walk distance (6MWD), nail fold capillaroscopy (NFC) findings and serum concentrations of pneumoproteins - KL-6 and SP-D.

METHODOLOGY

A cross-sectional study was conducted between December 2018 and December 2020 at a tertiary care hospital in South India. A total of fifty-five diagnosed cases of diffuse scleroderma satisfying the ACR/EULAR 2013 classification criteria were recruited into the study after obtaining written informed consent. All the fifty-five participants underwent Tc 99m DTPA aerosol scintigraphy and HRCT thorax. Out of the fifty-five patients, thirty-five underwent a battery of tests in addition to aerosol scan - spirometry, MRSS, NFC, and serum concentrations for KL-6 and SP-D. Semiquantitative CT scoring used by Warrick et al was used to evaluate HRCT findings. Aerosol scan was also performed in a group of twenty-eight healthy volunteers.

RESULTS

Of the total participants (n=55), the mean T1/2 was found to be 44.6±23.5 minutes which was lower than the mean T1/2 of healthy volunteers (47.64±12.72 minutes). A negative correlation

was found between T1/2 & Warrick score of $r = -0.30$ ($p < 0.03$) and T1/2 & 6MWD of $r = -0.14$ ($p = 0.4$). A positive correlation was noted between T1/2 & FVC ($r = 0.19$) and T1/2 & MRSS ($r = 0.79$). Majority of the patients (88.6%) demonstrated a late NFC pattern.

CONCLUSION

Aerosol scintigraphy can serve as a novel diagnostic modality for the early diagnosis of interstitial lung disease in patients with diffuse systemic sclerosis by detecting changes at the alveolar capillary level before anatomical or irreversible changes set in.

Title: Risk Factors of Post-Covid Fibrosis

Name of Presenter: **Dr. Rucha Sane**

Authors (or Co-authors): **Dr. Shiraj Kane, Dr. Bharat Dhareshwar**

Institution/Author Organization: **MGM**

Medical Collage And Hospital, Navi Mumbai

INTRODUCTION:

Covid 19 infection and development of post covid fibrosis with chronic lung impairment is of increasing concern this year. Extent of fibrosis & quality of life results in morbidity and mortality in older patients who suffer from COVID-19.

AIMS AND OBJECTIVES:

To determine reliable clinical or laboratory markers indicating risk of post-covid fibrosis and predicting outcomes.

MATERIALS AND METHODS:

Prospective study. 100 inpatient RT-PCR positive cases fulfilling inclusion criteria with valid informed consent are included in this study. History and necessary investigations will be noted. After repeat RT-PCR negative test patients will be followed up for chest x-ray.

RESULTS: In this study, 67% cases developed post-covid fibrosis. Out of those, all fibrosis cases had raised CRP and LDH, 45% had undergone more than 7 days of mechanical ventilation, 65% were more than 75 years of age, 60% had history of COPD, 45% gave history of smoking, 94% had moderate to severe disease at time of presentation.

CONCLUSION:

There is a need to evaluate the proportion of patients that are prone to develop chronic lung disease following COVID 19 infection. This study emphasizes on discovering of progress of COVID-ARDS to pulmonary fibrosis and potent predictors of mortality in covid patients.

Title: Pulmonary function in cured pulmonary tuberculosis cases (TUBERCULOSIS)

Name of Presenter: **Sharad Bagri**

Authors (or Co-authors): **Dr Devendra Kumar Singh**

Institution/Author Organization: **Sharda University**

Background:

It has been observed that several patients of cured pulmonary tuberculosis (PTB) suffer with lung dysfunction which is less documented routinely. Aim of this study is to estimate the lung function abnormality and exercise capacity including diffusion capacity of lung for carbon monoxide (DLCO) in cured PTB cases.

Methods:

Hospital based observational descriptive study was done among 100 patients of cured PTB. These patients were evaluated by spirometry and DLCO to assess their lung function and were classified as normal or abnormal. Modified medical research council (mMRC) dyspnea scale for symptom assessment and 6-minute walk test (6MWT) to determine the exercise capacity was also done.

Results:

83 (83 %) patients having abnormal spirometry. 17 (17%), 32 (32%) and 34 (34%) had obstructive, restrictive and mixed pattern respectively. 22 (22%), 43 (43%) and 4 (4%) patients had mild, moderate and severe decrease in DLCO respectively. More than half of the patients having normal spirometry had reduced in DLCO.

Conclusion:

The prevalence of abnormal lung functions is high even after complete anti-tubercular treatment. DLCO could be a better tool for evaluation of lung function in these patients. There is need to formulate guidelines for pulmonary rehabilitation of cured PTB patient.

Title: FACTORS PREDICTING THE DIAGNOSTIC YIELD OF EBUS-TBNA IN SAMPLING MEDIASTINAL AND HILAR LYMPH NODES

Name of Presenter: **SHIBINI P, SENIOR RESIDENT**

Authors (or Co-authors): **Dr.SHIBINI P, Dr.T P RAJAGOPAL (PROFESSOR AND HOD), Dr. SURAJ K P (PROFESSOR), Dr. ANAND M (ASSOCIATE)**

Institution/Author Organization: **INSTITUTE**

OF CHEST DISEASES, GOVT.MEDICAL COLLEGE, KOZHIKODE**BACKGROUND:**

EBUS-TBNA is a relatively quick, safe, day care procedure. Various patient related factors and procedure related factors influencing the diagnostic yield of EBUS-TBNA. Studies taking all comprehensive factors together to predict the diagnostic yield is lacking.

AIM AND OBJECTIVE:

To evaluate factors predicting the diagnostic yield of EBUS-TBNA in sampling mediastinal and hilar lymph nodes.

METHODOLOGY:

A cross sectional study done on patients with enlarged mediastinal/hilar LN based on CT thorax. Patient related factors and EBUS TBNA related factors like depth of sedation, LN characteristics, stations, no:of LN sampled,no:of passes per node, needle type, specimen type,suction, duration of procedure,use of ROSE were assessed and compared with EBUS-TBNA HPR.

RESULT:

73 patients included in study. Mean age-60.78+/-13.664 SD. EBUS TBNA HPR was positive in 50 patients(68.3%). Squamous cell carcinoma(23.3%),adenocarcinoma(21.9%),poorly differentiated(11%), granulomatous lymphadenitis(9.6%), multinucleate giant cells(2%). Significant association found with sedation(p=.0001), suction use(p=.0001), no:of passes per node(p.0001), size of LN(p=.0001), duration of procedure(p=.0001), gauge of needle(p=.035). No significant association found with age, sex, FOB findings, ROSE, LN station, shape, necrosis.

Conclusion: Nodal size>1cm,more no:of passes/node,suction use,moderate sedation,22 gauge needle could be the factors predicting diagnostic yield of EBUS TBNA.

Clinical implications:

By doing EBUS TBNA we can avoid invasive procedures

Title: Predictors and prognostic factors in a large Pulmonary embolism series

Name of Presenter: **SHONA ARLIN CHRISTOPHER**

Authors (or Co-authors): **Dr. Richa Gupta, Dr. D.J. Christopher**

Institution/Author Organization: **CHRISTIAN MEDICAL COLLEGE, VELLORE**

Introduction:

There are several risk factors associated with the development of pulmonary embolism (PE) and prognostic factors associated with mortality.

Methods:

In this prospective observational study 222 pulmonary embolism suspects were screened for PE. Demographic details, clinical findings, predisposing factors were noted. CT-pulmonary angiogram was done to confirm PE. These variables were compared between those diagnosed to have PE and those without.

Results:

Malignancy was significantly higher in the PE group (P=0.003) and the non- PE group had significantly higher cardiovascular disease (P=0.009), chronic lung disease (P<0.001) and chronic liver disease (P=0.023). Univariate regression for prolonged hospitalization showed significant correlations with chronic heart disease (P=0.13;IRR=1.59), hemoglobin <10g/dl (P= 0.042, IRR= 1.35) and chronic kidney disease (P=0.05;IRR=2.72) and negative correlation for malignancy (P = 0.026;IRR=0.64) and thrombolysis treatment (P=0.005;IRR=0.57). Univariate regression for mortality at 3 months showed significant correlations with chronic pulmonary disease (P=0.013;IRR=3.03).

Conclusion:

Our largest Indian single centre study showed malignancy was risk factor for PE, whereas cardiovascular disease, chronic lung and chronic liver diseases were associated with Non-PE diagnosis. In patients with PE prolonged hospital stay was associated with chronic heart disease, chronic kidney disease and hemoglobin <10gm/dl and 3-month mortality with chronic pulmonary disease.

Title: EVALUATION OF CRITERIA FOR CLINICAL CONTROL IN PATIENTS WITH COPD - A HOSPITAL BASED PROSPECTIVE STUDY

Name of Presenter: **Dr Shyam Sunder Washani**

Authors (or Co-authors): **Dr Shyam Sunder Washani ,DR G S GAUDE ,DR BHAGYASHRI PATIL ,DR JYOTHI HATTIHOLI,DR GAUTAM S**

Institution/Author Organization: **JN MEDICAL COLLEGE ,KLE UNIVERSITY, BELAGAVI**

Introduction

Chronic obstructive pulmonary disease (COPD) is a dynamic disease and there is a need to have criteria to determine the stability of the patient and to assess the risk of exacerbation. The concept of control of COPD was introduced by Soler-Cataluna et al and we tried to evaluate the concept of clinical control of COPD in the Indian setup.

Methods

Stable COPD patients underwent Spirometry,6MWT, BODE index was recorded & questionnaires CAT(COPD assessment test) and CCQ (clinical COPD questionnaire) were filled by patients during OPD visit. Patients were reassessed after 3 months and were classified into Controlled and Uncontrolled subjects and followed up for 24 weeks.

Results

106 stable COPD patients were evaluated for the control status. The mean age was 61.11 years with males (68.8%).After evaluation as per the criteria predefined for the control of COPD, 51.8 % in the mild/moderate COPD group and 15.09% patients in the severe COPD group were classified as Control COPD patients. On follow-up, the exacerbations rate in the Control group was 21.95% and 64.7% in the Uncontrolled group.The overall hospitalization rate observed was 14.28%.

Conclusion

The Criteria for Control of COPD is a unique and effective method to assess the stable COPD patient.

Title: The effect of early CPAP therapy for OSA in patients with chronic kidney disease

Name of Presenter: **Dr Anand V**

Authors (or Co-authors): **Dr Melcy cleetus, Dr Jolsana Augustine, Dr Divya R, Dr Chandrasekar S, Dr Rajesh V**

Institution/Author Organization: **Rajagiri Hospital, Aluva, Ernakulam**

Background/Introduction:

Obstructive sleep apnea is common in patients with chronic kidney disease (CKD). Uncontrolled hypertension encountered in untreated OSA patients may worsen renal function. Although OSA is found in up to 80% of CKD patients, there are limited data available regarding the effect of CPAP on the natural history of CKD. This study was undertaken to assess the benefits of CPAP therapy in CKD patients with OSA with regard to preservation of renal function.

Aims /Objectives:

To evaluate the effect of CPAP therapy in retarding the worsening of renal functions in CKD patients with OSA

Methodology:

Patients having CKD with OSA were recruited for the study. Patients on hemodialysis were excluded. CPAP therapy was initiated in all patients. Serum creatinine was checked at 2 monthly intervals. CPAP compliance was monitored. Creatinine value (at 6 months) of CPAP compliant patients were compared with that of non-compliant patients. Student's t-test and Fisher's exact tests /chi-square test were applied to compare the differences between the two groups in terms of numbers and proportions.

Results:

During the study period 25 patients with CKD were diagnosed with OSA after a PSG evaluation and CPAP therapy was advised. Of these, 7 were on hemodialysis and were excluded from the study. 18 patients were finally selected for analysis. Of these 18 patients who were potential candidates for CPAP therapy 7 failed to initiate CPAP therapy. Remaining 11 patients used CPAP therapy for the entire study period. Of the 11 patients in the CPAP group, only 1 patient showed a worsening of renal function, where as 5 of 7 patients in group 2 showed a worsening of creatinine. This difference was statistically significant.

Conclusion:

Early and regular initiation of CPAP prevents the progression of renal impairment in CKD patients with OSA.

Title: Clinico-pathological Profile of Bronchogenic Carcinoma Patients attending Burdwan Medical College and Hospital: A Cross-Sectional study

Name of Presenter: **Dr. Anirban Gandhi**

Authors (or Co-authors): **Dr. Anirban Gandhi, Prof. Dr. Santanu Ghoshj, Dr. Aritra Mahapatra, Dr. Pronoy Sen**

Institution/Author Organization: **BURDWAN MEDICAL COLLEGE AND HOSPITAL, PURBA BURDWAN, WEST BENGAL**

INTRODUCTION:

Studies on epidemiology on bronchogenic carcinoma are few especially in areas outside Kolkata. This study was undertaken in a district Medical College in West Bengal.

OBJECTIVES:

The aim of the study was to find the distribution pattern of bronchogenic carcinoma patients across socio-demographic, clinico-radiological and pathological types.

METHODOLOGY:

A cross sectional study was undertaken that included consecutive patients with pathologically proven lung cancer diagnosed between October 2018 to April 2020 in the Department of Pulmonary Medicine, Burdwan Medical College, West Bengal.

RESULT:

Majority of the patients were male (81%), smoker (76%) and 50% belong to the age group 40-60 years. Maximum number of patients were illiterate (66%), from rural area (84.6%) and from lower and lower middle class (96%). Cough (86.5%) was the most common symptom, followed by breathlessness (64%); clubbing (40%) was the predominant sign. Radiologically mass lesions was the most common (52%) followed by mass with effusion (26%) and 49% lesions were peripheral. Out of 104 cases 81(77.8%) were non-small cell type, 17% were small cell type and 4.8% were metastasis from different organs.

CONCLUSIONS:

Middle aged, rural, smoker, male were predominant groups of lung cancer patients who Commonly presented with cough. Non-small cell type was majority.

Title: Profile of DPLD (Diffuse Parenchymal Lung Disease) patients in a district of West Bengal; a cross-sectional study in Burdwan Medical College (BMCH) and Hospital, Purba Bardhaman

Name of Presenter: **Dr. Aritra Mahapatra**

Authors (or Co-authors): **Dr. Aritra Mahapatra, Prof. Dr. Santanu Ghoshj, Dr. Pronoy Sen, Dr. Anirban Gandhi, Dr. Hrishikesh Barui**

Institution/Author Organization: **BURDWAN MEDICAL COLLEGE AND HOSPITAL, PURBA BURDWAN, WEST BENGAL**

Introduction:

DPLD are a heterogeneous group of acute and chronic bilateral lung diseases of known and unknown causes. Studies on epidemiology of DPLD are few in West Bengal especially in areas outside Kolkata. This study was undertaken in a district Medical College in West Bengal.

Objectives:

The aim of the study was to find out the distribution pattern of DPLD across socio-demographic and clinico-radiological variables.

Methodology:

It is a cross sectional descriptive study in consecutive diagnosed DPLD patients (>18 years) in Department of Pulmonary Medicine of Burdwan Medical College, conducted from May-2019 to April-2020.

Result:

Among a total of 58 patients, majority of the patients were female (72%), non-smoker (all female) and 63% belong to the age group 40-60 years. Majority of patients were from rural area (82%), belonging to lower and lower middle class (65.5%) (Modified Kuppuswamy Scale). Cough (100%) was the most common symptom, followed by breathlessness (98%). Most common comorbidity was hypertension (26%) followed by diabetes mellitus (20%). Common CT patterns were UIP (67%), NSIP (21%), Nodular (12%). Fifty three percent patients showed positive connective tissue disease markers.

Conclusion:

Middle aged, rural, non-smoker female were predominant groups of DPLD patients in this study. Commonest pattern is UIP.

Title: PROGNOSTIC SIGNIFICANCE OF LEUKOCYTE DIFFERENTIALS IN COVID 19

Name of Presenter: **DR. JYOTHI MARIAM JOSE**

Authors (or Co-authors): **Prof K V V**

Vijayakumar MD., Dr.V Suryakumari MD., Dr. K Preethi MD

Institution/Author Organization: **ANDHRA MEDICAL COLLEGE, VISAKHAPATNAM**

Introduction :

The new coronavirus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has spread to many countries around the world, causing a global outbreak of COVID-19. The world is burdened by high morbidity and mortality. Complete blood count is the most available, efficient and economic examination. This study aims to analyse the complete blood count of cured and dead patients, in order to obtain key indicators of disease progression and outcome and to provide guidance for subsequent clinical practice.

Material & Methods :

Retrospective analysis of the data of 100 patients who are COVID 19 positive admitted at Government Hospital for Chest and Communicable Diseases/ Andhra Medical College, Visakhapatnam between August 2020 to November 2020. Using severity, duration of hospital stay, and the time required for nucleic acid results became negative as prognostic indicators, we explored the relationship between these inflammation based markers and prognosis of COVID-19. This association is statistically modelled using a penalised maximum likelihood logistic regression model.

Results :

Low LMR Ratio is associated with increased severity of COVID 19

Title: Demographic & clinical profile of COVID-19 patients admitted at a tertiary care hospital in

Name of Presenter: **Dr Roshan Kumar.M**

Authors (or Co-authors): **Dr Rajarajeshwari, Dr Senthil , Dr Sridhar, Dr Vinod**

Institution/Author Organization: **Government Hospital of Thoracic Medicine, Tambaram, Chennai**

Background/Introduction

In December 2019, some pneumonia cases of unknown origin were identified in Wuhan, China. The World Health Organization named the disease caused by SARS-Cov-2 as coronavirus disease 2019 (COVID-19), and declared it a public health emergency of international concern. The first confirmed patient with covid-19 in the India was reported on 30th January 2020 and in Tamilnadu was on 7th March 2020.

Aims/Objectives

To describe the characteristics, clinical, laboratory and radiological features of patients with laboratory-confirmed SARS CoV- 2 infection admitted in our hospital.

Methodology :

This is a observational study in patients admitted from 24th June to 5th Dec 2020 and had a laboratory-confirmed COVID-19 infection, were included in this study. All patients were initially evaluated at COVID triage care centre and referred to Government Hospital of Thoracic Medicine. We extracted the recent exposure history, clinical symptoms or signs, and laboratory findings on admission from case sheet. Radiological assessments included chest radiography, computer tomography (CT), and all laboratory testing was performed according to the clinical care needs of the patient.

Results :

During the study period, 2555 patients were admitted in our hospital. Two third of enrolled patients were male. Among symptoms fever & chills accounted for 56%, cough 46 %, general weakness 23% and breathlessness 20 %. Since the cases were referred from triage centre, mild to moderate COVID 19 pts were received in our centre. Among the comorbid diabetes was 13 % and hypertension was 9%. Mortality was only two. The detailed analyses will be presented.

Title: Clinical Profile of COVID 19 Positive Patients Admitted to a Tertiary Care Hospital

Name of Presenter: **Dr Sameer Arbat**

Authors (or Co-authors): -

Institution/Author Organization: **KRIMS Hospitals, Nagpur, India**

Background:

Novel corona virus (SARS-COV-2) is highly infectious and has become a global health emergency with high mortality rate.

Aim:

We are hereby presenting analysis of clinical data collected from the first 100 COVID positive patients admitted to our Centre for treatment.

Method: Clinical characteristics such as age, gender, symptoms, hospital stay, CT score, O2 requirement and treatment outcome were tabulated and analyzed.

Result:

Total 100 positive patients were included for quantitative analysis. Majority of patients were above 50 years age. The most common symptoms were cough (61%), breathlessness (55%) and fever (40%). Average hospital stay was 8.95 days ranging from minimum 2 to maximum 33 days. 13 patients showed less than 10 CT score whereas 27 patients CT score was above 10. There were 67% patients requiring O2. HT was the major comorbidity associated. Remdesivir Injection (78%), Fabiflu/Favipiravir (64%) and Solumedrol (62%) were the major drugs given for the treatment.

Conclusion:

The most common presenting symptoms included cough, fever, and breathlessness. Patients who required ICU admission at presentation had a worse prognosis. Those with greater severity of symptoms were mainly elderly patients requiring O2 with hypertension as major comorbidity.

Figure 1: Tabular representation of 100 COVID-19 patients' data.

Title: Assessment of RV dysfunction as predictors of severity in Pulmonary Embolism

Name of Presenter: **SHONA ARLIN CHRISTOPHER**

Authors (or Co-authors): **Dr. Richa Gupta, Dr. D. J. Christopher, Dr. Lijo Varghese**

Institution/Author Organization: **CHRISTIAN MEDICAL COLLEGE, VELLORE**

Introduction:

Hemodynamic instability in pulmonary embolism is due to right ventricular dysfunction and is a poor prognostic factor associated with severity and increased mortality. Blood biomarkers such as Troponin T and NT pro BNP, and features of RV dysfunction on Echocardiogram and CT pulmonary angiogram could have potential in predicting severity and mortality and this study was designed to assess this.

Methods:

Patients with a confirmed diagnosis of pulmonary embolism by CTPA were included in this study. The patients were classified as stable, sub-massive or massive PE as per standard criteria. Echocardiogram and ECG was performed, serum levels of Troponin T and NT pro BNP were obtained. CT scan was read by an experienced radiologist for features of RV dysfunction.

Results:

In this study the following echocardiographic parameters: TAPSE < 16mm, FAC < 35% presence of McConnell's sign, RV/ LV ratio \geq 0.9; and CTPA parameters :MPA \geq 29mm and RV/ LV ratio \geq 0.9 were good predictors of severity of pulmonary embolism.

Conclusion:

In patients with PE, cardiac biomarkers and echocardiographic & CT features of RV dysfunction and correlated well with severity grades.

Title: Treatment of undiagnosed airflow obstruction in patients with well controlled obstructive sleep apnea leads to improvement in symptom scores and sleep quality

Name of Presenter: **Tarang Kulkarni**

Authors (or Co-authors): **Milind Sovani, Raja Dhar**

Institution/Author Organization: **Fortis Hospital, Kolkata**

Study Objectives:

To estimate the prevalence of undiagnosed

airflow obstruction and assess whether its treatment leads to improved sleep quality in patients with obstructive sleep apnea (OSA).

Methods:

Patients with OSA and established on CPAP therapy for 3 months were included and subjected to spirometry. COPD assessment test (CAT) score, Pittsburg Sleep Quality Index (PSQI), Functional Outcome of Sleep Questionnaire 10 (FOSQ-10) and Epworth Sleepiness (ESS) score were recorded at baseline for all and after 6 weeks of treatment in those with airflow obstruction. This was defined as FEV1/VC <70% or FEV1/VC <70 to 75% and CAT score >10. Patients with COPD (smoking history >20pack years) underwent therapy with Indacaterol/ Glycopyrronium inhaler for 6 weeks, patients with asthma were treated with formoterol/ budesonide.

Results:

Of the 104 patients (mean age 57.1 years), 37 (35.6%) patients (23 men) had an overlap of OSA and airflow obstruction. Significant improvement ($p < 0.001$) was observed in PSQI (-1.14), ESS (-1.6) and CAT (-2.8) after treatment of underlying airways disease.

Conclusions:

In patients with OSA, even mild airflow obstruction is associated with a negative impact on sleep quality above that caused by OSA. Moreover, sleep quality and symptoms can be improved with treatment of underlying airflow obstruction.

Title: A CROSS-SECTIONAL STUDY TO ASSESS THE LEVELS OF SERUM MAGNESIUM LEVELS AS AN INDICATOR OF ASTHMA SEVERITY AMONG PATIENTS ATTENDING PULMONARY MEDICINE DEPARTMENT OF TERTIARY CARE CENTER

Name of Presenter: **AABID SHAFI WANI**

Authors (or Co-authors): **Dr J.Rawat, Dr Dev Jangpangi, Dr Ritisha Bhatt**

Institution/Author Organization: **SGRRIM&HS PATAL NAGAR DEHRADUN**

INTRODUCTION:

The relation between magnesium and asthma is well established over the years. Asthma is characterized by airway obstruction in which increased airway smooth muscle tone is the main mechanism leading to this obstruction. Theoretically, magnesium can induce bronchial smooth muscle relaxation in a dose-dependent manner by inhibiting calcium influx and inhibiting cytosol, histamine release from mast cells or acetylcholine release from cholinergic nerve endings. The present study was done to evaluate the levels of serum magnesium in asthma patients and to study its associations with asthma severity.

AIMS AND OBJECTIVES:

To study the association between serum magnesium levels and clinical profile of bronchial asthma in stable disease & exacerbation patients.

METHODOLOGY:

This is a cross-sectional case-control study conducted in Respiratory medicine department of a tertiary care hospital in India. 60 patients were allotted to each group (group I stable asthma group II asthma exacerbation and group III comprised of healthy controls).

RESULTS:

It was observed that in exacerbation and stable asthma group all of the patients had normal serum magnesium levels. Chi-square test was calculated for all the three groups. Association between three groups was measured p value was 0.950 which was statistically insignificant.

CONCLUSION We conclude that serum magnesium levels are not associated with asthma control.

Title: Effect of Vitamin D3 supplementation on the control of Bronchial Asthma – Prospective study

Name of Presenter: **Dr. Aishwarya.C**

Authors (or Co-authors): **Dr.Gajanan S Gaude, Dr.Bhagyashri Patil, Dr. Jyothi Hattiholi, Dr.Gautam S, Dr.Kiran Kumar Pujar**

Institution/Author Organization: **KLE Academy of Higher Education and Research , JNMC, Belagavi.**

Background and Objectives:

Vitamin D is found to be linked to Bronchial Asthma. Vitamin D in bronchial asthma helps in various immunological pathways. This study was done to estimate serum vitamin D levels in bronchial asthma patients and to evaluate clinically the correlation between its supplementation and asthma control.

Methodology:

99 patients diagnosed to have bronchial asthma were included. Vitamin D levels were obtained and patients were grouped based on the severity of asthma, severity of exacerbation and Asthma Control Test Score. 60000 IU of Vitamin D3 was supplemented per week for 8 weeks. After 24 weeks of follow up, serum Vitamin D levels, FEV1%, severity of asthma , severity of exacerbation and ACT score were studied.

Results:

79.80% patients had deficient and 20.20% had insufficient levels. After supplementation , the mean Vitamin D levels increased from 15.74±5.90 ng/ml to 24.82±7.06 ng/ml (p=0.0001). FEV1% increased from 53.57±14.89% to 65.57±15.34 (p=0.0001). ACT score improved from 13.30±2.83 to 17.85±2.93 (p=0.0001). Severity of asthma and exacerbation had reduced significantly(p=0.0001)

Conclusion:

Vitamin D levels were low in patients with bronchial asthma. After supplementation there was a significant improvement in the lung function, better asthma control and reduction in the severity and exacerbations.

Title: Association of psychiatric comorbidity in asthma

Name of Presenter: **ARAVIND**

Authors (or Co-authors): **Santosh kumar, Gajendra vikram singh, komal lohchab, Ashutosh Gupta**

Institution/Author Organization: **S.N.MEDICAL COLLEGE**

INTRODUCTION:

Asthma is a chronic inflammatory condition, which is associated with increase in airway hyper responsiveness that leads to recurrent episodes of wheezing, breathlessness, chest tightness and coughing .

AIMS AND OBJECTIVE:

Asthma is a very common respiratory illness , in which some of the disease related factors may increases the vulnerability to psychiatric disorders . This study was done to determine the prevalence of psychiatric co-morbidity in patients of bronchial asthma

METHODOLOGY:

It is an observational study conducted in 200 follow-up patients of bronchial asthma attending respiratory medicine OPD in agra. Psychiatric comorbidities are assessed by pre designed short structured questionnaire using Mini international neuropsychiatric interview.

RESULT:

Among 200 patients of bronchial asthma 24% had psychiatric co-morbidity mainly depressive episode (45%) . A significant association is found between duration of active illness (more than 1 year) (P =0.001), and age of patient above 60 years (P =0.001) with psychiatric co-morbidity of asthma patient.

CONCLUSION:

Our study shows there is increased prevalence of psychiatric co-morbidities in patients of bronchial asthma. The predominant psychiatric disorder seen is depressive disorder, the treatment includes medical treatment of asthma and psychiatric evaluation to prevent psychiatric comorbidity or its early management.

Title : PREVALENCE AND DEMOGRAPHICAL VARIATION OF ASTHMA COPD OVERLAP (ACO) IN PREVIOUSLY DIAGNOSED OAD PATIENTS OF SOUTHERN RAJASTHAN.

Name of Presenter: **Ashish Bansal**

Authors (or Co-authors): **Dr. Lalit shrimali**

Institution/Author Organization: **Geetanjali Medical college and hospital, Udaipur**

Background:

Asthma COPD overlap(ACO) is widely gaining recognition as separate phenotype of chronic obstructive airway disease with distinct treatment and prognosis. It is an important challenge of accurately diagnosing ACO.

Aims:

To estimate the prevalence of ACO among patients previously diagnosed as obstructive airway disease and compare their demographical profile.

Methodology:

This was observational study of 351 patients with obstructive airway disease visited at our center between 2018-2019. A detailed chart review including demographic, clinical, laboratory investigations, spirometry, and radiological findings were recorded in prestructured proforma. The diagnosis of ACO was based on GINA/GOLD criteria 2019. Results Of the total (n=351), ACO was diagnosed in 109 (31.05%)patients. Female predominance 61 (55.96%)patients was observed. There was a significantly higher incidence of wheeze, nasal symptoms, family history of atopy, as compared to obstructive airway disease. There was no significant difference in radiological findings between two groups.

Conclusion:

ACO represents a large proportion (31.05%) of obstructive airway disease patients with female predominance, higher comorbidities. GINA/GOLD criteria 2019 are important questionnaire to differentiate ACO from obstructive airway disease with limited role of chest imaging. The study results have implications for earlier identification and appropriate treatment of this distinct clinical phenotype.

Title: A CROSS -SECTIONAL STUDY OF DEPRESSION AND ANXIETY IN ASTHMA PATIENTS ATTENDING TERTIARY CARE CENTRE IN NORTH KERALA

Name of Presenter: **DR LUBAIBA K**

Authors (or Co-authors): **DR SWETHA, DR MANOJ DK**

Institution/Author Organization: **GOVERNMENT MEDICAL COLLEGE, KANNUR**

INTRODUCTION

Asthma is a common chronic non-communicable disease causing reduced quality of life, due to its physical, psychological and social effects.

OBJECTIVES

- 1) To assess prevalence of depression and anxiety among stable asthma patients in a tertiary care centre.
- 2) To assess relationship between Bronchial asthma symptom control and depression, anxiety.
- 3) To assess quality of life in asthma patients

METHODS

A cross-sectional study of 1 year duration (July 2018-2019). A consecutive series of 150 stable asthmatic patients, attending the pulmonology OPD, satisfying inclusion criteria were included in the study. Sociodemographic and clinical details collected using Socio Demographic Profoma. Psychological status and Quality of life assessed by HADS 23 scale and Standardised Asthma quality of life questionnaire respectively.

RESULTS

Our study showed among stable asthma patients 22% have depression and 22% have anxiety. 48.6% of them got HAD score >8 and required further psychiatric evaluation. Significant correlation seen between the asthma control with asthma and depression symptom among our patients (p value 0.002 and 0.011 respectively). AQLQ score assessment showed median 4.91, interquartile range 2.4

CONCLUSION

Depression and anxiety is substantially related to quality of life and hospitalization in asthma patients. Hence routine screening for the same should be considered for them.

Title: ASSOCIATION BETWEEN OBESITY AND LEVEL OF CONTROL OF ASTHMA

Name of Presenter: **Dr. Midhun Mohan K**

Authors (or Co-authors): **Dr. Sreekala C, Dr. Sanjeev Nair**

Institution/Author Organization: **Government Medical College Thiruvananthapuram**

INTRODUCTION:

Obesity has been shown to be not only a risk factor for developing asthma but also associated with inadequate asthma control and poor quality of life.

AIM OF THE STUDY:

To determine whether obesity is associated with level of control of asthma in patients presenting to Department of Pulmonary Medicine, Medical College, Thiruvananthapuram and to determine factors associated with poor control of asthma.

MATERIALS & METHODOLOGY:

Study design-prospective cohort study. Asthma patients attending the Department of Pulmonary Medicine were included, with obese asthmatics as exposed group and non-obese as unexposed. Demographic characteristics and level of control (GINA 2018) were collected using structured questionnaire at baseline and

monthly for three months.

RESULTS:

Among the patients 34 patients were obese and 68 non-obese. Mean age was 43.08±14.84 and 80(78.43%) patients were females. After 3 month follow-up, among the obese asthmatics, 9(26.47%) had uncontrolled asthma, 17(50.00%) had partially-controlled asthma and 8(23.53%) had well controlled asthma as compared to 9(13.24%) had uncontrolled asthma, 14(20.59%) had partially-controlled asthma and 45(66.18%) had well controlled asthma among the non-obese asthmatics; the difference between the groups was statistically significant (p<0.001).

Incorrect inhaler technique, depression symptoms, GERD, OSA, Sex, Socioeconomic status, Passive smoking exposure, FWSE and duration of breathless were other factors associated with poor control of asthma.

CONCLUSION:

Obesity was associated with poor control of asthma in our population.

Title: Correlation of Diabetes and asthma in young Adults: a Case Study

Name of Presenter: **Dr Mobeen Quadri**

Authors (or Co-authors): **Dr Amal Johnson, Dr R Narasimhan senior consultant Apollo chennai**

Institution/Author Organization: **ALLURI SITARAMARAJU INSTITUTE OF MEDICAL SCIENCES, ELuru, 534005**

Introduction:

Diabetes mellitus is a condition whose main characteristic is excessive blood glucose and, if not controlled, can cause chronic systemic complications such as, nephropathy, pulmonary dysfunction, retinopathy and vascular disorders, among others. Lung complications in diabetics, due to chronic hyperglycemia, have been studied more recently

Aims and Objectives:

To study the correlation between Diabetes and Asthma in young adults

Materials and methods:

Our study consists of 100 patients whose age is between 18 years to 40 years (young adults) came to our OPD who have clinical features of Bronchial Asthma and confirmed obstructive airway disease with good reversibility on Spirometry, levels of HbA1C are estimated in those individuals and results are correlated

Results:

Approximately 45% of known Asthma patients have HBA1C values within Normal Limits (<5.6), 50% have HBA1C values in pre-diabetic range (5.6 to 6.4), only 5% have in the Diabetic range (>6.4).

Conclusion:

we found there is a definitive correlation between Diabetes and Asthma in young adults

Title: A Prospective study of prevalence of Severe Asthma with Fungal Sensitization, and an open labelled, randomized controlled trial of Itraconazole in patients having Severe Asthma with Fungal Sensitization

Name of Presenter: **DR. S.A. NATESH**

Authors (or Co-authors): **DR. S. KEERTHIVASAN**

Institution/Author Organization: **COIMBATORE MEDICAL COLLEGE HOSPITAL**

Introduction:

Atopic asthma involves an exaggerated immune response characterized by immunoglobulin E (Ig-E) activation and mast cell degradation. Atopy can be clinically elicited with a positive skin prick test or specific antibodies to IgE in serum against common aeroallergens. Allergic bronchopulmonary aspergillosis (ABPA) is an idiopathic inflammatory disease of the lung, characterized by an allergic inflammatory response to colonization of the airways by *Aspergillus fumigatus*. Few patients with poorly controlled asthma have some of the criteria for ABPA-S, but do not reach the threshold for diagnosis. These patients have been designated as having Severe Asthma with Fungal Sensitization (SAFS). The importance of identifying such patients is based on several studies indicating that antifungal therapies like Itraconazole may significantly improve asthma control and reduce oral corticosteroid exposure.

Objectives:

- 1) To evaluate the prevalence of Severe Asthma with Fungal Sensitization.
- 2) To study the role of Itraconazole in patients of severe asthma with fungal sensitization by randomized controlled trial.

Methodology:

Based on detailed history and pulmonary function test 100 patients with severe asthma were taken in for study. *Aspergillus fumigatus* specific skin prick test was done for all. Patients who showed positive skin prick test were subjected to various tests to rule out ABPA and diagnose patients having SAFS. Absolute eosinophil count less than 1000/mm³, Serum

IgE less than 1000 IU/mL, HRCT lungs without features suggestive of ABPA were regarded as patients with SAFS. Patients with SAFS were taken in for randomised control study and were separated into 2 groups. All patients received basic asthma medications for severe category in addition group A received tablet Itraconazole 200mg BD for 12 weeks and group B received placebo. Symptomatic assessment was taken in account for the patients whether they had well controlled/ partially controlled/ uncontrolled asthma symptoms and compared with the outcome. Serial PFT was done for all patients 2 weekly, Serum IgE, Absolute Eosinophil count were repeated at the end of 12 weeks.

Results:

Among the study population, 30(30%) participants were aged between 18 to 24 years, 23 (23%) were aged between 25 to 39 years, 40 (40%) were aged between 40 to 59 years and 7 (7%) were aged >60 years. 32 (32%) participants were male and remaining 68 (68%) participants were female. Among the study population 27 (27%) participants showed Positive Skin prick test to *Aspergillus fumigatus* specific antigen. Among the 27 patients, HRCT lungs showed features of allergic bronchopulmonary aspergillosis-CB in 5 (18.52%) participants and 22 (81.48%) participants had Normal HRCT. Based on Sr. IgE and absolute eosinophil count, 17 (62.96%) participants were categorised as having allergic bronchopulmonary aspergillosis and 10 (37.04%) participants with severe asthma with fungal sensitization. Among 10 SAFS patients 5(50%) were in group A and 5(50%) were in group B. Symptomatically all 10 patients had uncontrolled asthma. 5 participants with uncontrolled symptoms in Group A had their symptoms well controlled after 12 weeks. Among 5 participants with uncontrolled symptoms in Group B, 4 (80%) had partially controlled asthma and 1(20%) had uncontrolled asthma after 12 weeks. Out of 5 patients in Group A, PFT showed mild obstruction in 3(60%) and normal spirometry in 2(40%) after 12 weeks. In group B, PFT showed 1(20%) had mild obstruction and 3(60%) had moderate obstruction and 1(20%) had very severe obstruction after 12 weeks. Sr. IgE of patients taken at the beginning and at the end of study showed significant reduction in patients in group A with mean difference of 433.20 than group B where the mean difference was 175.56. Similarly, Absolute eosinophil count taken at the beginning and at the end of study showed significant reduction in patients in group A with mean difference of 303.60 than group B where the mean difference was 110.40.

Conclusion:

Patients in group A who received Itraconazole

compared with group B patients who received placebo had well appreciable improvement in their control of symptoms. As evident, their pulmonary function improved and had significant reduction in levels of Sr.IgE and Absolute eosinophil count. Hence by this study the efficacy of Itraconazole in patients with severe asthma with fungal sensitization is substantiated and is proven clinically useful.

Title: STUDY OF CLINICAL PROFILE OF BRONCHIAL ASTHMA PATIENTS ASSOCIATED WITH FOXP3 GENE POLYMORPHISMS

Name of Presenter: **PRASHAMSA CHELIMALLA**

Authors (or Co-authors): **Dr M G Krishna Murthy, Dr. T Pramod kumar**

Institution/Author Organization: **GANDHI MEDICAL COLLEGE AND HOSPITAL**

INTRODUCTION:

Asthma is an airway hyperresponsive disease characterized by the expression of multiple inflammatory genes, including cytokines. AIMS AND OBJECTIVES: 1.To determine the clinical profile of selected gene polymorphism of FOXP3 gene. 2.To assess the disease severity and to correlate with phenotypes.

METHODOLOGY:

This is a cross sectional study conducted among clinically diagnosed asthma patients in the department of respiratory medicine, Gandhi Hospital, Secunderabad. For the present investigation blood samples were collected from a total of 150 patients and 50 controls. Blood samples as well as clinical data were collected in a well designed proforma from all the patients and controls for analysis.

RESULTS:

In the present study, out of 150 patients, 49(32.5%) have CA genotype, 41(27.3%) have C genotype, 25(16.5%) have CC genotype, 22(14.6%) have A genotype and 13(8.6%) have AA genotype. 96(64%) falling into severe asthma category. 38(25.3%) are moderate and 16(10.6%) are mild. 33(22%) of CA and 22(14.6%) C genotypes were falling into severe category.

CONCLUSION:

We conclude that with the inclusion of additional samples, the functional significance of the selected polymorphism might give an insight to explore the use of Tregs in asthma therapeutics.

Title: Quantitative Correlation between values of Serum specific IgE with grades of

skin prick test and their clinical utilityName of Presenter: **Dr. Roopanshi Jain**Authors (or Co-authors): **Dr. Ashish Kumar Prakash, Dr. Anand Jaiswal, Dr. Bornali Datta**Institution/Author Organization: **Medanta the Medicity, Gurugram****BACKGROUND:**

When a skin prick test is done and we find a patient to be sensitive to multiple common aero-allergen, then it becomes difficult to decide about immunotherapy. Many a times correlation with history helps. But it's difficult to elicit exact history.

METHODS:

This study included 70 patients diagnosed with allergic bronchial asthma. Total eleven common respiratory allergen were used. The grading of skin prick test was done +1 to +4 and the was compared with the quantitative values in ku/l of serum specific IgE.

RESULTS:

Results obtained from SPT grading were compared with sIgE values. SPT4+ grading was seen in house dust allergens only. Such patient had a greater sIgE value. For maximum wheal diameter of 4+, the average sIgE was 55.4 IU/L in D. pteronyssinus, whereas for minimum wheal diameter of SPT Grade1+, average sIgE was 0.01 IU/L in Short ragweed (Ambrosia artemisiifolia). Thus a positive correlation exists between degrees of positivity of SPT and serum values of specific IgE.

CONCLUSION:

Higher sIgE values are associated with a higher grade of SPT. This will serve as very important study in deciding immunotherapy for patients found positive with multiple aeroallergen with skin prick test.

Title: An airway disorder diagnosed by virtue of attenuation of mucous.Name of Presenter: **AJEESH K P**Authors (or Co-authors): **Dr Ritisha Bhatt, Dr Sudheer Tale, Dr Lokesh Saini, Dr Prakar Sharma, Dr Mayank Mishra, Dr Ruchi Duva, Dr Girish Sindhwani**Institution/Author Organization: **ALL INDIA INSTITUTE OF MEDICAL SCIENCES, RISHIKESH****Introduction:**

Allergic Bronchopulmonary Aspergillosis (ABPA) is an uncommon disorder (1 to 2% asthmatics) characterised by excessive allergic response to fungal antigens trapped in mucous

as part of colonization of airway by Aspergillus fumigatus. Hyper Attenuated Mucous (HAM) is an almost pathognomonic radiological finding of ABPA which may indicate increased severity of allergic inflammation with greater chance of relapse.

Case Summary:

25 year old gentleman presented with history of non resolving pneumonia despite completing Anti Tubercular Treatment two times for clinically diagnosed Pulmonary Tuberculosis. CT Thorax showed HAM with Bilateral bronchiectasis arising the suspicion of ABPA. Subsequent serological evaluation showed elevated Total Serum IgE and Aspergillus specific IgE in the background of Eosinophilia. Patient improved after initiating systemic steroids and is currently in remission.

Conclusion:

Radiological finding of HAM even in the absence of background history of severe asthma may help in clinching the diagnosis of ABPA. Clinical diagnosis of tuberculosis should be entertained after exhausting all other diagnostic possibilities.

Title: ABPA presenting as lung abscessName of Presenter: **Dr. ANKUR GUPTA**Authors (or Co-authors): **Dr. Vishal Chopra**Institution/Author Organization: **GMC PATIALA****Introduction:**

A cavity with air fluid level on a Chest radiograph can point to a number of diagnoses. Most common being a pyogenic lung abscess. History: A 30 year old male came with complaints of intermittent episodes of cough and breathlessness for 1 month, fever for 15 days and blood in sputum for 7 days. He had history of seasonal breathlessness and cough since childhood and was on inhalation therapy for the last 10 years.

Methodology:

Chest radiograph showed cavity with air fluid level in right upper zone. CECT further showed extensive varicoid bronchiectasis, some containing air fluid level and airspace disease. Patient was then worked up for ABPA as he did not respond to antibiotics. Since all his ABPA markers were found to be raised, patient was diagnosed as a case of ABPA according to newer diagnostic criteria proposed by Agarwal et al.

Result:

Patient was started on oral steroids and antifungals to which patient responded very well and repeat chest radiograph showed

resolution of air fluid level.

Clinical Implication/Conclusion:

Whenever patient comes with an air fluid level with history of Bronchial Asthma, ABPA should be kept as a differential diagnosis.

Title: A rare case report of Eosinophilic Granulomatosis with polyangiitisName of Presenter: **Dr Mudra khare**Authors (or Co-authors): **Dr Abhijeet khandelwal, Dr Arpit shrimaal, Dr Kamal patel, Dr Kumar girendra.**Institution/Author Organization: **Index medical college MP****Introduction:**

Eosinophilic Granulomatosis with polyangiitis (EGPA) is a rare primary, non heritable, non transmissible systemic disease, occur in patient with bronchial asthma. EGPA is an eosinophilic, small vessel granulomatous vasculitis, characterized by late onset asthma, upper airway disease, eosinophilia and clinical manifestation of systemic vasculitis.

Aim & Objectives:

A case report of EGPA.

CASE REPORT:

A 58 year female diagnosed as bronchial asthma 5 year back with history of dyspnoea, fever, productive cough, hemoptysis, bilateral lower limb numbness and pain bilateral decrease in vision, rhinitis, headache, since 1 month. Total WBC 12,500, eosinophil: 23%, IgE: >1500, AEC: 2872, ESR: 15, urine analysis: albumin =+, pus cell = 10. Ulcers present on multiple sites. NCV report s/o severe sensory motor polyradiculopathy affecting all four limbs. pANCA was positive. Chest x-ray shows bilateral basal pulmonary infiltrates. skin biopsy taken s/o small vessel vasculitis (eosinophilic).

Observation:

She was diagnosed as EGPA and started the treatment.

Conclusion:

EGPA is an eosinophilic associated small vessel vasculitis. Corticosteroid are the mainstay treatment and other immunosuppressant

Title: A CASE REPORT OF UNUSUAL PRESENTATION OF PSEUDOANEURYSM OF PULMONARY ARTERY AND INVASIVE ASPERGILLOSIS IN YOUNG BRONCHIAL ASTHMA PATIENT

Name of Presenter: **DR.SUDHINI SREEJA REDDY**

Authors (or Co-authors): **DR.MAHABOOB KHAN(HOD & PROFESSOR), DR.M.NARENDER(PROFESSOR), DR.DHANALAXMI(ASSOCIATE PROFESSOR)**

Institution/Author Organization: **GOVERNMENT GENERAL AND CHEST HOSPITAL**

INTRODUCTION:

Pseudoaneurysm is rare entity, incidence: 1/14000, higher risk of bleeding d/t more friable aneurysmal wall, cause- iatrogenic/traumatic/ infectious/malignancy Invasive Aspergillosis: unusual in immunocompetent, 75%cases reported in immunocompromised, only 43% reported in asthma, copd,tb, diabetes, dresslers syndrome, lung cancer

CLINICAL PRESENTATION:

25yrs old male presented with chief C/O Hemoptysis, cough, chest pain, shortness of breath since 2months K/C/O Bronchial asthma since childhood ,past H/O PTB, EPTB, ABPA, Bronchiectasis, Had left lingulectomy and lower lobectomy for uncontrolled massive hemoptysis after 2 attempts of bronchial artery embolization d/t pseudoaneurysm of left LL pulmonary artery(Dec'2019)

DIAGNOSIS:

CECT CHEST: Status post left lower lobectomy with lobulated cavity showing incomplete septa with air fluid levels, cystic bronchiectasis changes noted in right ML, superior, posterior, lateral basal segments of right LL, Conglomerate in mediastinal nodal mass encasing around aortic arch ,right and left pulmonary arteries, left UL pulmonary veins causing narrowing of those vessels, Cardiac soft tissue lesions, Bilateral level 4 cervical, left lower para-aortic&retrocrucl LN enlarged CT GUIDED BIOPSY: HPE: Invasive fungal infection with granulomatous response(secondary sclerosing mediastinitis) KOH Mount: thin, septate branching hyaline hyphal elements+

MANAGEMENT:

inj.TRANEXA 500mg/iv/tid inj.VORICONAZOLE 6mg/kg*2doses f/b 4mg/kg bd*6days f/b oral CLINICAL PEARLS: Invasive Aspergillosis is life threatening disease if delayed/not treated properly and can spread to various organs, has high mortality rate

Title: A STUDY OF SERUM SODIUM POTASSIUM CHLORIDE ABNORMALITY IN CHRONIC STABLE ASTHMATIC PATIENTS

Name of Presenter: **CHETANKUMAR**

KARSANBHAI PRAJAPATI

Authors (or Co-authors): -

Institution/Author Organization: **B. J MEDICAL COLLEGE AHMADABAD**

Introduction:

abnormal electrolytes concentration i.e hypokalemia, hyponatremia and hypocalcemia are reported in asthmatic patients which is attributed secondary to use of beta agonist and aminophylline therapy. Carried a study to evaluate use of nebulized beta agonist for asthma and its effects on serum electrolytes and reported that aggressive administration of nebulized salbutamol during the emergency treatment of acute bronchospasm is associated with statically significant decrease in serum potassium, sodium, and magnesium level .hence present study was undertaken to evaluate the serum electrolyte concentration disturbance among chronic stable asthmatic patients.

Methodology:

the present prospective study was undertaken among 50 stable asthmatic patients taken from outpatient department of pulmonary medicine civil hospital Ahmadabad Gujarat .all patients were subjected to detailed history and most common electrolytes disturbance in our study henceforth serum electrolytes should be checked during admission of the patient.

Result:

in this study electrolytes disturbance are common in 14 to 23yr old patient with female predominance and also hypokalemia is most common followed by hyponatremia

Conclusion:

in conclusion electrolytes disturbance are common in asthma .hypokalemia and hyponatremia were found to be most common electrolyte disturbance in our study. Henceforth serum electrolytes should be checked during admission of patients.

Title: Prevalence of Allergic bronchopulmonary aspergillosis in patients with bronchial asthma:-A prospective study

Name of Presenter: **GAGANDEEP KAUR**

Authors (or Co-authors): **Komaldeep Kaur, Rahul Suri, Vishal Chopra**

Institution/Author Organization: **Government Medical College, Patiala**

Introduction:

Allergic bronchopulmonary aspergillosis is an immunological disorder caused by

hypersensitivity to aspergillus species, most commonly aspergillus fumigatus. ABPA complicating asthma remains underdiagnosed and many patients are maltreated as pulmonary tuberculosis in tuberculosis endemic countries leading to further clinical and radiological worsening.

Aim:

To find out the prevalence of ABPA among asthma patients and their association with factors like age, gender, history of smoking and history of antitubercular drug therapy.

Material and methods:

57 consecutive skin prick test positive asthmatic patients were included in the study.

Results:

During the study, ABPA was diagnosed in 34 (59%) patients, chest x-ray abnormalities were seen in 13 (38%) patients, bronchiectasis was present in 22 (64%) patients,6 patients have been misdiagnosed with pulmonary tuberculosis in the past.

Conclusion: The prevalence of ABPA is significantly higher in patients with bronchial asthma. Hence early diagnosis and initiation of treatment are important to prevent permanent lung damage.

Title: A Study of prevalence and clinical relevance of hypersensitivity to cockroach and House Dust Mite(D. farinae) by skin prick test and its corelation with asthma severity

Name of Presenter: **HARSHITA RANI**

Authors (or Co-authors): **RACHIT SHARMA, RAJENDRA PRASAD**

Institution/Author Organization: **ERA LUCKNOW MEDICAL COLLEGE**

Introduction:

Asthma is a heterogeneous disease, usually characterized by chronic airway inflammation. Cockroach and house dust mites can be associated with severe asthma symptoms in a number of ways:- Through inhalation and Through sensitization. There is a strong association between cockroach and house dust mite and severity of asthma, and is known to cause sensitization in asthmatics

Aim:

To determine prevalence of cockroach and house dust mites sensitivity in bronchial asthma patients and its corelation with asthma severity Methodology Patients attending our opd and

ipd will be screened for bronchial asthma and will undergo spirometry to diagnose according to gina guidelines 2020 following which patient was subjected to Skin prick test with extract of cockroach , house dust mite and other allergens. After 15 minutes, immediate sensitivity will be assessed and compared. Grading will be done and asthma severity score will be determined in all patients

RESULT:

Skin prick test for cockroach is 18.75% and House dust mite is 13.75%.

CONCLUSION:

Skin prick test for cockroach is 18.75% and House dust mite is 13.75%. According to asthma severity score, severe cases in D. Farinae is more than cockroach.

Title: STUDY OF SERUM MAGNESIUM LEVEL IN PATIENTS OF ASTHMA AND IT'S CORRELATION WITH LEVEL OF CONTROL OF

Name of Presenter: **DR MANNAF ALI**

Authors (or Co-authors): **DR (PROF) ARUNABHA DATTA CHAUDHURI, DR. (ASSOC. PROF) SUMIT ROY TAPADAR**

Institution/Author Organization: **R. G. KAR MEDICAL COLLEGE & HOSPITAL**

Introduction:

Asthma is a serious health problem affecting the people of all ages. Epidemiological evidence suggests that low dietary intake of magnesium is associated with impaired lung function, bronchial hyper-reactivity and wheezing. A high magnesium intake is associated with improvement in symptom.

Aims & Objectives:

To evaluate serum magnesium level and its prognostic implications with asthma patients and to find out any correlation between the level of control of asthma and serum magnesium level.

Materials & Methods:

In this study, 100 asthma patients aged between 18 to 60 years were involved. Asthma control was assessed using a questionnaire according to GINA guideline and serum Mg level was estimated.

Results & Analysis:

Majority of patients were between 30-39 years of age, 52% being females. . Uncontrolled asthma was more among >50 years of age and among females. Mean total IgE was more and mean total magnesium level was minimum

among uncontrolled asthmatics.

Conclusion:

Uncontrolled asthmatics had low serum magnesium level compared to partly-controlled and well-control asthmatics and most of them had serum level of less than lower normal limit. We have found that serum magnesium level has a positive correlation with the level of symptom control in asthma.

Title: Study on correlation between sputum eosinophil count and absolute eosinophil count with the severity of asthma

Name of Presenter: **Dr Mobeen Quadri**

Authors (or Co-authors): **Dr Yugandhar- Prof & HOD of Dept of Respiratory Medicine**

Institution/Author Organization: **ALLURI SITARAMARAJU INSTITUTE OF MEDICAL SCIENCES,ELuru, 534005**

INTRODUCTION:

Asthma is a heterogeneous disease, usually characterized by chronic airway inflammation. It is defined by the history of respiratory symptoms such as wheeze, shortness of breath, chest tightness and cough that vary in intensity over time and variable expiratory airflow limitation. . Sputum and blood eosinophilia are the biomarkers indicating an eosinophilic airway inflammation . Not much data is available regarding the relation of clinical symptoms and functional parameters to these biomarkers of airway inflammation. Therefore, this study was done with the intention to find the correlation between sputum and absolute eosinophil count with severity of asthma.

AIM:

To study the correlation of sputum eosinophil count and absolute eosinophil count in assessing the clinical severity of Asthma

STUDY DESIGN:

Prospective study

STUDY POPULATION:

Patients were selected from outpatient and inpatient departments of Respiratory medicine,Alluri Sita Rama Raju institute of Medical Sciences.

STUDY DURATION:

The study was carried out between December 2018 to December 2019.

Summary:

Present study was done to correlate induced sputum eosinophil and absolute eosinophil

counts in assessing the clinical severity of bronchial asthma. In our study of 101 asthmatics were selected , out of them 58% patients had severe asthma, 24% patients had moderate asthma, and 19% patients had mild asthma. There was a significant correlation of induced sputum eosinophil and absolute eosinophil count with severe persistent asthma.

CONCLUSION:

Assessment of eosinophil count in sputum and blood are simple and inexpensive method that can show a direct measurement of airway inflammation. Thus it can help to identify specific phenotypes in asthmatic patients who are more responsive to steroids, which needs to be demonstrated in future studies. It could be the preferred method in routine practice in monitoring airway inflammation and guiding management.

Title: Assessment of serum vitamin D in different severities of bronchial asthma.

Name of Presenter: **MOHAMMAD SAMEER AHMED**

Authors (or Co-authors): **DR MG KRISHNA MURTHY,DR T PRAMOD KUMAR,DR P ESHWARAMMA, DR G RAMULU,DR V VEENA**

Institution/Author Organization: **GANDHI MEDICAL COLLEGE AND HOSPITAL**

INTRODUCTION:

Asthma is a chronic inflammatory airway disease .Vit D acts on Vit D receptors that are present in airway epithelial and smooth muscle cells and inhibit pro-inflammatory cytokines TNF ALPHA, IL-8, RANTES reducing chemotaxis of immune cells. Vit D deficiency is associated with inability to switch of inflammatory state with upregulation of prostaglandins, leukotrienes,T cell activity resulting in increase in asthma severity.

OBJECTIVE:

To assess relation between serum Vit D and asthma severity.

METHODOLOGY:

A cross sectional study of 50 patients aged 20-55yrs diagnosed as bronchial asthma based on recent GINA guidelines . Severity of bronchial asthma is classified based on pre BD FEV1. Vit D estimation is done by siemens advanced chemiluminescence immunoassay.

RESULTS:

The mean value of vit D is 25.2 in mild ,13.1 in moderate and 12.04 in severe cases , suggesting lower the FEV1,greater the vit D deficiency.

DISCUSSION:

Vit D deficiency is highly prevalent in asthmatic patients and there is a strong correlation between asthma severity and vit D concentration. so measurement of vit D levels in patients of bronchial asthma is very useful.

Title: Steroid-Sparing Effect of Omalizumab in Stage IV (Corticosteroid Dependent) Allergic Bronchopulmonary Aspergillosis

Name of Presenter: **PC KATHURIA**

Authors (or Co-authors): **MANISHA RAI**

Institution/Author Organization: **BLK SUPER SPECIALITY HOSPITAL, NATIONAL ALLERGY CENTRE**

Allergic bronchopulmonary aspergillosis (ABPA) is a condition in which the immune system evokes an exaggerated allergic response to aspergillus fungus and is characterized by airway inflammation, bronchiectasis, and bronchoconstriction. Corticosteroids are the acknowledged first-line therapy for this condition. We present a case series consisting of three patients with stage 4 ABPA, previously on varying drug regime protocols consisting of oral corticosteroids and supportive management of deriphylline, Montelukast and oral β_2 agonist. The patients were put on treatment with anti-IgE (Omalizumab) for treatment and management of the symptoms of ABPA as loading and maintenance drug regimens. All patients showed positive response to treatment which was evaluated clinically as reduction in symptoms as well as reduced steroid dependence. No adverse events were reported during treatment.

In conclusion, all patients had positive clinical response to therapy with omalizumab, showing a good safety profile. Omalizumab has the potential to be an effective alternative or as an additional therapy option for ABPA in asthma patients who fail to respond to corticosteroids, providing a steroid-sparing effect.

Title: STUDY OF CLINICAL AND IMMUNOSEROLOGICAL PROFILE AMONG DIFFERENT TYPES OF ALLERGIC BRONCHOPULMONARY ASPERGILLOSIS (ABPA)

Name of Presenter: **PRADEEP KUMAR DASARI**

Authors (or Co-authors): **Satish Chandra Kilaru, C N Prasad, M Ramu**

Institution/Author Organization: **PRATHIMA INSTITUTE OF MEDICAL SCIENCES**

INTRODUCTION:

Allergic bronchopulmonary aspergillosis (ABPA) complicates Bronchial asthma and Cystic fibrosis. Total IgE levels offer low specificity but remain a useful test for follow-up while *Aspergillus fumigatus* specific IgE levels serve as the most sensitive test for screening ABPA. AIM: This study evaluates the clinical and immunoserological profile among different types of ABPA and to identify any statistical significance among them.

METHODOLOGY:

A cross sectional study was conducted on 30 subjects of ABPA, who were further grouped on HRCT into ABPA-S, ABPA-CB, ABPA-HAM. Serological parameters of each group were analyzed individually. RESULTS: Majority of subjects were ABPA-B (56.7%) followed by ABPA-HAM (40 %) and ABPA-S (3.3%). Cough is more common in ABPA-HAM compared to ABPA-B (100% vs 88%) and similar presentation for dyspnea (83.3% vs 76%). The mean total IgE values in ABPA-S was 2500 IU/ml, in ABPA-B 5911 \pm 46.25 IU/ml and in ABPA-HAM was 5969 \pm 681 IU/ml. The mean specific IgE among them were 0.55 \pm 0 KUA/L, 26.77 \pm 25.26 KUA/L and 10.86 \pm 7.81 KUA/L respectively. Thus in this study specific IgE was higher among subjects with ABPA-B compared to other groups, though not statistically significant.

Conclusion:

HRCT chest when combined with serological parameters confer better diagnostic yield and aid in management and follow up of ABPA.

Title: Children with asthma and blood eosinophilia: A retrospective cohort study

Name of Presenter: **Rashmi Ranjan Das**

Authors (or Co-authors): **Joseph John, Manoj Panigrahi**

Institution/Author Organization: **AIIMS Bhubaneswar**

Background:

Blood eosinophilia is associated with asthma severity. Objective: To study the characteristics of children with asthma and blood eosinophilia.

Methodology:

This retrospective cohort study included children with asthma (aged 5 to 14 years). The details were collected in a pre-designed proforma. Multivariate analyses were done to identify characteristics associated with asthma and blood eosinophilia. The diagnostic accuracies of the laboratory parameters (sensitivity, specificity and predictive values) were calculated. Results: Of 176 subjects included, blood eosinophilia was noted in

47.8%. Following factors were associated with this characteristic: age >8 years (OR 2.34), a total serum level of IgE \geq 300 UI/mL (OR 1.98), and an Asthma Control Test (ACT) score <20 points (OR 2.15). Those with asthma and blood eosinophilia had a baseline FEV1/FVC <70% (OR 1.78). Age >8 years and ACT score <20 showed the highest sensitivity (> 80% each), and total serum IgE level \geq 300 UI/mL had the highest specificity (around 70%). Those with an ACT score <20 had the highest AUC (69%).

Conclusions:

In the present study, nearly half of the asthmatic children had blood eosinophilia. The prevalence was greater in those >8 years of age (experienced poor controlled asthma and had higher total serum IgE levels).

Title: A Study of prevalence and clinical relevance of hypersensitivity to pollens by Skin Prick Test

Name of Presenter: **RAVI KANT PANDEY**

Authors (or Co-authors): **DR. RAJENDRA PRASAD**

Institution/Author Organization: **ERAS LUCKNOW MEDICAL COLLEGE**

Introduction:

Nasobronchial allergy and allergic rhinitis are one of the most common allergic disorder and among the most common chronic diseases. Airborne pollen and spores allergens are one of the main causes of allergic respiratory problem. The prevalence of nasobronchial allergy has increased in last two to three decades due to change in environment and pollution.

Aim of Study:

To study the prevalence and clinical relevance of hypersensitivity to pollen by Skin Prick Test Method of study: Skin sensitivity to 24 pollen allergens was observed on 45 patients of Nasobronchial allergy by performing 1080 skin prick tests.

Result:

Most common pollen allergen was *Cassia siamensis* (20.0%) followed by *Brassica campestris* (18.0%) and *Ricinus communis* (14.0%). (48%) patients had a positive family history of allergy, suggesting that allergies can be acquired from environmental stimulus or related to genetics.

Conclusion: Pollens causing allergy are quite variable in different regions which makes it very important to identify the pollen allergen prevailing in the region, and prepare extracts from them for diagnosis, allergen avoidance and immunotherapy for the benefit of allergy

sufferers.

Title: Serum specific IgE is complimentary with skin prick test for detection of common respiratory aero allergen

Name of Presenter: **Dr. Roopanshi Jain**

Authors (or Co-authors): **Dr. Ashish Kumar Prakash, Dr. Anand Jaiswal, Dr. Bornali Datta**

Institution/Author Organization: **Medanta the Medicity, Gurugram**

BACKGROUND:

Bronchial asthma is a type 1 hypersensitivity disorder. Atopic bronchial asthma is the most common phenotype. Tests like Skin Prick Test and sIgE help in reaching the allergic sensitisation.

METHODS:

This study included 70 patients diagnosed with allergic bronchial asthma. All patients enrolled had respiratory symptoms and a raised sIgE. Common commercially available kit of standardised 11 respiratory allergens were used for SPT and the same was compared with serum specific IgE.

RESULTS:

SsIgE has poor sensitivity of detecting allergen sensitisation in comparison to SPT. (positivity ranged from 0% to 69.23%). For Artemisia and dog sensitivity was 0% while for D. pteroyssinus as 64.29% and D. farina 69.23%. Perfect or substantial agreement was not observed between SPT and sIgE for any allergen (kappa values ranging from -0.138 in Artemisia to 0.363 in D. pteroyssinus).

CONCLUSION:

The two tests may have a complimentary role with SPT as a step 1 test with clinical correlation. If clinical correlation does match with SPT results, sIgE should be the next step. Again, the gold standard and the benchmark are clinical correlation. This was evident from pooled analysis of common positive and negative tests by two techniques and evaluation

Title: Correlation between Serum specific IgE with skin prick test for detection of common respiratory aero allergen

Name of Presenter: **Dr. Roopanshi Jain**

Authors (or Co-authors): **Dr. Ashish Kumar Prakash, Dr. Anand Jaiswal, Dr. Bornali Datta**

Institution/Author Organization: **Medanta the Medicity, Gurugram**

BACKGROUND:

Atopic bronchial asthma is the most common asthma-phenotype. Tests like Skin Prick Test and sIgE help in reaching the allergic sensitisation.

METHODS:

This study included 70 patients diagnosed with allergic bronchial asthma. Total 11 common aeroallergens were used for both SPT and sIgE.

RESULTS:

Specificity of sIgE ranged from 76.47% to 100 % for various allergens tested. Best results were observed for Chenopodium album, Alternaria tenuis and HDM (100%, 97.78 % and 92.31% respectively). PPV of sIgE, showed significant variation ranging from 0 % for Artemisia scaperia and dog dander to 100% Chenopodium album. For HDM allergens the PPV was 97.3%, 90% and 88.89% respectively. Negative predictive value of sIgE, showed significant variation ranging from 37.5 % for D. pteroyssinus to 95.56% for Short ragweed (Ambrosia artemisifolia). For allergens like cat dander, Artemisia scaperia, Aspergillus fumigatus and Chenopodium album the NPV was 88.71%, 86.21%, 82.14% and 81.82% respectively.

CONCLUSION:

For the patients who have relative-contraindications to SPT, sIgE can be useful. For D. pteroyssinus, D. farinae, Cockroach & Chenopodium we found that sIgE had a good predictive value when compared with SPT. SsIgE had a poor predictive value when compared with SPT for allergens like cat dander, Artemisia scaperia, Aspergillus, Ambrosia artemisifolia, Chenopodium.

Title: CLINICAL CHARACTERISTICS AND OUTCOME OF BRONCHIAL ASTHMA PATIENTS IN COVID-19 PNEUMONIA

Name of Presenter: **Dr. SAI RAMYA GONUGUNTLA**

Authors (or Co-authors): -

Institution/Author Organization: **NRI MEDICAL COLLEGE AND GENERAL HOSPITAL**

INTRODUCTION:

From the onset of the COVID-19 pandemic, an association between the severity of COVID-19 and the presence of certain medical comorbidities has been suggested. However, unlike influenza and other viruses, the burden of the disease in patients with asthma has been less evident.

AIM:

To characterize the clinical course of SARS-CoV-2 infection in patients with asthma and

assess the impact of asthma in COVID 19-related outcomes.

OBJECTIVES:

1. To understand the burden of covid-19 in asthmatics.
2. To assess the relation between severity, treatment outcomes of covid-19 and different asthma phenotypes.
3. To assess the impact of asthma in covid-19.

MATERIALS AND METHODS:

This is a prospective study being conducted in a District Covid Hospital. The study included all the covid-19 RT-PCR positive patients with history of bronchial asthma.

RESULTS:

Among all the hospitalized patients for covid-19 the number of asthmatics are very less. Most common age group is 60-70 yrs. The severity was more among patients with other comorbidities like diabetes, hypertension, obesity, coronary artery disease. Very few of the patients required ICU care and mortality is also low in exclusive asthmatics. The exact data will be presented in the conference as this is an ongoing study.

Title: PREVALANCE OF ALLERGIC BRONCHOPULMONARY ASPERGILLOSIS IN PATIENTS WITH BRONCHIAL ASTHMA

Name of Presenter: **TANMAY BHARGAVA**

Authors (or Co-authors): **Dr. Rajendra prasad**

Institution/Author Organization: **ERAS LUCKNOW MEDICAL COLLEGE**

Introduction:

Asthma is a heterogenous disease, usually characterized by chronic airway inflammation. There is a strong association of fungal sensitization and severity of asthma. Aspergillus species are known to cause several respiratory manifestations. ABPA is most clinically recognized form of hypersensitivity respiratory disorders.

Aim:

To evaluate the frequency of sensitization to aspergillus antigens and the prevalence of allergic bronchopulmonary aspergillosis (ABPA) in asthmatic patients. Method of Study: 80 consecutive non-smoking outpatients with asthma (≥ 18 years) underwent skin prick test with aspergillus antigens, peripheral eosinophil counting, measurements of total serum IgE level and specific IgE against aspergillus fumigatus, radiologic investigations and pulmonary function tests.

Result:

13 patients (16.3%) had a positive skin reactivity to *Aspergillus* antigens. Four of these 13 patients (30.8%) met the diagnostic criteria of ABPA, an overall prevalence of 5% (4/80). Total serum IgE levels and specific IgE against *Aspergillus Fumigatus* were elevated significantly in all the patients. 1 case was diagnosed as ABPA-CB.

Conclusion:

All patients with bronchial asthma should be screened for ABPA by skin test for *Aspergillus* species. If found positive, special consideration is needed to rule out ABPA.

Title: Comparison of in-vitro deposition of Formoterol/Budesonide (FBD) Synchrobreathe (SB with the FBD pressurized metered dose inhaler (pMDI)

Name of Presenter: **Vaishali Naik**

Authors (or Co-authors): **Jagdish Panchal, Anita Sawant, Kiran Rote, Sushmeeta Chowala, Dr Meena Lopez, Dr Rashmi Hegde, Dr Jaideep Gogtay**

Institution/Author Organization: **Cipla Ltd**

Introduction:

It has been established that breath-actuated inhalers like the SB, help to overcome co-ordination issues and are easier to use compared to pMDIs. However, there is limited data comparing the drug deposition in the respiratory tract and oropharynx, between the two inhaler devices.

Aim:

To compare the in-vitro drug deposition of FBD (6/200 mcg), when delivered with the pMDI and SB.

Methodology:

Nine random samples of FBD from three different batches (Foracort 200 pMDI and SB, Cipla Ltd.) were evaluated for in-vitro drug delivery. Parameters evaluated were percent fine particle mass (%FPM), percentage of drug in the induction port (% IP) and the mass median aerodynamic diameter (MMAD) using the Next Generation Impactor (Copley Scientific). Amount of drug deposited in the apparatus was evaluated using high performance liquid chromatography.

Results:

	%FPM (±SD)		%IP (±SD)		MMAD (µm) (±SD)	
	Formoterol	Budesonide	Formoterol	Budesonide	Formoterol	Budesonide
pMDI	38.20 (±5.2)	40.02 (±3.13)	46.28 (±5.35)	44.32 (±2.56)	2.73 (±0.32)	2.57 (±0.37)
SB	40.54 (±1.58)	39.83 (±1.04)	31.68 (±1.73)	32.04 (±3.73)	2.97 (± 0.153)	3.00 (± 0.17)

Conclusion:

The SB showed an in-vitro drug deposition similar to that of pMDI with a lower drug deposition in the induction port, indicating reduced oropharyngeal deposition compared to the pMDI.

Title: Comparison of COPD patients on single inhaler and two separate inhalers for triple therapy

Name of Presenter: **AHAMED RAFAD**

Authors (or Co-authors): **Beena Thomas,P. sukumaran**

Institution/Author Organization: **Pushpagiri Institute of Medical Sciences**

INTRODUCTION:

Triple therapy (LAMA,LABA,ICS) for COPD is available as single or separate inhalers. There is dearth of studies in real world scenario comparing them. AIM-To study the characteristics of patients on triple therapy with single inhaler and two separate inhalers and compare their outcome

METHODOLOGY:

We followed up 33 moderate to severe COPD patients each on single inhaler(Tiotropium-Formoterol-Ciclesonide) and two separate inhalers(Tiotropium,Formoterol-Budesonide) for triple therapy for a period of three months. We compared socio-demography,Test of Adherence to inhalers score(TAI),baseline and improvement in FEV1,FEV1/FEV,SGRQ and EQ-5D score by independent t-test or Mann Whitney U test.The change in each group was compared with their baseline by paired t-test or Wilcoxon Signed Rank test.

RESULTS:

The groups were comparable at the baseline with respect to age,gender,smoking,FEV1/FEV,SGRQ,EQ-5D,TAI;but,separate inhaler group was worse than single inhaler group with respect to baseline FEV1(severe COPD-61% vs 30%) and spacer use(70% vs 100%).Each group improved significantly onFEV, FEV1/FEV, SGRQ, EQ5D . Improvement in the group on separate inhalers was significantly higher compared to group on single inhaler for FEV1,FEV1/FEV,SGRQ and EQ-5D.

CONCLUSION:

Triple therapy improves patient by single or separate inhalers.Patient on separate inhalers had more improvement than patient on single inhaler without considering confounding factors

Title: Study of association of severity of Chronic obstructive pulmonary disease with Matrix metalloproteinase (MMP) gene promoter polymorphisms

Name of Presenter: **ALEKYA KALLA**

Authors (or Co-authors): **DR. M. G. Krishnamurthy, DR. T. Pramod kumar**

Institution/Author Organization: **GANDHI HOSPITAL AND MEDICAL COLLEGE ,SECUNDERABAD,TELANGANA**

INTRODUCTION:

COPD is a polygenic disorder with genetic heterogeneity . A number of genes like alpha-1 antitrypsin,MMP-3 and 9,TIMP-2,HMOX-1,EPHX1,TNF- α ,SP-B have been implicated in the pathogenesis of COPD.

OBJECTIVES:

[1]To determine MMP-9 gene promoter polymorphism in COPD [2]To identify association of MMP-9rs no 3918242(C>T)) gene polymorphisms with severity of COPD.

METHODOLOGY:

Cross sectional study of 100 COPD cases and 50 controls. Blood is collected for genetic evaluation which includes 3steps-DNA isolation byTKM method ,Agarose gel electrophoresis for genotyping and PCR for MMP-9 gene promoter polymorphism by corresponding primers. Genotypic results have been compared with pre bronchodilator FEV1(GOLD severity grading) RESULTS- Out of 100 patients ,54 had CC genotype ,17 had CT genotype and 29 had TT genotype.62.95% of CC genotype were under severe (16) and very severe(18) category. 52.94% of CT genotype were classified under moderate category . 44.82% of TT genotype were classified under mild category.

CONCLUSION:

CC and CT genotype were found to be more in COPD cases than controls CC genotype in particular was associated with severe and very severe phenotypes MMP-9 -1562 C>T promoter polymorphism may be considered as one of the risk factors in the etiology of COPD only by further analysis with large sample size.

Title: A study of Modified DECAF score in predicting hospital outcomes in patients of acute exacerbation of chronic obstructive pulmonary disease

Name of Presenter: **DR ANIKET MONDAL**

Authors (or Co-authors): **DR SUSHANT SHARMA, DR GOVIND SINGH RAJAWAT, DR SURESH KOOLWAL**

Institution/Author Organization: **INSTITUTE OF RESPIRATORY DISEASES, JAIPUR**

BACKGROUND:

Acute exacerbation of COPD (AECOPD) is an event which negatively impacts health status, rates of hospitalization, and disease progression. Zidan et al (2015) found that

frequency of admissions was more accurately linked to mortality instead of atrial fibrillation, thus giving rise to Modified DECAF scores. AIM- To validate the prognostic effect of the Modified DECAF score in predicting hospital outcomes in AECOPD.

METHODOLOGY:

A descriptive type of observational study was done on 160 patients admitted with acute exacerbation of COPD, in Institute of Respiratory Diseases, SMS Medical College, Jaipur. After fulfilling the inclusion and exclusion criteria, a detailed history was taken and Modified DECAF scores were calculated and correlated with the various hospital outcomes.

RESULTS:

Patients with lower Modified DECAF scores(0 to 2) are found to have better prognosis while those having higher scores(3, 4 and 5) are associated with higher mortality rate and the need for prolonged hospital stay and NIV use.

CONCLUSION:

A simple clinical prediction tool can accurately stratify patients hospitalised with AECOPD into clinically relevant risk categories and could assist clinicians managing this frequently fatal condition.

Title: Socio-demographic profile, clinical parameters, and inflammatory markers in chronic obstructive pulmonary disease (COPD)

Name of Presenter: **ANUJ KUMAR PANDEY**

Authors (or Co-authors): **Ajay Kumar Verma, Surya Kant, Darshan Kumar Bajaj, Rakesh Kumar Dixit, Arpita Singh, Umesh Pratap Verma, Ved Prakash, Shyam Chand Chaudhary, Kausar Mahmood Ansari**

Institution/Author Organization: **KING GEORGE'S MEDICAL UNIVERSITY, LUCKNOW**

Background:

COPD, a heterogeneous lung disorder that is characterized by airflow obstruction is the third leading cause of death worldwide. Here, we aimed to determine the clinical-demographic profile, risk factors, inflammatory markers, and their association in COPD.

Methodology:

In this cross-sectional study, we had evaluated demographic profile, risk factors, clinical characteristics (CAT score, mMRC Dyspnea Scale, exacerbation, ABCD classification, spirometry), biochemical parameters, serum levels of inflammatory markers- cyclooxygenase-2 (COX-

2), prostaglandin-2 (PGE-2), and socioeconomic status in 158 COPD and non-COPD individuals.

Results:

Age, gender, BMI, biochemical parameters, and socioeconomic status in the studied population were comparable. Major risk factors were smoking, and biomass smoke exposure, and prevalent in the COPD group. Major COPD patients belonged to group 'C' and 'B' followed by 'D' and 'A' category. Circulating serum levels of COX-2, and PGE-2 were upregulated ($p < 0.001$) as well as positively correlated with GOLD grading, mMRC score, and long clinical history in COPD group.

Conclusion:

The serum levels of COX-2 and PGE-2 correlated with the clinical factors of COPD, showing that they can serve as indicators to the management of COPD. Decreasing smoking habits, avoiding biomass exposure, getting more education and job opportunities were important to manage COPD.

Title: EVALUATION OF ANTHROPOMETRY, BODY COMPOSITION ANALYSIS IN ASTHMA AND COPD AND ITS CORRELATION WITH SEVERITY

Name of Presenter: **DR. ANUPAM PRAKASH**

Authors (or Co-authors): **PROF. BALAKRISHNAN MENON , DR. VISHAL BANSAL**

Institution/Author Organization: **VALLABHBHAI PATEL CHEST INSTITUTE**

INTRODUCTION:

Multiple studies from the general population indicate that high values of body fat (BF) and low values of fat free mass (FFM) are independent predictors of mortality. There is limited data regarding anthropometry and body composition in COPD and asthma patients in Indian population.

AIMS AND OBJECTIVES:

To assess the anthropometry and body composition parameters in subjects with COPD and asthma and its correlation with severity.

METHODOLOGY:

This was an Observational, cross-sectional study. Total no of 93 patients were recruited to this study and divided into 2 groups (BA&COPD) according to diagnostic criteria. Diagnosed patients were subjected to pulmonary function test, 6-minute walk test, body-composition analysis and anthropometric measurements.

RESULTS:

The FEV1 for COPD patients shows a weak negative correlation with Skin-Fold Thickness,

BMI and Mid-Arm Circumference while it shows a weak positive correlation with Free-Fat Mass Index. In our study the FEV1 for asthma patients shows a weak negative correlation with Mid-Arm Circumference, BMI and while it shows a weak positive correlation with Free-Fat Mass Index, Skin-Fold Thickness.

CONCLUSION:

Free-Fat Mass Index shows better correlation to severity parameters in patients of asthma and COPD, as compared to anthropometric measurements

Title: PREDICTORS OF EXERCISE INDUCED DESATURATION IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Name of Presenter: **DR B.KARNIHA**

Authors (or Co-authors): **DR R. SRIDHAR**

Institution/Author Organization: **STANLEY MEDICAL COLLEGE**

Background:

Advanced COPD is associated with decreased exercise performance leading to impaired quality of life and increased mortality. Therefore exercise testing is increasingly being considered an essential component in routine clinical assessment of COPD patients.

Aim:

To assess whether FEV1 and baseline SpO2 can be the predictors of exercise induced desaturation (EID) in stable COPD patients and to determine optimal cutoff value of predictors.

Methodology:

102 stable COPD patients underwent 6MWT and were grouped as desaturators (DS) and non-desaturators (NDS). Both groups compared for baseline and clinical characters by student's t-test and Pearson correlation coefficient assessed strength of association. Using logistic regression and ROC Curve, EID predictors identified.

Results:

Out of 102 patients, 51 desaturated on 6MWT ($n=51/102$). EID had significant lower values of FEV1 ($p < 0.001$), FVC ($p < 0.001$), FEV1/FVC ($p < 0.049$). EID is negatively correlated with 6MWT, FEV1 and resting SpO2. Resting SpO2 and FEV1 were identified as significant and individual predictors of EID. Resting SpO2 $\leq 95\%$ had sensitivity of 82%, specificity of 71% and FEV1 $< 42\%$ had sensitivity of 86% and specificity of 78%.

Conclusion:

The 6MWT is a safe and sensitive test to identify EID in stable COPD patients. Resting oxygen saturation and FEV1 are the good predictors of

EID.

Title: HAND GRIP AND ENDURANCE IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Name of Presenter: **Dr. Balachandar R**

Authors (or Co-authors): **Vinod kumar V**

Institution/Author Organization: **Govt. Stanley Medical College, Chennai-1.**

Introduction:

COPD is a disease of airway with systemic inflammation, which leads to muscle atrophy, fatigue and muscle dysfunction expressed as reduction in hand grip strength (HGS) and endurance.

Aims and objectives:

To determine and compare HGS, endurance in COPD and to see relation to the stage of disease, multidimensional predictors of mortality, and 6-minute walk test (6MWT).

Methodology:

In this observational study, 62 consecutive outpatients with COPD and 51 volunteers without respiratory problems were compared. All COPD subjects underwent a comprehensive examination to determine COPD severity, 6MWT and prognostic scales. Body composition, Basic spirometric parameters, and HGS and endurance were determined in all study participants.

Results:

The COPD group had a 20% reduction in HGS ($P=0.001$) 58% decrease in the endurance test ($P=0.001$) compared to the control group. Dynamometric parameters were significantly negatively associated with the stage of disease and values of BODE index, and positively associated with the results of 6MWT.

Conclusion:

Both HGS and endurance are impaired in COPD patients in Compared with the control group. This can be considered as an attractive option not only to assess exercise capacity but also as a predictive marker in COPD patients.

Title: Developing a COPD Screening Questionnaire: Qualitative insights from patients and chest physicians about their experiences on COPD

Name of Presenter: **DEESHA DEEPAK GHORPADE**

Authors (or Co-authors): -

Institution/Author Organization: **Pulmocare Research and Education (PURE) Foundation**

Background:

90% of the COPD patients in the community remain undiagnosed and therefore wrongly treated or untreated. The aim of this study was to formulate a set of questions that could be used for COPD screening.

Method:

We randomly selected 10 Chest physicians from Pune and Bhubaneswar with at least 10 years of clinical experience. 9 confirmed cases of COPD, 5 smokers with no-COPD and 5 asthmatics were randomly selected. 19 in-depth interviews were conducted with patients and 2 focussed group discussions (FGD) with the chest experts. ATLAS.ti version 8 software was used for data analysis.

Results:

Themes identified were; COPD patient's group (Symptoms, Risk Factors, Impact on daily activities, Weather Changes, Seeking Medical Assistance, Bad days, Past Medical History), Asthma patients (Symptoms, Risk Factors, Impact on daily activities, Weather Changes, Seeking Medical Assistance, Good days, Past Medical History, allergies), At-risk individuals (Symptoms, Risk Factors, Weather Changes and Seeking Medical Assistance) and FGDs with the chest experts (Symptoms, Risk Factors, Impact on daily activities, Weather Changes, Medical history of Asthma/COPD/TB, Co-morbid conditions, Triggering factors).

Conclusion:

Total 68 variables were identified from the themes identified across 4 groups which were thought to be important factors in the screening of COPD.

Title: To study blood eosinophilia and sputum eosinophilia in chronic obstructive pulmonary disease patients.

Name of Presenter: **Dr Dhiresh jaiswal**

Authors (or Co-authors): **Dr MM puri , Dr vikas sharma**

Institution/Author Organization: **National institute of tuberculosis and respiratory disease, New Delhi**

Background:

Identification of COPD phenotype is useful to select the right drug to the right patient. In the COPD patients, control of dyspnea and prevention of exacerbations are the predominant component of management. Blood eosinophilia has been proposed as a surrogate marker for airway eosinophilia and has been associated with the exacerbations of COPD. Blood eosinophilia and /or sputum eosinophilia may help to identify exacerbator phenotypes and treatment response in chronic

obstructive pulmonary disease (COPD). In this study we aimed to provide an insight into the occurrence of blood eosinophil and sputum eosinophil among the COPD patients and factors associated with eosinophilia.

Aims:

To measure absolute blood eosinophil count and sputum eosinophil count in stable patients of COPD and acute exacerbations of COPD patients.

Methodology:

A prospective, observational study in COPD patients at National Institute of Tuberculosis and Respiratory Diseases, New Delhi. Clinical features, demographic data, lung function, blood eosinophil count and sputum for eosinophil count was done in cohort of 140 COPD patients. Absolute eosinophil count (AEC) of >150 cells/mm³ and Sputum eosinophilia of ≥2% were used as cut offs for defining eosinophilia. Severity of COPD was assessed using GOLD criteria. Various statistical tests including Chi Square test, Mann-Whitney rank sum test and Spearman rank correlation were used to draw the results.

Results:

1. Among 140 enrolled COPD patients, 67 (47.9%) patients were in the age group of 61 to 65 years.
2. Among the enrolled patients, 114 (81.4%) were males and 26 (18.6%) were females.
3. 67.9% of the enrolled patients belonged to urban area and 32.1% patients belonged to rural area.
4. 47.9% of the enrolled patients belonged to lower socioeconomic class.
5. Among 140 enrolled COPD patients, 76 (54.3%) had low BMI (<18.5)
6. Among the enrolled COPD patients, 115 (82.2%) were smokers and 25 (17.8%) were non-smokers.
7. Among 115 Smokers, 108 (93.92%) were bidi smokers, 07 (6.08%) were cigarette smokers.
8. Among 140 enrolled COPD patients, 133 (95%) had history of exacerbation in last one year and 07 (5%) had no history of exacerbation in last one year.
9. Out of 133 exacerbators, 40 (30%) had mild exacerbation, 33 (24.80%) had moderate exacerbation and 60 (45.2%) had severe exacerbation.
10. Among the 140 enrolled COPD patients, 75 (53.6%) belonged to Group-D, 51 (36.4%) belonged to Group-B and 14 (10%) belonged to Group -A according to GOLD classification of COPD.
11. Out of 140 enrolled COPD patients, 83 (59.3%) were presented as stable disease and 57 (40.7%) were presented with the acute exacerbation.
12. Age, BMI, duration of COPD, Hemoglobin

and PFT impairment were not associated with either blood eosinophilia or sputum eosinophilia.

13. Blood eosinophilia (AEC >150 cells/μL) was present in 76 (54.3%) among 140 enrolled COPD patients. Sputum eosinophilia (>2%) was present in 41 (57.7%) in among 71 patients after excluding sputum paucicellularity (n=69).

14. There was statistically significant association found between absolute blood eosinophilia and history of exacerbation of the COPD patients (p<0.001).

15. Also, there was statistically significant association was found between sputum eosinophilia and history of exacerbation of the COPD patients (p=0.008).

16. COPD severity (GOLD stage) was significantly associated with absolute blood eosinophil count (p=0.044).

17. Sputum eosinophilia and blood eosinophilia correlation was not significant (p=0.072)

Conclusions:

Measurement of blood and sputum eosinophils help the physicians in determining the phenotype of COPD. Risk of exacerbations and role of ICS are defined according to the blood eosinophils as per latest GOLD guidelines. Targeted therapy can be explored to suppress the eosinophilic inflammation. Therefore, in every COPD patients, at least blood eosinophil counts should be measured.

Title: Effect of hyperglycaemia on duration of hospital stay and rate of mortality in patients of Chronic Obstructive Pulmonary Disease in acute exacerbation

Name of Presenter: **Dr. Kandavel. G. S.**

Authors (or Co-authors): **Dr.kandavel.G.S, Dr.Bhagyashri Patil, Dr.Gajanan S Gaude, Dr.Jyothi Hattiholi, Dr.Gautam.S, Dr.kiran kumar Pujaar.**

Institution/Author Organization: **KLE Academy of Higher Education and Research, JNMC**

Introduction:

COPD is not only a respiratory disease but is also a systemic disease associated with comorbidities. COPD is thought to be a causative factor for developing diabetes. Hence this study has been taken up to analyse the effect of hyperglycaemia on outcomes in COPD patients with exacerbation.

Materials and Methods:

84 patients were enrolled and divided into two groups as group A with mean RBS < 250mg/dl and group B with mean RBS ≥ 250mg/dl. The outcomes of the study were duration of hospital and ICU stay, no. of days with NIV requirement and rate of mortality.

Results:

The mean duration of hospital stay in group A was 5.43 days and in group B, it was 7.34 days ($p = 0.004$). The mean duration of ICU stay in group A was 3.33 days and in group B, it was 4.47 days ($p=0.0475$). The rate of mortality was higher in group B with 11.36%. In overall, patients in group B had poorer outcomes compared to group A.

Conclusion:

Patients with hyperglycaemia had increased duration of hospital stay, ICU stay and rate of mortality. Optimal glycaemic control plays a significant role in COPD patients.

Title: PLASMA FIBRINOGEN IN COPD – A CROSS SECTIONAL STUDY

Name of Presenter: **MIKASH MOHAN**

Authors (or Co-authors): -

Institution/Author Organization: **JSS MEDICAL COLLEGE AND HOSPITAL**

Introduction:

This study was done to assess the relation between the levels of plasma fibrinogen in copd patients and find its implications in guiding us in the treatment, prognosis and others aspects of the disease.

Aims & Objectives:

Primary: To measure the levels of plasma fibrinogen in 3 groups of patients -acute exacerbation COPD patients, COPD stable patients and healthy nonsmokers.

Secondary: To correlate the fibrinogen levels with severity of airway obstruction based on spirometry

Methodology:

Patients attending JSS Hospital Pulmonology OPD or admitted in pulmonology departments during the study period from November 1st 2018 to April, 2020 fulfilling the inclusion and exclusion criteria were included in the study Spirometry measurement and measurement of Plasma Fibrinogen (ELISA) was performed on 105 patients (35 COPD patients with exacerbation; 35 stable COPD patients and 35 healthy nonsmokers). The data collected in spreadsheets, statistical analysis done and compared.

Conclusions:

- There is a direct linear correlation between plasma fibrinogen and COPD and its acute exacerbation. (copd – 3.52mg/ml, ae copd – 4.02 mg/ml, normal-2.67mg/ml)
- Furthermore, within the COPD groups, plasma fibrinogen levels are elevated with severity of airway obstructions in spirometry.
- We also see that NLR, PLR ratios were elevated

in AE COPD than COPD.

• From the ROC curve it is evident that a cut off of plasma fibrinogen could help us understand or discriminate COPD patients with higher risks of being in an acute exacerbation episode. (cut off – 3.5mg/l and area under curve - .812)

Title: How good are DLCO and echocardiography in predicting Pulmonary Hypertension in COPD?

Name of Presenter: **Dr Mohammed Ibrahim**

Authors (or Co-authors): **Dr R Pajanivel, Dr Amirtha Ganesh, Dr Vimal Raj R**

Institution/Author Organization: **Mahatma Gandhi Medical College and Research Institute, SBV university, Pondicherry**

Introduction:

Pulmonary Hypertension in COPD increases the already grim morbidity and mortality of COPD, a disease with significant systemic effects. Since the gold standard investigation–Right heart catheterization is an invasive procedure, early detection of COPD-PH with DLCO, an OPD procedure, might prove beneficial to this crucial subset of population. Aim: To assess the predictive value DLCO and ECG compared to echocardiography in predicting COPD-PH.

Methodology:

we divided Forty subjects into PH (n=8) and non-PH (n=32) groups with elevated mean pulmonary artery pressure (mPAP \geq 25mmHg) and right heart changes in echocardiography establishing the diagnosis. ECG changes and DLCO% were documented and correlated with echocardiography.

Results:

DLCO of 64.5% as a cut-off for PH detection yielded sensitivity and specificity of 75.00% and 84.38% respectively. We saw ECG changes in only very few (n=3) with good specificity (100%) and poor sensitivity (37.5%). DLCO of 76.5% was found as a cut-off in patients with pre-PH (mPAP of 19-24 mm Hg), who are at risk of developing PH in near future.

Conclusion:

DLCO has an excellent correlation with echocardiography in screening pulmonary hypertension secondary to COPD and in detecting early pulmonary vascular changes.

Title: Early vs non early desaturation during 6MWT in COPD patients. A follow up study

Name of Presenter: **Dr. MOHIT AGARWAL**

Authors (or Co-authors): **Dr. DIPTI GOTHI**

Institution/Author Organization: **ESI PGIMSR BASAIDARAPUR**

Introduction:

No study has been done from India to prognostically evaluate time to desaturation during 6 minute walk test (6MWT) in COPD patients.

Aims & objectives:

To evaluate if early desaturation correlates with exacerbation rate, BODE index and spirometry.

Materials and methods:

It was a longitudinal cohort study conducted in a tertiary care institute from December 2018 to May 2020. 100 COPD patients were evaluated with 6MWT. The patients were called desaturators if they had exercise induced desaturation to $<90\%$ or more than 4 % from baseline. They were called early desaturators if they had desaturation after first minute. They were given treatment as per GOLD guidelines. They were followed up for one and a half year.

Observation:

12 patients could not be complete the follow up. Of the remaining patients, 85 were men and 3 were women. The mean forced expiratory volume in one second (FEV1) and forced expiratory volume (FVC) was 41.8+15.8 and 62.0+15.0 respectively. 55(62.5%) patients were desaturators. Of these 16 were early desaturator (ED) and 39 were non early desaturators (NED). ED had significantly higher number of exacerbations ($p=0.02$), higher BODE index ($p=0.004$) and higher hospitalisation ($p= 0.0006$) as compared to non early desaturators (NED). There was no significant difference in the FEV1 and FVC among ED and NED

Conclusion:

Early desaturation predicts adverse outcomes in COPD.

Title: A Comparative study of DECAF and BAP65 scores in predicting outcome of acute exacerbation of COPD

Name of Presenter: **Dr P Alekhya**

Authors (or Co-authors): **Dr Chandrakant Tarke**

Institution/Author Organization: **Apollo Hospitals, Jubilee hills, Hyderabad**

Introduction:

AECOPD are important events in management of COPD because they negatively impact health status. Most patients need hospitalization, may require Intensive care and mechanical ventilation. Easy to use score is essential for predicting outcome of AECOPD. Dyspnea, Eosinopenia, Consolidation, Acidemia, atrial Fibrillation (DECAF) score, BAP65 score (BUN >25 mg/dL, Altered Mental Status, PR >109 bpm,

age>65yrs) are considered.Aim/

Objectives:

To compare DECAF and BAP65 scores in predicting the outcome of AECOPD patients.

Methodology:

A prospective study of 46 patients presenting with AECOPD at Apollo hospitals,Hyderabad during August 2018-May 2019.Outcomes like length of hospital stay, length of ICU stay,need for mechanical ventilation,mortality were compared.Results:Mean length of hospital stay in high risk of DECAF score was 8.86 days and of BAP65 score was 9.1 days.Length of ICU stay for DECAF was 7.14days and ! BAP65 was 7.33days.Sensitivity for predicting mortality was 100% and 75% for DECAF and BAP65 scores respectively. Out of 37(80.43%),29(63.04%) required non-invasive ventilation and 8(17.39%) required intubation during exacerbation of COPD.14(100%) patients of high risk group (DECAF) and 9(100%) patients (BAP65) required mechanical ventilation

Conclusion:

DECAF was better predictor of mortality with high sensitivity compared to BAP65 score. For mechanical ventilation, DECAF and BAP65 scores had low sensitivity but high specificity. Length of hospital and ICU stay were increased with increase in scores.

Title: Efficacy of home based pulmonary rehabilitation during COVID times in patients with Chronic Obstructive Pulmonary Disease (COPD)

Name of Presenter: **Dr. Prabhuram. J**

Authors (or Co-authors): **Mr.Vignesh, Mrs. Menaka**

Institution/Author Organization: **Kanaga Ramalingam Pulmonary rehabilitation and Sleep Centre, Tirupur**

Background:

Benefits of home based pulmonary rehabilitation for patients with COPD, in Indian scenario is uncertain. Objective : During the COVID times where the possibility of patients coming to the pulmonary rehabilitation center is practically difficult, the benefits of a home based pulmonary rehabilitation in patients with COPD is uncertain. We aimed to assess the efficacy of such a program.

Methodology:

Patients with COPD, (Stage II, III and IV) as per the GOLD classification were randomized to domiciliary rehabilitation group. 8 weeks supervised pulmonary rehabilitation was given by whatsapp call. Following variables were reviewed at baseline, 4 weeks and at 8 weeks of rehabilitation,which included FEV1, 6MWD and

dyspnoea (MRC scale).

Results:

Thirty patients with a mean (SD) of 65 (6) were enrolled in the study. The mean MRC score was 4 (0.8). The mean FEV1 was 32% of reference value. Twenty six patients completed the study. 6MWD (P<0.001) and dyspnoea (P<0.05) increased significantly in home based rehabilitation patients. There was no statistically significant improvement in FEV1.

Conclusion:

Home based pulmonary rehabilitation is a very effective tool for patients with COPD especially during this COVID times, it leads to improvement in exercise tolerance and symptomatic improvement.

Title: PROFILE OF EXCESSIVE DYNAMIC AIRWAY COLLAPSE IN COPD PATIENTS

Name of Presenter: **DR. PRADEEK GUPTA**

Authors (or Co-authors): **Dr. Jagdish Rawat, Dr. Dev jangpangi, Dr. Ritisha Bhatt**

Institution/Author Organization: **SGRR MEDICAL COLLEGE, DEHRADUN**

INTRODUCTION:

Expiratory Dynamic Airway Collapse (EDAC) is the excessive collapse (>50%) of the membranous parts of the trachea and main bronchi. As per the available literature, it occurs frequently, impacts pulmonary function and can have similar presentation like COPD, therefore accurate diagnosis is required for better management.

AIMS AND OBJECTIVES:

To evaluate the profile of EDAC in stable COPD patients and patients with COPD exacerbation.

METHODOLOGY:

It was a cross sectional case control study comprising of 90 patients. They were allocated to 3 groups: COPD exacerbation, stable COPD and control with 30 patients in each group. The degree of tracheobronchial collapse was evaluated by dynamic airway CT. The images were obtained at three different time points during the respiratory cycle and at three anatomic levels for each respiratory cycle.

RESULTS:

Prevalence of EDAC was 3.33% in COPD patients when compared to the control population while the prevalence of EDAC was 6.67% in the exacerbation group as compared to the stable group.

CONCLUSION:

The occurrence of EDAC remains low in patients

with stable COPD and the abnormality appears to be worsened in acute exacerbation of COPD.

Title: Biomass fuel exposure and COPD in females

Name of Presenter: **PRIYANKA SINGH**

Authors (or Co-authors): **Dr. Tushar Sahasrabudhe, Dr. Vinay Dharmadhikari**

Institution/Author Organization: **Dr. D.Y Patil medical College, Hospital and research center Pimpri pune**

Introduction:

In India, biomass fuel exposure is being recognized as an important risk factor for non-smoking COPD, especially for females who cook on chulha in Indian villages.

Methodology:

It was a cross-sectional study done over a period of two years. 100 females above 40 years of age diagnosed with COPD as per GOLD criteria were enrolled.

Aims and objectives:

To evaluate risk factors and study clinical profile in female COPD patients. Results: The mean age of the participants was 54.81 years SD of 9.86, with a range of 41-82 years and the median of 53 years. Biomass fuel exposure was major risk factor in 93% females (P < 0.0001), with 19.97 years being the mean duration of exposure. Tobacco smoking was rare. Dyspnea was the most prominent symptom (100%) though wheezes were less common (55%). Radiological examination revealed emphysema in only 15% patients.

Conclusion:

Biomass fuel exposure seems to be the single important factor for COPD in Indian females. Prominent pathology seems to be more of bronchitis than emphysema. Implementation of strategies to minimize biomass fuel exposure and providing alternate fuel for cooking may prevent COPD in Indian females.

Title: Study of variation in Neutrophil Lymphocyte Ratio and Platelet Indices in adult patients with stable and acute exacerbation of Chronic Obstructive Pulmonary Disease- A hospital based cross sectional comparative study

Name of Presenter: **Dr RamyaPriya**

Authors (or Co-authors): **Dr Saka Vinod Kumar, Dr Madhusmita Mohapatra, Dr Manju, Dr Dharm Prakash Dwivedi, Dr Vishnukanth, Dr Pratap Upadhyya**

Institution/Author Organization: **Jawaharlal Institute of Postgraduate Medical Education and Research, JIPMER**

INTRODUCTION:

Strategy for prevention, early diagnosis and treatment of Chronic Obstructive Pulmonary Disease (COPD) exacerbations is essential to reduce morbidity and mortality.

AIMS AND OBJECTIVES:

1. To study levels of neutrophil lymphocyte ratio (NLR) and platelet indices—Mean Platelet Volume (MPV) and Platelet Distribution Width (PDW) in patients with stable and acute exacerbation of COPD (AECOPD)
2. To correlate the change in neutrophil-lymphocyte ratio and platelet indices with Erythrocyte Sedimentation Rate (ESR) and C-Reactive Protein (CRP)
3. To evaluate the association of NLR, platelet indices with severity of GOLD staging of COPD.

METHODS:

Patients attending Pulmonary Medicine out patient department and emergency services who fulfill the inclusion criteria were recruited. Eligible patients meeting the inclusion criteria was subjected to spirometry (6 weeks after stabilisation in exacerbated patients), chest X-Ray P/A view and HRCT thorax in full inspiration. Blood samples were sent for analysis of NLR, platelet indices (MPV, PDW), ESR and CRP.

FINDINGS:

Amongst 64 patients, statistically significant difference were noted in NLR, PDW, ESR and CRP between stable and AECOPD patients ($p < 0.001$). Significant positive correlation was found between NLR, PDW with ESR and CRP ($p < 0.001$). NLR, PDW positively correlated with GOLD staging of severity of COPD.

CONCLUSION:

These laboratory tests are simple inflammatory biomarker tests which will help in early diagnosis and prompt intervention in exacerbator phenotype.

Title: Cardiac evaluation by transthoracic echocardiography in patient with Chronic Obstructive Pulmonary Disease and correlation of findings with COPD severity

Name of Presenter: **Dr. Shivam Gupta**

Authors (or Co-authors): **Dr. Avadhesh Kumar, Dr. (prof.) Sudhir Chaudhri, Dr. Anand Kumar, Dr. S.K. Sinha, Dr. Sanjay Verma, Dr. R.K. Mathur.**

Institution/Author Organization: **Department of Tuberculosis and Respiratory Diseases, G.S.V.M Medical college, Kanpur**

INTRODUCTION:

Chronic obstructive pulmonary disease (COPD), defined by GOLD as a common preventable and treatable disease that is characterized by persistent respiratory symptoms and airflow limitation that is caused by airway and/or alveolar abnormality usually caused by significant exposure to noxious particles. COPD is associated with several complications, the most serious of which are Pulmonary arterial hypertension, right ventricular hypertrophy (Cor-pulmonale) and right ventricular failure. Echocardiography provides a rapid, noninvasive, portable, and accurate method to evaluate several cardiac functions.

MATERIAL AND METHODS:

After assessment of risk factors for exacerbation spirometry and CAT chart, patients will be classified according to COPD ABCD groups. After establishing diagnosis of COPD, 2D transthoracic echo Doppler study of all patients were done to evaluate various parameters of cardiac involvement, like dimensions of right atria/ventricle, diameter of great vessels, valvular echo, diastolic dysfunction, pericardial involvement, shunt disease, presence embolus/clot/vegetation

RESULTS:

Our study constituted 48 patients. The study has maximum patients in 50-65 yrs age group (58.3%). In this study maximum number of patients 41.7% were in GOLD 3 severity, followed by 29.2% GOLD 2, 27.1% GOLD 4 and only patient in GOLD 1. There were total 14 (29.17%) patients with normal echocardiography. Tricuspid regurgitation being most common observed anomaly in 22 (45.8%) of total patients. In our study total 13 (27.1%) patients with right atrial dilatation. 19 (39.6%) patients had right ventricular dilatation. As COPD group stages increase to A to D the chances of having normal echocardiography finding are decreased, more percentage of patients have R.V and R.A dilatation. Higher percent of patients, with reduced TAPSE showing more severe form of right heart involvement in chronic smokers.

CONCLUSION:

With the advancing COPD group the normal 2D-Echocardiography cases reduced and abnormal findings increased. The most common anomaly in our study in echocardiography was Tricuspid Regurgitation (45.8%) followed by right ventricle dilatation (39.6%). More COPD patients with severe disease had these abnormalities. Similar pattern was seen in right atrial diameter and diastolic dysfunction.

Title: RELATION OF ELECTROCARDIOGRAPHIC AND ECHOCARDIOGRAPHIC CHANGES WITH THE

SEVERITY OF CHRONIC

Name of Presenter: **Dr. Tessa Charley**

Authors (or Co-authors): **Dr. Suhail N, Dr. Sadakathulla Unais C, Dr. Dhvani Gopinath**
Institution/Author Organization: **MES MEDICAL COLLEGE, PERINTHALMANNA, KERALA**

INTRODUCTION:

COPD is associated with significant extrapulmonary effects, among which cardiac manifestations are most common. COPD affects pulmonary blood vessels, right ventricle, as well as left ventricle leading to development of pulmonary hypertension, cor pulmonale, right ventricular dysfunction, and left ventricular dysfunction also.

AIMS AND OBJECTIVES:

- 1) To study the various electrocardiographic and echocardiographic changes occurring among COPD patients.
- 2) To find an association between certain specific electrocardiographic and echocardiographic findings & the severity of COPD as assessed by spirometry

METHOD:

A cross-sectional study among 100 COPD patients who were diagnosed with spirometry, attending the OPD of Department of Respiratory Medicine, MES Medical College, Kerala. They were analysed with electrocardiogram and echocardiogram and were also compared with severity of COPD.

RESULTS:

In the electrocardiogram, 24% had right axis deviation ($p = 0.020$), 21% had poor progression of R waves ($p = 0.039$), 15% had right ventricular hypertrophy. In the echocardiogram, 19% had right ventricular hypertrophy ($p = 0.008$), 36% had pulmonary artery hypertension ($p = 0.0001$). Also, there was a linear association between the severity of COPD and the electrocardiographic and echocardiographic changes.

CONCLUSION:

Considering the advantages offered by the early detection of cardiovascular comorbidities in COPD by means of electrocardiography and echocardiography, we expect them to have better survival and improved quality of life.

Title: "A CASE OF NOISY BREATHING"

Name of Presenter: **DR. ATHUL THULASI**

Authors (or Co-authors): **DR. PAWAN KUMAR SINGH, DR. MANJUNATH B.G, DR. DHRUVA CHAUDHRY**

Institution/Author Organization: **PGIMS, ROHTAK**

Introduction:

Prolonged intubation is a risk factor for tracheal stenosis (TS), however it has been reported to develop even after few hours of intubation. Since they present with breathlessness and may have monophonic wheeze, they are often mistaken to have asthma.

Case summary:

A 36 year old housewife having no comorbidities developed cough, breathlessness-2 months, noisy breathing -2 weeks. She was diagnosed as asthma and started on inhalers by local practitioner. She came to us as her symptoms persisted. No h/o allergic manifestations or significant exposure. She gave history of suicidal hanging 3 months back and was given invasive mechanical ventilation for 4 days. On examination, she was tachypnoeic, stridor noted. PFT showed obstruction, flow volume loop showed fixed obstruction.

Diagnosis:

FOB revealed TS. CT neck showed short segment TS.

Management:

Mercedes Benz incision and balloon dilatation using FOB done. Her symptoms subsided. FOB showed significant resolution of stenosis. Repeat PFT showed significant improvement.

Conclusion:

TS can occur following even few hours of invasive ventilation, So clinicians should have a high index of suspicion for TS in such patients. Flow volume loops indicate fixed airway obstruction. Bronchoscopic management can be curative in selected patients.

Title: Recurrent Spontaneous Pneumothorax in a COPD patient

Name of Presenter: **Dhinesh Kumar**

Authors (or Co-authors): **Prince George Varughese**

Institution/Author Organization: **Pondicherry Institute of Medical Science**

Pneumothorax is defined as presence of air in pleural space. Pneumothorax is classified as spontaneous and nonspontaneous. Primary spontaneous pneumothorax (PSP) is defined as spontaneously occurring presence of air in pleural space in patients without clinically apparent underlying lung disease. Secondary spontaneous pneumothorax is presence of air in underlying lung disease. The most frequent underlying disorders are chronic obstructive pulmonary disease with emphysema, cystic fibrosis, tuberculosis, cancer and HIV-associated PCP. Peak incidence of SSP can occur later in life in the emphysema population. In SSP,

dyspnea is the most prominent clinical feature. Recurrence rates usually are up to 80% of cases. Here we report a case of recurrent left sided spontaneous pneumothorax in a 79-year-old female with chronic obstructive pulmonary disease and bilateral cystic lung disease who underwent Intercostal tube drainage and talc pleurodesis. Patient underwent uneventful recovery
Keywords Spontaneous pneumothorax, COPD, cystic lung disease

Title: Case of secondary spontaneous pneumothorax with AE OF COPD

Name of Presenter: **Dr. Gyan Prakash Verma**

Authors (or Co-authors): **DR. kumar Girendra , DR. Abhijeet Khandelwal , DR. Vinod kumar**

Institution/Author Organization: **INDEX MEDICAL COLLEGE HOSPITAL AND RESEARCH CENTRE**

INTRODUCTION:

Pneumothorax is an accumulation of air in pleural space that is between parietal and visceral pleura. Spontaneous pneumothorax is more common in COPD patient and usually creates confusion in the mind of the treating physician during an episode of AE of COPD.

CASE REPORT:

Patient 70 yr old smoker male, married, presented to the OPD with chief complaint of chest pain since 5 days and other symptom are dyspnoea and cough which was associated with expectorant in morning,

on examination - patient have tachycardia and tachypnoea with decreased oxygen saturation.

On Chest examination- decrease air entry on right side with hyper resonant on percussion with chest x-ray finding of right sided moderate pneumothorax. On ct scan- suggestive of right sided tension pneumothorax with pan-acinar emphysema.

DISCUSSION:

Spontaneous pneumothorax occurs in elderly patients in the age group of 60 year and above. Acute COPD Exacerbation are treated easily in an outpatient setting most of the time, but in some cases, such as spontaneous pneumothorax can be presenting feature. Spontaneous pneumothorax is a cardiopulmonary emergency occurring in the absence of iatrogenic or traumatic causes. It requires urgent management.

CONCLUSION:

To conclude, we emphasize that SSP should be considered in the differential diagnosis of patient having a history of long term COPD who are in a relatively stable condition with non critical respiratory distress. We also highlight the importance of conducting a chest X-ray

along with repeated clinical examination in a patient of COPD who does not improve with adequate therapy.

Title: CASE OF VANISHING LUNG SYNDROME

Name of Presenter: **DR. HEMALATHA DARSI**

Authors (or Co-authors):

DR. C. RAGHAVENDRA, DR. V. V. RAMANA REDDY

Institution/Author

Organization:

MAHARAJAH'S INSTITUTE OF MEDICAL SCIENCES

VANISHING LUNG SYNDROME also known as giant bullous emphysema. COPD related emphysematous bulla commonly lead to giant emphysema. An old patient referred from outside came with chief complaints of breathlessness, cough. History of smoking 1 pack per day from past 15 years. Initial xray showed giant emphysematous bullae on left side, misinterpreted as pneumothorax. ICD tube was placed in an outside institution but x-ray remained unchanged. CT chest advised and it showed giant emphysematous bulla involving both lungs with giant bulla occupying entire left hemithorax and another giant bulla in right upper hemithorax. Advised to attend cardiovascular surgeon for surgical management with possibility of bullectomy. It is characterized by slowly enlarging upper lobe bulla that compresses normal lung parenchyma causes mediastinal shift with patient experiencing dyspnea and reduced exercise tolerance. A large bulla can look the same as pneumothorax but former does not have along edge and have rounded appearance. Bulla are predominantly caused by smoking. CT scan is very useful in differentiating between two pathologies. Bulla can be treated by surgical techniques.

KEYWORDS;

VANISHING LUNG SYNDROME, BULLA, COPD.

Title: ALPHA 1 ANTITRYPSIN DEFICIENCY - AN UNDER RECOGNIZED CAUSE OF EMPHYSEMA

Name of Presenter: **Dr. sreerag varior a**

Authors (or Co-authors): **Dr. Parul Vadgama, Dr. Grinish Tamakuwala**

Institution/Author Organization: **Government medical college surat**

INTRODUCTION:

Alpha 1 antitrypsin deficiency is a hereditary disorder characterized by low circulating levels of AAT and is associated by development of COPD often by 3rd or 4th decade. Prevalence of emphysema in AATD is 21%. Most common SERPIN A1 mutation associated with AATD

are Z & S mutation and vast majority of AATD individual diagnosed with COPD are ZZ homozygotes.

CASE:

A case of 36 year old male patient, chronic alcoholic presented with acute abdominal pain vomiting & breathlessness. He had family history of emphysema. On examination chest was barrel shaped with hyper resonant note on percussion. Breath sound was decreased on auscultating bilateral lung fields. Per abdomen was tender with voluntary guarding and diminished bowel sounds. He diagnosed to have acute pancreatitis according to raised serum amylase, lipase level & USG abdomen reports. Serum acetone was normal. Patient was treated with iv antibiotic and continuous iv fluids. Routine blood investigation, ECG and 2D echo was normal and Patient had respiratory acidosis with hypercapnia on ABGA. CXR shows hyperinflated lung field and flattened diaphragm. He was kept on non invasive ventilation for 5 days.

DIAGNOSIS & DISCUSSION:

HRCT thorax showed hyperinflated bilateral lung parenchyma & paucity of bronchovascular marking in bilateral lower lobe. PFT showed moderate obstructive pattern with poor bronchodilator reversibility. Alpha 1 antitrypsin level was 0.7 (n/l - 0.9-2.0). Patient was treated with bronchodilators, nebulisation & steroid & get discharged.

CONCLUSION:

Any young patient with family history of emphysema presenting with emphysema in HRCT thorax and pancreatitis should be suspected for AATD even though it is a rare case.

Title: Evaluation Of Cardiovascular Changes In Patients With Chronic Obstructive Pulmonary Disease

Name of Presenter: **AASTHA GUPTA**

Authors (or Co-authors): **Dr. Prem Parkash Gupta, Dr. Rohtas Yadav, Dr. Ashwani Kumar**

Institution/Author Organization: **PGIMS ROHTAK**

Background:

COPD has considerable effects on cardiac functions and pulmonary vessels. Most of the increased mortality associated with COPD is due to cardiac involvement.

Objectives:

To assess the cardiac changes secondary to COPD by echocardiography and to find out the correlation between echocardiographic findings and severity of COPD.

Methodology:

A total 40 of patients of COPD were selected and staged by pulmonary function test (PFT) and evaluated by echocardiography and were grouped as per GOLD staging and ABCD classification. Results: • 27.5% patients belonged to Group A, 30% to Group B, 22.5% to Group C and 20% to Group D. Prevalence of PAH was 62.5% with 30% mild, 25% moderate, and 7.5% severe [100% Group D] PAH. • Cor pulmonale occurred in 7.5% patients, mostly seen in Group C and D. Echocardiography parameters like mean right ventricle basilar diameter, mean right ventricle end-diastolic area, maximum mean right ventricular wall thickness were maximum in Group D patients which correlates with the increasing severity of COPD.

Conclusion:

Prevalence of PAH has a linear relationship with severity of COPD and severe PH is almost associated with cor pulmonale. Echocardiography helps in early detection of cardiac complications in COPD cases giving time for early interventions.

Title: A Prospective, Observational Study to Evaluate Effectiveness and Safety of Fixed Dose Combination of Indacaterol Maleate 110 µg + Glycopyrronium Bromide 50 µg (IND/GLY 110/50 µg) in Stable Chronic Obstructive Pulmonary Disease (COPD) Patients.

Name of Presenter: **Dr. Asawale KY**

Authors (or Co-authors): **Dr. Satish KS**

Institution/Author Organization: **Dr. Satish KS - Vikram Hospital, Bangaluru; Dr. Asawale KY - Novartis India Pvt. Ltd. Mumbai**

Background:

As COPD severity increases to a moderate type, patients will benefit from a combination of 2 classes of long-acting bronchodilators. The present study was conducted to evaluate effectiveness and safety of fixed dose combination of IND/GLY 110/50 µg in stable COPD patients.

Methods:

This was a phase IV study to evaluate the effect of FDC of IND/GLY 110/50 µg in patients with COPD. Due ethics committee permission was acquired. The primary objective of the study was to obtain effectiveness data in patients treated with FDC.

Results:

After 28 patients from 17 centers were enrolled for a period of 26 weeks. The mean trough baseline FEV1 and end of study was 1128.4 ml

and 1220.1 ml respectively. There was slight increase in the mean trough FEV1 at week 26. The change from baseline values were not significant. No patient reported episodes of severe exacerbation. 24.1% patients reported a total of 210 Treatment Emergent Adverse Events and 2.9% patients experienced a total of 36 Severe Adverse Events in this study.

Conclusions:

There was a numerical increase in the trough FEV1 from baseline visit to Week 26. The majority of adverse events were mild and completely recovered and were unrelated to study medication.

Title: ASSESSMENT OF COGNITIVE FUNCTION IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE.

Name of Presenter: **Dr. B V SRI LAKSHMI CHITTAPULI**

Authors (or Co-authors): **Dr. Sreeram kumar, Dr. Somnath Dash, Dr. Seshagiri Rao, Dr. Kondal Rao**

Institution/Author Organization: **GSL MEDICAL COLLEGE**

INTRODUCTION:

Chronic Obstructive Pulmonary Disease represents an important public health challenge. COPD is characterized by persistent respiratory symptoms and chronic airflow limitation.

AIMS & OBJECTIVES:

To assess the cognitive function of COPD patients by using mini-mental state evaluation scoring tool.

MATERIAL AND METHODS:

All the patients diagnosed with COPD are selected for study. The patients are divided into four severity grades according to GOLD criteria for obstruction and 4 groups A,B,C,D (mild, moderate, severe and very severe). All the patients are tested for cognitive function based on MMSE scoring system and score is noted in individual patients. The same test was also performed in control group of equal number.

RESULTS:

The study includes 62 patients. Out of these patients 44 were males and 18 were females. The percentage of abnormal MMSE scores among COPD patients of lower socioeconomic status is of 41%. Patients with higher smoking index and severe obstruction (FEV1 30-50%) had more cognitive impairment.

CONCLUSION:

COPD patients have higher prevalence of mild to moderate cognitive impairment. Percentage

of cognitive impairment is more in patients with lower socioeconomic status, higher smoking index, longer duration of symptoms, higher degree of obstruction.

Title: COPD AND ITS CARDIAC MANIFESTATIONS IN A TERTIARY CARE HOSPITAL

Name of Presenter: **D. PRIYA**

Authors (or Co-authors): **DR. MANISHA.C,DR. LAKSHMIKA CH,DR.SIRISHA VADLAMUDI,DR.C.SUJITH REDDY. DR.GANGADHAR REDDY**

Institution/Author Organization: **MNR MEDICAL COLLEGE AND HOSPITAL**

INTRODUCTION:

Chronic Obstructive Pulmonary Disease is a global health issue. The anatomical and functional relation that exists between the lungs and the heart is such that any dysfunction that impacts in one of the organs is likely to have consequences on other. Heart diseases are among the most important comorbidities observed in COPD, because they have a direct impact on patient survival.

AIMS AND OBJECTIVES:

With an aim to find the prevalence of various cardiac comorbidities in COPD and its relation to severity.

MATERIAL AND METHODS:

A cross-sectional study involving 120 patients of moderate to severe COPD according to GOLD guidelines were taken from department of Respiratory medicine, MNR Medical College and hospital. All patients underwent investigations such as Chest X-ray, ECG and 2D ECHO.

RESULTS:

We investigated 108 males and 12 female patients ranging from 35 to 80 years of age.65 individuals were of moderate and 55 of severe COPD. Cor-pulmonale-48, pulmonary hypertension-30, CHF-4, CAD-8, systemic Hypertension-12, Atrial flutter and fibrillations-6, dilated cardiomyopathy-4, and others-8

CONCLUSION:

The study shows high prevalence of cardiac comorbidities such as Ph, COR-P, LV dysfunction in COPD patients. The severity of complications increases with severity of COPD and makes a linear relation

Title: THE DARK DEVOUR- A STUDY ON PROGNOSTIC IMPLICATIONS OF NIGHT TIME DYSPNOEA IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN A TERTIARY CARE

HOSPITAL IN TELANGANA

Name of Presenter: **DR.DEEPAN.V**

Authors (or Co-authors): -

Institution/Author Organization: **OSMANIA MEDICAL COLLEGE HYDERABAD**

Introduction:

Night-time symptoms have not been stressed in COPD unlike bronchial asthma where they are an established basis of treatment and prognosis. Night-time dyspnoea has several implications which are yet to be studied in detail in COPD. Hence this study was undertaken to establish a relationship between night dyspnoea episodes and prognosis of COPD.

Aims:

1.To study the prevalence of night-time dyspnoea among individuals with COPD recruited from the general population. 2. To establish night-time dyspnea as a significant predictor of poor prognosis in COPD.

Methodology:

The present prospective observational study was conducted with 80 diagnosed COPD patients over a period of 18 months. Each patient will then be subjected to a set of 10 questions during every visit of follow up (every 3 months) to look for exacerbations, hospital admissions and mortality

Results:

Out of 80 patients, 63 had exacerbations, 39 were admitted in hospital and 7 died due to COPD, all being statistically significant.

Conclusion:

The present study shows that night-time dyspnoea in COPD is strongly related to disease severity, and is associated with lower FEV1, higher mMRC score and a marker of poor prognosis. Both exacerbations and admissions were more common during follow-up, and survival was poorer.

Title: COMPARISON OF SMOKER AND NONSMOKER CHRONIC OBSTRUCTIVE PULMONARY DISEASE PATIENTS ATTENDING RESPIRATORY MEDICINE OUT PATIENT DEPARTMENT

Name of Presenter: **DR. DINESH KUMAR PATEL**

Authors (or Co-authors): **DR. SUDHIR CHAUDHRI, DR. ANAND KUMAR, DR. SANJAY VERMA, DR. AVDHESH KUMAR, DR. RAJ KUMAR MATHUR**

Institution/Author Organization: **DEPT. OF TB & RESPIRATORY DISEASES, GSVM MEDICAL COLLEGE, KANPUR, U.P.**

While tobacco smoking is a major risk factor for COPD, only approximately 20% of smokers

develop the disease. About 15–20% of COPD cases are due to occupational exposures to pollutants at the workplace and biomass fuel exposure. More evidence is rising to suggest that other risk factors such as air pollution, respiratory infections, poor nutritional status, chronic asthma, impaired lung growth, poor socio-economic status and genetic factors are also important for disease development

AIMS AND OBJECTIVES:

Comparison of smoker and nonsmoker chronic obstructive pulmonary disease patients attending respiratory medicine out patient department

MATERIAL AND METHODS:

Patients presenting with COPD symptoms, were evaluated for their clinical presentation, Demographic profile, spirometry, CAT score and 6 min walk distance was done in all the patients. Patients will be classified on the basis of spirometry according to GOLD ABCD stage. A comparison of smokers with nonsmokers were done in all the parameters

RESULTS:

The total no. of patients included in the study was 68 with 52 male and 16 female. Mean age was 57.94 years in male and 58.38 years in female.45.6% of our patients belonged to rural area and 54.4% in urban area. Most of the patients (51.5%) belonged to GOLD D group, followed by GOLD B. Most of the smoker too had GOLD D disease followed by in GOLDB while non-smokers maximum patients had GOLD B. Mean of 6MWD was more in non smokers (252.7) as compared to smokers (237.8 meters). Among smokers and nonsmokers both, the worst walk distance was in GOLD D and C, but was overall slightly better in non smokers. Similarly mean saturation drop in 6 MWD test was more in GOLD D, slightly less in GOLD C and lesser in GOLD B in both smokers and non smokers. Both smokers and Non-smokers had maximum patients with CAT Scores 11-20 but the proportion was less in nonsmokers as compared to smokers. However, there were more non-smokers in patients with CAT Scores 21-30. Seems that once COPD sets in, not much difference remains between smokers and non-smokers, rather non-smokers fared worse than smokers in COPD

CONCLUSIONS:

We did not find marked difference in clinical presentation of COPD among smoker and non smokers. However smokers show poor performance and physiological parameter as compared to nonsmokers.

Title: Efficacy Of Vaccination In Preventing Copd Exacerbation

Name of Presenter: **Dr. Evelin Roy**

Authors (or Co-authors): **Dr. Thomas George, Dr Muraly C P, Dr O K Mani , Dr Parvathi Rajendran , Dr Elizabeth Mathai**

Institution/Author Organization: **Government medical college, Thrissur**

BACKGROUND:

Infections by respiratory viruses and bacteria are common causes of exacerbations in COPD. The study aims to assess the efficacy of vaccination against influenza and pneumococci in patients with COPD and demonstrate its correlation with prevention of acute exacerbations.

METHODS:

In this prospective study over a year, 20 COPD patients who received influenza and pneumococcal polysaccharide vaccine were compared with 20 vaccinated with pneumococci and 40 unvaccinated controls. Number of acute exacerbations, hospitalizations, ICU admissions and mortality were compared.

RESULTS:

Influenza and pneumococcal vaccine had an effective prevention and decreased exacerbations than the control group ($p < 0.001$). Lower likelihood of exacerbations with both vaccines taken (24%) when compared pneumococcal vaccine alone (36%). Patients who had pneumococcal vaccination and were also vaccinated against influenza (4%) had lower risk of death.

CONCLUSION:

There was a correlation between influenza and pneumococcal vaccination and the decreased likelihood of hospitalization in the following year due to exacerbations. The use of pneumococcal vaccine especially combined with influenza vaccination is associated with lower risks of all-cause mortality.

CLINICAL IMPLICATION:

As our study shows that there is lesser number of exacerbation in vaccinated group, we must more efficiently explain the importance of vaccines to our patients with COPD.

Title: TO STUDY THE INCIDENCE AND CLINICAL PROFILE OF LUNG CANCER IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Name of Presenter: **DR GAURANG AURANGABADKAR**

Authors (or Co-authors): **DR AJAY LANJEWAR**

Institution/Author Organization: **JAWAHARLAL NEHRU MEDICAL COLLEGE SAWANGI(MEGHE),WARDHA**

INTRODUCTION:

COPD and lung cancer are caused by cigarette smoking and there is increasing evidence linking the two diseases. COPD is an independent risk factor for lung carcinoma and lung cancer is up to five times more likely to occur in smokers with airflow obstruction than those with normal lung function.

AIM AND OBJECTIVES:

To study the incidence and clinical profile of lung cancer in patients of COPD

METHODOLOGY:

The observational cross sectional study comprised 100 indoor patients who presented with clinical features suggestive of COPD and diagnosis was based on history, clinical presentation, findings on X-ray chest, HRCT and spirometric measurements, the diagnosis of lung cancer was made by mass lesion seen on the chest radiography and diagnosis was confirmed by guided biopsy/FNAC .

RESULTS:

The incidence of lung cancer in COPD patients found to be 9 percent in this study. Out of 9 lung cancer patients, 2 (22.22%) had adenocarcinoma, 6 (66.66%) had squamous cell carcinoma and there was 1 (11.11%) case of small cell carcinoma.

CONCLUSION:

COPD and Lung cancer are diseases, whose prevalence increases with advancing age. COPD and lung cancer are caused by cigarette smoking and Squamous cell carcinoma of lung is commonly associated with smoking.

Title: EFFICACY OF SUBLINGUAL BACTERIAL LYSATES IN STABLE COPD - A CASE CONTROL STUDY

Name of Presenter: **DR.HAADI NIZAR AHAMMED**

Authors (or Co-authors): **DR.TUSHAR SAHASRABUDHE**

Institution/Author Organization: **DR. D Y PATIL MEDICAL COLLEGE ,HOSPITAL AND RESEARCH**

BACKGROUND:

Bacterial infection due to colonizers is the commonest reason for exacerbation in COPD. A vaccination strategy of administering antigens extracted from a lysate of the most common bacterial species involved in respiratory exacerbation may thus reduce exacerbation rate.

AIM AND OBJECTIVE:

To evaluate the safety and efficacy of sublingual

bacterial lysates in reducing COPD exacerbation and control of COPD.

MATERIALS AND METHODS:

In this open labeled case-control study, 100 patients of COPD were randomized into two different groups after being matched for severity and age. The treatment group received a daily sublingual dose of bacterial lysate (10 days each month for three consecutive months) and the control group did not. Patients were followed up with 7 visits over 1 year to evaluate COPD control.

RESULTS:

Treatment group showed statistically significant reduction in decline of FEV1 and improvement in QOL, CAT score and BODE index over 1 year. There were 22 major exacerbations in control group vs. 14 in the treatment group. Bacterial lysate had no adverse effects.

CONCLUSION:

Immunization with bacterial lysates showed improvement in QOL, number of major COPD exacerbations and slowed down the disease progression.

Title: A COMPARITIVE STUDY OF BODE INDEX AND GOLD STAGING IN PREDICTING NUMBER AND OUTCOME OF EXACERBATIONS IN STABLE COPD PATIENTS

Name of Presenter: **HARITHA SREE CH**

Authors (or Co-authors): **Dr.K Rajendra kumar,Dr M kiran,Dr Chakravarthi,Dr.Ramy Gadam**

Institution/Author Organization: **RANGARAYA MEDICAL COLLEGE**

Introduction:

The mechanisms underlying COPD exacerbations are poorly understood. It's important to identify the factors that predict the outcome of exacerbations.

Aim:

To assess BODE index and its relation to GOLD staging in stable COPD patients and to assess the value of BODE index and GOLD staging in predicting the number of exacerbations that lead to hospital admission and mortality in the following 1 year.

Methodology:

A prospective observational study done at GGH, Kakinada. 100 patients with stable COPD were enrolled and followed up for a period of 1 year or until death whichever is earlier. Results: Out of 100 patients, 6 were lost to followup. Out of 94 patients, 19 had BODE score 5-6 of which 11 had 1 exacerbation and 4 died. 26 patients had a BODE score 7-10 of

which, 22 had 1 exacerbation and 7 died. Out of 94 patients, 35 were categorized into GOLD stage 3, of which 14 had exacerbations and 4 died and 28 were categorized into GOLD stage 4 of which, 20 had 1 exacerbation and 4 died. Total number of patients with at least 1 exacerbation was 36 and mortality was 12. Remaining results were submitted later.

Conclusion:

BODE index, its components and GOLD staging predict the number of exacerbations significantly. BODE index and two of its components, dyspnea scale and exercise capacity are better predictors of mortality compared to GOLD staging.

Title: Evaluation of tuberculosis associated chronic obstructive pulmonary disease at a tertiary care hospital: A case-control study

Name of Presenter: **Dr. Kanchanapalli Alekya**

Authors (or Co-authors): **Dr. P. JAYAKAR BABU**

Institution/Author Organization: **Katuri medical college and hospital**

BACKGROUND:

Irreversible airway obstruction is important sequelae of pulmonary tuberculosis (TB) that might contribute to a significant proportion of chronic obstructive pulmonary disease (COPD).

AIMS:

This study aims to evaluate the prevalence of TB associated COPD among COPD patients presenting to a tertiary care hospital.

Subjects and Methods:

Stable COPD patients presenting to chest OPD and an equal number of healthy controls were enrolled. COPD patients were subjected to detailed clinical evaluation and lung function test. History of pulmonary TB was evaluated from both groups through self-reporting and/or checking previous records. TB associated COPD patients were identified and their prevalence and distinguishing features evaluated.

Results:

Of 74 COPD patients, 24 had previous history of pulmonary TB. Out of 74 patients, 64 (86.5%) had a history of >10 pack years of tobacco smoking, out of which 19 were current smokers. History of exacerbation in the preceding year was present in 31% patients. 35 patients had history of previous hospitalization related to COPD. The airflow limitation was similar in both groups.

Conclusions:

TB associated COPD constitutes significant proportion of COPD patients. It is a distinct clinical entity with preponderance in

young. It may be associated with frequent hospitalizations as compared to other COPD patients

Title: Study of Prevalence and Pattern of Infections in Acute Exacerbations of Obstructive Airway Disease (OAD).

Name of Presenter: **Kinshuk Sarbhai**

Authors (or Co-authors): **Saswat Subhankar, C Mohan Rao**

Institution/Author Organization: **Kalinga Institute of Medical Sciences, Bhubaneswar**

Introduction:

Understanding the infective and non-infective etiology of obstructive airway disease is important in this geographic region of Eastern India for antibiotic stewardship and to determine the epidemiological status of the pathogens.

Aims:

To study the pattern of infection causing exacerbation of obstructive airway disease.

Materials and Methods:

All patients admitted from July 2018 to December 2019 as acute exacerbation of OAD were subjected to detail history, clinical examination, radiology and laboratory investigations. Sputum for culture and pharyngeal swab for viral rt-PCR were collected from all patients before starting treatment.

Results:

A total of 126 consecutive cases underwent microbiological evaluation. Virus was detected in 40 cases and bacteria in 26 cases. Among the predominant viruses, Flu A (H3N2) followed by rhinovirus were detected mostly in COPD cases. Males and patients more than 60 yrs of age had a higher morbidity. Leucocytosis and renal failure were witnessed in bacterial etiological group and more severe exacerbation with need for ventilatory support was witnessed in patients with co-infection category of patients.

Conclusion: It is imperative to identify the etiological agent of exacerbations of obstructive airway diseases and to treat bacterial infections judiciously in order to prevent decline in lung function.

Title: A CROSS-SECTIONAL STUDY ON CORRELATION OF MICROALBUMINURIA WITH DISEASE SEVERITY IN STABLE COPD PATIENTS

Name of Presenter: **KRISHNAPRIYA S KUMAR**

Authors (or Co-authors): **S. P. AGNIHOTRI, GOVIND S. RAJAWAT**

Institution/Author Organization: **SAWAI**

MANSINGH MEDICAL COLLEGE, JAIPUR, RAJASTHAN

BACKGROUND:

Cardiovascular disease is one of the major causes of mortality in COPD patients. Microalbuminuria is considered as a marker of systemic inflammation and has strong association with cardiovascular events and death as it reflects generalized endothelial vascular dysfunction.

OBJECTIVES:

(a) To assess prevalence of microalbuminuria in stable COPD patients. (b) To find out relationship of microalbuminuria with clinical and physiological parameters in COPD patients.

METHODS:

This comparative cross-sectional study was carried out on COPD patients attending outpatient department at Institute of Respiratory Diseases, SMS Medical College, Jaipur during the year 2019–2020. 40 stable COPD patients and 40 healthy controls were enrolled. Spot urinary albumin/creatinine ratio, smoking history, spirometry, arterial blood gas analysis, body mass index, kidney function tests and BODE index were assessed.

RESULTS:

Out of 40 cases and 40 controls, 23 (56%) and 4 (10%) had microalbuminuria respectively. There was negative correlation between FEV₁, PaO₂ levels and 6 minute walk distance with microalbuminuria levels. There was positive correlation between BODE Index and MMRC grading with microalbuminuria levels.

CONCLUSION:

COPD patients should be screened regularly with microalbuminuria to determine risk and progression of cardiovascular consequences so that adequate interventional strategies can be taken to prolong survival in COPD patients.

Title: PREVALENCE OF CHRONIC KIDNEY DISEASE AMONG CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN COMPARISON WITH OTHER CHRONIC RESPIRATORY DISEASES

Name of Presenter: **DR. LAVANYA S V**

Authors (or Co-authors): **Prof. DR. PAJANIVEL R, DR. VIMAL RAJ .R, DR. HEMACHANDAR. R**

Institution/Author Organization: **MAHATMA GANDHI MEDICAL COLLEGE AND RESEARCH INSTITUTE, PUDUCHERRY**

Introduction:

COPD patients have a relatively higher risk of comorbidities such as pulmonary tuberculosis, lung carcinoma and coronary artery disease

(CAD). The above conditions may contribute to systemic inflammation in patients with COPD. This inflammatory response predisposes to atherosclerotic disease which may affect the renal vasculature resulting in CKD. Patients with COPD and CKD share common risk factors. However, there have been only a few reports of CKD as a comorbidity of COPD as well as other chronic respiratory diseases.

Aim:

To assess the prevalence of CKD among COPD patients compared to patients with chronic respiratory diseases other than COPD.

Methodology:

Ninety patients were divided into 2 groups with each group containing 45 patients. COPD patients were included in group 1 and group 2 included patients with chronic respiratory diseases other than COPD. GFR was estimated based on CKD-EPI formula.

Results:

The overall prevalence of CKD in the present study was 41.57%. The prevalence of CKD in COPD (51.11%) was higher than in non-COPD patients (31.81%). Concealed CKD was encountered more among COPD patients (11.11%) than non-COPD patients (9.09%).

Conclusion:

COPD patients had 1.64 times higher risk of development of CKD than non-COPD patients.
Keywords: COPD, CKD

Title: Nocturnal oxygen desaturation in patients with chronic obstructive pulmonary disease : A predictor of morbidity

Name of Presenter: **Dr.M.Manasa vamsi priya**
Authors (or Co-authors): **Dr.V.V.Ramana reddy (HOD), Dr.G.R.K.Gupta (assoc prof)**
Institution/Author Organization: **Maharaja institute of medical sciences**

Introduction :

Chronic obstructive pulmonary disease is a leading cause of morbidity and mortality all over the world. There are both structural and functional changes in the lungs of a COPD patient. Continued airflow limitation, altered respiratory mechanics and emphysematous changes lead to ventilation-perfusion mismatch which is the key driver of hypoxia. It has been well established that some COPD patients experience non-apneic episodic hypoxia during sleep. As the severity of the disease increases there is increased incidence of nocturnal hypoxia.

Aims and objectives:

Our aim was to calculate the incidence of nocturnal hypoxia in patients with COPD and correlate the incidence with disease severity. To investigate and monitor the patients, if they have developed any adverse sequelae of COPD

Methodology:

We conducted a prospective analytical study on 120 patients who attended to our out-patient department for a duration of one year. For all patients day-time resting oxygen saturation was measured. In those patients with saturation <95%, overnight oxygen saturation monitoring was done along with before and after sleep arterial blood gas analysis. Further investigations like spirometry to correlate with disease severity, echocardiogram and HRCT chest to identify sequelae of COPD were done.

Results:

Out of 120 patients 46 had daytime resting oxygen saturation <95% and among them 21 (45.65%) patients had significant nocturnal oxygen desaturation. Desaturation is more in patients with less value of predicted FEV1. On further investigation with echocardiogram and HRCT chest, 4 (8.69%) patients had already developed the features of pulmonary arterial hypertension. During the follow-up of these patients 5 (10.86%) patients have newly developed the signs of pulmonary arterial hypertension. Increase in frequency of exacerbations has been observed among these patients with significant nocturnal hypoxia.

Conclusion:

Significant nocturnal oxygen desaturation has been identified in patients with COPD. Increased frequency of exacerbations and increased risk of development of pulmonary arterial hypertension is identified in patients with significant nocturnal hypoxia.

Key words:

COPD, nocturnal hypoxia, spirometry, FEV1, echocardiogram, HRCT chest, pulmonary arterial hypertension.

Title: A follow up study with respect to exacerbation in COPD patients and its correlation with 6 minute walk distance.

Name of Presenter: **Dr. MOHIT AGARWAL**
Authors (or Co-authors): **Dr. DIPTI GOTHI**
Institution/Author Organization: **ESI PGIMSR BASAIDARAPUR**

Introduction:

No study has been done in India to evaluate the factors affecting exacerbation rates in COPD.

Aims & objectives:

To evaluate various factors that can predict acute exacerbations of COPD.

Materials and methods:

It was a longitudinal cohort study conducted in a tertiary care institute from December 2018 to May 2020. 100 COPD patients were evaluated in detail and given treatment as per global initiative of obstructive lung disease (GOLD) guidelines. All the patients were followed up for one and a half year. An exacerbation of COPD was defined as a worsening of respiratory symptoms that requires a change in regular medication, emergency visits and hospitalization.

Observation:

12 patients could not complete the follow-up. Of the remaining patients, 85 were men and 3 were women. 49/88 patients (55.7%) experienced acute exacerbations. Amongst the various factors studied for area under curve (AUC) in predicting exacerbation rate, post-exercise desaturation to <88%, BODE index, smoking index, dyspnoea severity, 6MWD had AUC of > 0.86. The sensitivity and specificity for predicting hospitalisation with post-exercise saturation of < 88% and 6MWD of <398 m was 88%/92% and 73%/82% respectively. The exacerbators had a significantly lower mean 6MWD (347+80 m) compared to non-exacerbators (452+57 m, p < 0.0001).

Conclusion:

The 6MWD test can be used to predict exacerbations in COPD.

Title: The importance of 6MWT variables and their clinical significance with respect to exacerbation: A follow up study

Name of Presenter: **Dr. MOHIT AGARWAL**
Authors (or Co-authors): **Dr. DIPTI GOTHI**
Institution/Author Organization: **ESI PGIMSR BASAIDARAPUR**

Introduction:

No study has been done in India to evaluate the association between 6-minute walk test (6MWT) derived variables and exacerbation in COPD.

Aims & objectives:

To study 6MWT-derived variables and its association with exacerbation and hospitalization in COPD.

Materials and methods:

It was a longitudinal cohort study conducted in a tertiary care institute from December 2018 to May 2020. 100 COPD patients were evaluated

with 6MWT variables i.e. distance(6MWD), speed (6MWSpeed), weight (6MWW), distance saturation product (DSP)and post 6MWT SpO₂ were calculated.They were given treatment as per global initiative of obstructive lung disease (GOLD) guidelines and followed up for one and a half year. An exacerbation of COPD was defined as a worsening of respiratory symptoms that requires a change in regular medication, emergency visits and hospitalization.

Observation:

12 patients could not be complete the follow up. Of the 88 patients analysed, 85 were men and 3 were women 49/88 patients (55.7%) experienced acute exacerbations. 28/49(57.1%) patients required hospitalised. Exacerbators and hospitalised patients had a significantly lower 6 MWT-derived variables ($p < 0.0001$). The areas under curve (AUC) for the 6MWT-derived variables for exacerbation and hospitalisation were 0.72-0.83 & 0.83-0.93 respectively. The cut off value of exacerbators were 6 MWD<405 m,6MWSpeed<1.13 m/sec,6 MWW<21300 m kg, DSP<369 m% and post 6MWT SpO₂<91.5%. The cut off value for hospitalization were 6 MWD <398 m,6MWSpeed <1.1 m/sec, 6 MWW<19877 m kg, DSP <349 m% and post 6MWT SpO₂<88.5%.

Conclusion:

6 MWT-derived variables are important predictors of exacerbations and hospitalization in COPD.

Title: IMPROVED DIAGNOSIS OF EXACERBATIONS OF COPD USING EXACT-PRO QUESTIONNAIRE

Name of Presenter: **Dr Neethu K**

Authors (or Co-authors): **Dr Neethu K, Dr K Anithakumari, Dr Sanjeev Nair**

Institution/Author Organization: **Government medical college, thiruvananthapuram**

BACKGROUND:

Exacerbations are an important feature of COPD which account for the greatest proportion of the total COPD burden. As many as 50-70% of exacerbations remain unreported if self-reporting is used to assess them.Using a daily diary(EXACT-PRO questionnaire) for symptoms can improve the diagnosis of exacerbations.

AIM AND OBJECTIVES:

To determine the proportion of COPD exacerbations that would have remained unreported as exacerbations if self- reporting was used instead of EXACT-PRO tool.

MATERIALS AND METHODS:

Cohort study in which 100 stable COPD

patients were followed up every month for a total duration of 6 months. During review, their symptomatology over the last month as recorded in the OP ticket and daily diary were compared.

OBSERVATIONS:

The total number of exacerbations identified were 481 with a mean of 4.81 ± 1.97 when self-reported and was 927 with a mean of 9.27 ± 2.05 using EXACT-PRO questionnaire.48% of the exacerbations would have been remained unreported if self-reporting was used instead of EXACT-PRO questionnaire.

DISCUSSION AND CONCLUSIONS:

Assessing the symptoms of COPD patients using a daily diary can improve the diagnosis of exacerbations of COPD. 48% of the exacerbations would have remained unreported if self-reporting was used instead of EXACT-PRO tool.

Title: A COMPARATIVE STUDY BETWEEN COPD ASSESSMENT TEST AND SAINT GEORGE'S RESPIRATORY QUESTIONNAIRE IN

Name of Presenter: **DR. OMKAR PRASAD RATH**

Authors (or Co-authors): **DR (PROF) SUSMITA KUNDU**

Institution/Author Organization: **R. G. KAR MEDICAL COLLEGE AND HOSPITAL**

Introduction:

COPD patients usually experience a decrease in their health-related quality of life (HRQL). St George's Respiratory Questionnaire (SGRQ) and the CAT Questionnaire along with various questionnaires have been extensively validated and used to measure HRQL. This study has been done to recognize which of the above-mentioned two questionnaires is better to evaluate the HRQL in COPD patients.

Aims and Objectives:

To evaluate HRQL in COPD patients by using CAT AND SGRQ questionnaires and compare them.

Methodology:

This study involved 66 COPD patients. After detailed history and clinical examination; various tests and questionnaires have been applied on them and data have been analysed statistically.

Observation:

The mean age of the patients was $58.89 (\pm 9.57)$ years of which 77.27% were male. Non-smoker COPD patients and female COPD patients had better CAT and SGRQ scores. Elderly patients, smokers with high pack years, patients with more hospitalisation and exacerbation and

COPD patients with increased GOLD stage had worse CAT and SGRQ scores.

Conclusion:

Male patients, elderly patients and smokers had worse HRQL. In terms of evaluation of HRQL, the CAT score and SGRQ score were found to be equally effective.

Title: DECAF score : A prognostic indicator in patients with acute COPD exacerbations

Name of Presenter: **DR.P.SRAVANI**

Authors (or Co-authors): **Dr. P.Yugandhar, Prof and HOD**

Institution/Author Organization: **Alluri Sitaramaraju Academy of Medical Sciences, ASRAM medical college , eluru**

INTRODUCTION:

COPD is a leading cause of mortality and morbidity . In patients getting admitted with acute COPD exacerbation identifying simple ,immediately accessible and strong prognostic indicators will aid in management decisions. DECAF (dyspnea , eosinopenia , consolidation ,acidosis , atrial fibrillation) score is an effective clinical tool for the prediction of mortality and outcome in acute COPD exacerbations

AIMS and OBJECTIVES:

To study the role of DECAF scoring as a indicator of prognosis in patients with acute COPD exacerbations.

METHODS:

In this study, 90 patients admitted with the diagnosis of Acute COPD exacerbation were included. Patients were scored according to DECAF scoring system and were followed during their entire hospital stay and their in hospital outcome was analyzed

RESULTS:

out of 90 patients 44 patients had score of 0-1(low risk) , 15 patients had score of 2(intermediate risk) ,31 patients had score of 3-6(high risk) . In high risk group there is higher mortality, longer hospital stay and increased need for ventilator use

CONCLUSION:

DECAF score is a simple yet effective predictor of mortality and outcome in patients with acute COPD exacerbations. It incorporates indices routinely available and aids the physician in taking management decisions

Title: A ROLE OF CAT SCORE IN COPD PATIENTS

Name of Presenter: **PEDAMALLA SRAVANTHI**

Authors (or Co-authors): **DR A.SATHYA PRASAD**

Institution/Author Organization: **MAMATA MEDICAL COLLEGE**

INTRODUCTION:

COPD is a condition with persistent airflow limitation and systemic inflammation affecting the lungs and other organs and impairing quality of life by several mechanisms. CAT is a new scoring system for assessing the impact of COPD on the patient health. The CAT score and FEV1 are complimentary measurements for assessment and management of COPD. The CAT is a short(8 item) and simple patient completed questionnaire. the CAT has a scoring range of 0-40.CAT is not a diagnostic tool in COPD patients.It is a better assay for evaluating the severity of disease ,management of patient response to treatment and prognosis.

AIM:

To evaluate the comparison between CAT score and GOLD grade in COPD patients.

METHODOLOGY:

A comparative study between november 2018 to september 2020,comprising 50 patients. The CAT score and COPD data were used to obtain COPD severity. Spirometry was performed to assess severity of airflow obstruction. RESULTS: Of the 50 patients,78% were males and 22% were females, with mean age was 63.1+_9.68 years. Most of them presented with grade II dyspnea ,most (50%) of them had mild CAT scores with 23(46%)patients having moderate obstruction (GOLD grade2).

CONCLUSION:

There is inverse correlation between FEV1% and CAT score.The higher the mean CATscore, the greater the GOLDgrade.

Title: CLINICO SOCIAL PROFILE OF NON SMOKERS HAVING CHRONIC OBSTRUCTIVE LUNG DISEASE.

Name of Presenter: **Dr. PASUPULETI SAI DRUTHI**

Authors (or Co-authors): **Dr. Lakshminarayana Jasti, Dr. Somanath Dash, Dr. Seshagiri Rao, Dr. Kondal Rao.**

Institution/Author Organization: **GSL MEDICAL COLLEGE**

INTRODUCTION:

Obstructive lung disease is a group of respiratory diseases characterized by airway obstruction. Smoking is the most common cause of obstructive lung diseases. Factors like allergy due to various pollutants, occupational exposures etc., were also found to contribute to the disease among never smokers.

OBJECTIVE:

Present study was intended to clinically assess and to find out any social causes leading to obstructive lung diseases in non smokers.

MATERIALS AND METHODS:

Patients with features of obstructive lung diseases who attended to the department of pulmonary medicine were included in this study. 52 patients of COPD with no smoking history were enrolled and were compared with equal number of smokers with COPD. Detailed clinical history was taken from patients. Each patient was clinically examined thoroughly.

OBSERVATION:

Majority of patients (84.6%) with obstructive lung disease among non smokers were between age group of 21 – 60 years. The females among non smokers were more (49.2%) than in smokers (27.2%). In the present study, female preponderance was observed.

CONCLUSION:

COPD among non-smokers is not uncommon. Agricultural works, exposure from biomass fuel, low socioeconomic factors, non pucca houses with fewer rooms are the contributing factors for obstructive lung disease among non smokers.

Title: Prevalence of Anemia in COPD and its Etiology based on peripheral smear

Name of Presenter: **Dr. Prakash K**

Authors (or Co-authors): **Vengadakrishnaraj S P**

Institution/Author Organization: **Govt. Stanley Medical College, Chennai-1.**

INTRODUCTION:

Chronic obstructive pulmonary disease (COPD) is traditionally associated with polycythemia, the systemic inflammation that is now recognised as a feature of COPD makes it a possible cause of ACD. If present in COPD, anemia could worsen dyspnea and limit exercise tolerance.

AIMS AND OBJECTIVES:

The aim of the study is to find the prevalence of anemia of chronic disease in COPD and find its impact on clinical stages of COPD.

METHODOLOGY:

This study was conducted in Government hospital of Thoracic Medicine and Stanley medical College from may 2019 to April 2020 for 1 year in 388 patients. Patients with clinical history of COPD diagnosed as per GOLD criteria. Patients with other chronic disease are excluded.

RESULTS:

of 388 COPD patients with hemoglobin level less than defined by WHO, 92 (23.7%) had normocytic normochromic and 76.3% had microcytic hypochromic anemia in peripheral smear.

DISCUSSION:

Anemia is a comorbidity in severe COPD and is responsible for increased disease burden. Anemic patients experience more dyspnea and have decreased functional capacity results in deterioration in the quality of life.

Title: Role of Pulmonary Rehabilitation in COPD

Name of Presenter: **RAJEEV KUMAR CHAUHAN**

Authors (or Co-authors): **Santosh kumar, Gajendra vikram singh, Komal Lohchab**

Institution/Author Organization: **S.N.MEDICAL COLLEGE**

INTRODUCTION:

Pulmonary rehabilitation is a comprehensive intervention for patients with chronic respiratory diseases who are symptomatic and often decreased life activities Pulmonary rehabilitation reduces hospitalization among patient who have a repeated exacerbation.

AIMS AND OBJECTIVES:

This study is used to assess the role of pulmonary rehabilitation in COPD patients.

MATERIALS AND METHOD:

This is an hospital based randomized case control study,conducted in 108 clinically diagnosed COPD patients to assess the role of pulmonary rehabilitation in COPD patient The role of pulmonary rehabilitation in COPD patients is assessed by SGRP

RESULT:

The change in decline in [POST 6MWT] observed between the case and control group was significant [p=0] . The SGRQ was noticed to be decreased in both the groups, .The change in decline in SGRQ observed between the case and control group was significant [p=0] .

CONCLUSION:

In conclusion, pulmonary rehabilitation is a new hope for patient with COPD. It is a treatment that reduces dyspnea and increases activities of daily living ,exercise tolerance ,exercise capacity and better quality of life.

Title: Comparative study of inflammatory markers in Type2 diabetes mellitus between

copd and non copd patientName of Presenter: **Dr Rajesh sahu**Authors (or Co-authors): **Dr Jusmita dutta & Dr Ratan kumar**Institution/Author Organization: **L.N.Medical college bhopal (MP)****BACKGROUND:**

Both diabetes mellitus and chronic obstructive pulmonary disease (COPD) are chronic conditions with severe global consequences.^{1,2} While 10% comorbidity occurs with both, recent studies have shown that T2DM can worsen the progression and prognosis of COPD, while COPD constitutes an important risk factor for the development and/or progression of T2DM. Inflammatory process is pathological connecting link between two.¹

METHODS:

We investigated 40 patients of type-II diabetes mellitus (T2DM+COPD group), and 45 patients of diabetes only (T2DM group) to compare inflammatory markers such as high sensitivity C-reactive protein (hs-CRP) and total leucocyte count (TLC).

RESULTS:

The hs-CRP levels for T2DM+COPD group (5.45 ± 1.07) was statistically higher than the T2DM group (2.37 ± 0.44) (Student's t test, $p < 0.0001$). TLC was also significantly raised in T2DM+COPD group (7.9×10^9) compared to T2DM group (7.3×10^9) (Student's t test, $p < 0.05$).

DISCUSSION:

Inflammatory mediators are elevated in COPD and diabetes.³ Common inflammatory pathways might be the link between COPD and diabetes.⁴⁻⁶ It might be beneficial to consider the reduction of diabetes risk as an objective during the selection of therapeutic approaches for COPD.¹

CONCLUSION:

In conclusion, simultaneously elevated levels of hs-CRP and leukocyte count are associated with increased risk of major comorbidities. These biomarkers may be an additional tool for clinicians to conduct stratified management of these two comorbidities.

*Conflict of interest-- nil***Title: CRP IN COPD PATIENTS**Name of Presenter: **DR. ROHIT SUHAS BHINGARDEVE**

Authors (or Co-authors): -

Institution/Author Organization: **LTMMC SION HOSPITAL MUMBAI**

The chronic inflammation in COPD, orchestrated by multiple inflammatory cells and mediators in the airways and the lung tissues, is induced by inhalation of noxious gases and particulate matter. This persistent inflammatory response in the lung is also associated with a significant systemic inflammatory response yielding adverse clinical outcomes, so-called systemic effects of COPD (2). Although the origin of systemic inflammation present in COPD remains poorly understood and correlations in the regulation of inflammation in the pulmonary and systemic compartments are not well documented yet, it is clearly established that some inflammatory markers are risen in systemic circulation (2,3). Of the blood-based biomarkers, C-reactive protein (CRP) has shown the greatest promise (4). In COPD patients increased CRP levels are associated with poor lung function, reduced exercise capacity and worse quality of life as well as being a significant predictor of all cause mortality (5-8). As well as COPD itself, smoking, which is the most commonly encountered risk factor for the disease is also responsible for rise in serum CRP levels (9). Though to our knowledge the effect of biomass exposure, potentially initiating inflammatory process in the lungs of COPD patients, on serum CRP levels has not been studied previously, we conclude that systemic inflammation is present in COPD patients and CRP is an important biomarker in COPD in means of reflecting disease severity and prognosis of patients. Serum CRP levels are risen independently of smoking status and biomass exposure in COPD patients reflecting that CRP rise was a result of the inflammatory nature of the disease itself. Systemic hypertension contributes to the degree of systemic inflammation, those COPD patients with concomitant systemic hypertension should more closely assessed for systemic effects of COPD and for worse prognosis. Further clinical trials must be held to investigate whether this condition has clinical implications in the follow-up and treatment of this subgroup of patient

Title: To Study the Prevalence of Osteoporosis and Metabolic Syndrome Among Female Chronic Obstructive Pulmonary Disease Patients at A Rural Tertiary Care Centre of North IndiaName of Presenter: **DR RUCHIRA ROY**Authors (or Co-authors): **Dr Adesh Kumar, Dr Ashish Kumar Gupta, Dr Aditya Kumar Gautam, Dr Prashant Yadav**Institution/Author Organization: **Uttarpradesh University of medical sciences****Background:**

Chronic obstructive pulmonary disease (COPD) is a lung disease that is thought to result from chronic inflammation that may affect other

organ systems. Evidence suggests that the prevalence of osteoporosis and metabolic syndrome in patients with COPD is high and potentially important. The strength of the bone depends on bone mineral density (BMD) and bone quality. The BMD is measured by the dual-energy X-ray absorptiometry (DEXA) scan. The major features of the metabolic syndrome include central obesity, hypertriglyceridemia, low high-density lipoprotein (HDL) cholesterol, hyperglycemia, and hypertension. These diseases being so severe but its prevalence among female COPD patients in North India is not well documented.

Aim and Objectives:

To find the prevalence of osteoporosis and metabolic syndrome among female chronic obstructive pulmonary disease patients at a rural tertiary care centre of north india. Materials & methods: This is a cross sectional study conducted between January 2019 to June 2020 in Department of Respiratory Medicine, UPUMS, Saifai, Etawah. The female patients who presented with symptoms of COPD and fulfilling the inclusion criteria are included and is ranked by Global Initiative For Chronic Lung Disease (GOLD 2020), World Health Organization Criteria for Classification of Osteopenia and Osteoporosis, Criteria for clinical diagnosis of metabolic syndrome according to NCEP:ATP III (National Cholesterol Education Program: Adult Treatment Panel III).

Result:

A total of 210 patients were included, out of which 148 patients had osteoporosis and 127 patients had metabolic syndrome with mostly occurring between 60 to 69 years of age.

Conclusion:

Osteoporosis and Metabolic syndrome is prevalent entity in female COPD patients among the North Indian population. Keywords: Chronic obstructive pulmonary disease, Metabolic syndrome, Osteoporosis.

Title: In-vitro drug deposition of indacaterol 110mcg/glycopyrronium 50mcg using dry powder inhaler: Comparison of two drug-device combinationsName of Presenter: **Sujata S. Mahadik**Authors (or Co-authors): **M. Lopez, R. Hegde, G.S. Rajawat, G. Masugade, V. Mhapsekar, B. Bind, S. Vartak, A. Desai, J. Gogtay**Institution/Author Organization: **Cipla Ltd.****Aim:**

To evaluate delivery of Cipla's indacaterol 110mcg/glycopyrronium 50mcg (Inda/Glyco) with Cipla's DPI in comparison to reference Inda/Glyco delivered using reference DPI

Methods:

Performance of Cipla's product and device (Nistami) and reference product and device (Sequadra) was evaluated by measuring fine particle dose (FPD) and median mass aerodynamic diameter (MMAD) at two different flow rates (60 and 90 LPM) using Next Generation Impactor. Data from measurement in triplicates are presented as mean±SD. Delivered dose was determined using DUSA apparatus. Analysis was performed using a validated HPLC method.

Results:

The FPD values are as mentioned below:

FPD(mcg)				
Flow rate	Indacaterol		Glycopyrronium	
	Cipla	Reference	Cipla	Reference
60L/min	48.83±0.80	45.43±0.34	22.42±0.66	25.83±0.27
90L/min	49.18±0.99	47.10±0.16	22.71±0.76	25.19±0.22

The MMAD values are as mentioned below:

MMAD(µm)				
Flow rate	Indacaterol		Glycopyrronium	
	Cipla	Reference	Cipla	Reference
60L/min	2.84±0.07	2.99±0.02	2.95±0.12	3.13±0.02
90L/min	2.71±0.03	2.86±0.04	2.80±0.07	3.09±0.02

The Cipla product-device combination delivered ~87% and 88.4% of indacaterol and glycopyrronium respectively, at both the flow rates. Drug delivery with reference product and DPI at 60 and 90 LPM was 85.5% and 89.6% for indacaterol and 87.9% and 90.1% for glycopyrronium, respectively.

Conclusion:

The in-vitro drug delivery with Cipla's Inda/Glyco drug-device is similar to the reference Inda/Glyco drug-device.

Title: Prevalence and Risk Factors for Coronary Artery Disease (CAD) in patients of COPD

Name of Presenter: **SAJIN SUNNY MATHEW**

Authors (or Co-authors): **M S Barthwal, Tushar Sahasrabudhe, Sachin Kumar Dole**

Institution/Author Organization: **Dr. D. Y. Patil Medical College Hospital and Research Centre Pune**

Background:

CAD and COPD are related closely, as they share common causative risk factors. COPD related systemic inflammation adds to the CAD risk. CAD may therefore be common in COPD but often silent.

Aims and Objectives:

To study the prevalence of CAD in COPD and

study the risk factors.

Materials and methods:

This was a cross sectional study which was carried out using a semi-structured questionnaire along with a complete cardiac assessment to evaluate for the presence of associated CAD in 200 patients of COPD diagnosed by GOLD criteria.

Results:

72/200 (36%) had abnormal ECG/ 2 D echo suggesting CAD. 17/19 who underwent coronary angiography had significant blocks. Out of 200 cases, 87/200 (43.5%) were tobacco smokers and 113/200 (56.5%) had biomass fuel exposure. Incidence of CAD correlated with smoking index as well as severity of airflow obstruction (p-value <0.05). Mean CRP level among COPD patients with CAD was higher (11.5 ± 3.9 mg/L) as compared to patients with COPD alone (0.5 ± 0.28 mg/L). Conclusion: Risk of CAD is high in COPD and seems to increase with COPD severity and smoking index.

Title: A COMPARATIVE STUDY OF RISK FACTORS, CARDIOVASCULAR COMORBIDITIES, C-REACTIVE PROTEIN AND BLOOD EOSINOPHIL COUNT AMONG MALE AND FEMALE PATIENTS WITH STABLE CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Name of Presenter: **Dr Sandip Das**

Authors (or Co-authors): **Dr Ritabrata Mitra (Asst. Prof.), Prof (Dr) Amitabha Sengupta (Professor)**

Institution/Author Organization: **IPGME & R and SSKM Hospital, Kolkata**

INTRODUCTION:

Gender difference among cases of Chronic Obstructive Pulmonary Disease, their risk factors and correlation with inflammatory markers especially peripheral blood eosinophilia and C-reactive protein titer is a topic of great interest and research.

AIMS & OBJECTIVES:

To evaluate risk factors and cardiovascular comorbidities among male and female COPD cases and look for their correlation with absolute eosinophil count (AEC) and C-reactive protein (CRP) titer.

METHODOLOGY:

Observational Cross-sectional study among 70 COPD cases without acute exacerbation, not requiring hospitalization, not oral corticosteroids in last 6 months, nondiabetic and without COPD-asthma overlap; Comparative statistical analysis was done by Fisher Exact probability or Chi-Square test and

Spearman's correlation co-efficient was used to analyze correlation.

RESULTS:

56% cases (39/70) were males and 44% (31/70) were females. Significant gender difference was noted with respect to smoking habit (59% males, 13% females), Indoor biomass fuel exposure (81% females, 9% males), Occupation (39% male laborers, 87% female homemakers) and presence of hypertension (56% males 32% females). AEC showed significant correlation with Smoking index, BODE index, whereas CRP titer was significantly correlated with hypertension.

CONCLUSION:

Indoor biomass exposure is a leading cause of female COPD. Absolute eosinophil count and CRP are important biomarkers of the disease.

Title: Efficacy and safety of Budesonide given in combination with Glycopyrronium + Formoterol in Indian COPD patients: Post-hoc analysis of the Glycopyrronium + Formoterol Phase 3 study

Name of Presenter: **Dr. Sonali P. Jadhav**

Authors (or Co-authors): **S Salvi, A Kumar, S. Agarwal, A Leuva, V Shukla, S Deshpande, S Balamurugan, A Singh, S Tikkiwal, S Gupta, M Lopez, S Sawant, A Vaidya, J Gogtay**

Institution/Author Organization: **Cipla Ltd**

Background/Objectives:

Data on triple therapy of Glycopyrronium/Formoterol/Budesonide in Indian patients with COPD is lacking. We conducted a post-hoc analysis of our prospective, Phase 3 study of Glycopyrronium+Formoterol to evaluate response in patients who received budesonide as per Investigator's discretion.

Methodology:

We compared effect of budesonide 400mcg (ICS) given in combination with Glycopyrronium 25mcg/Formoterol 12mcg twice daily (GF, n=77) or Glycopyrronium 50mcg once daily (G, n=74) during 12 weeks of treatment in patients with moderate-to-severe COPD. This analysis included mean change in trough FEV1 (primary endpoint), 1hr post-dose FEV1&FVC, rescue medication use and change in mMRC & CAT score.

Results:

At week 12, mean change in trough FEV1 from baseline was 70mL [95%CI(20, 130);p=0.0102] in GF+ICS group and 40mL [95%CI(-40, 110);p=0.3185] in G+ICS group; inter-group difference was 40mL[95%CI(-60mL, 130mL);p<0.0001]. The mean change from baseline in trough FVC and 1hr post-dose FEV1

& FVC, was 90mL, 40mL, 50mL, respectively in GF+ICS. A statistically significant improvement was observed in rescue medication use, mMRC and CAT score with mean change of -0.52, -6.81 and -0.83 respectively in the GF+ICS group vs. baseline ($P < 0.0001$). GF+ICS was safe and well tolerated.

Conclusion:

Budesonide given in combination with Glycopyrronium/Formoterol is effective and safe in Indian patients with moderate-to-severe COPD.

Title: EFFECT OF LONG TERM OXYGEN THERAPY IN COPD – A PROSPECTIVE OBSERVATIONAL CLINICAL STUDY

Name of Presenter: **SRUTHI RAGHUNATH P J**
 Authors (or Co-authors): **DR.SRUTHI RAGHUNATH P J ,DR.ANANDAN P T, DR.SAFREENA MOHAMED N**
 Institution/Author Organization: **INSTITUTE OF CHEST DISEASES ,GOVT MEDICAL COLLEGE , KOZHIKODE**

INTRODUCTION:

COPD is a major global health burden because of its high prevalence and significant mortality. Long-term oxygen therapy is the cornerstone mode of treatment in patients with severe COPD with resting hypoxemia. When correctly used, it improves survival in hypoxemic COPD patients. It may have favourable effects on other outcome measures including quality of life and frequency of hospitalization.

OBJECTIVES:

To determine the effect of LTOT on quality of life and frequency of exacerbations in patients with COPD with resting hypoxemia and assess adherence and factors associated with nonadherence to its use.

MATERIALS AND METHODS:

72 patients having COPD with resting hypoxemia, satisfying inclusion criteria were included. Baseline investigations, frequency of exacerbations recorded, quality of life assessed using St.George Respiratory Questionnaire, and LTOT was prescribed. Patients were asked to record hours of use of LTOT and if not using for the recommended duration the reasons for the same. Subjects were followed up for 6months, quality of life and frequency of exacerbations recorded and compared with baseline. Compliance to LTOT and reasons for noncompliance recorded.

RESULT:

72 patients included in the study. 3 died,2 discharged from LTOT,3 lost to follow up,64 were included in final analysis.75% male, mean age

61.3±1.48 years .64% was adherent to LTOT use. There was statistically significant improvement in quality of life assessed by SGRQ with respect to symptoms, activity, impact and total score when compared the baseline with 6 months of LTOT use. No significant change in frequency of exacerbations, there was reduction in hospital admissions. Main reason for nonadherence was restriction for ambulation (72%)

CONCLUSION:

This study demonstrates LTOT improves quality of life in COPD patients with resting hypoxemia if appropriately used and reduces the frequency of hospital admissions. The main reason for nonadherence is restriction of ambulation.

Title: CULTURE SENSITIVE PATTERN AND BACTERIOLOGICAL PROFILE IN SPUTUM CULTURE AMONG PATIENTS OF ACUTE EXACERBATION OF COPD

Name of Presenter: **V Ch S Sai SNIGDHA SRI Veeramalla**
 Authors (or Co-authors): -
 Institution/Author Organization: **Andhra medical college, visakapatnam**

Retrospective observational study of 90 patients diagnosed with acute exacerbation of COPD admitted at GHCCD from October 2019 to October 2020. Among 90 Patients on gram staining,24(26.67%) were gram positive and 45(50%)were gram negative organisms. Organisms isolated were:1) Kiebsiella pneumonia in 24cases(26.67%) 2) Streptococcus pneumoniae in 17 cases(18.89%) 3)Hemophilus nfluenza in 11 cases(12.2%) 4) Pseudomonads aeruginosa in 8 cases(8.89%) 5) Staphylococcus aureus in 5 cases(5.55%)6) E.coli in 2 cases(2.22%)7)Atypical bacteria in 2 cases(2.22%) while 21 cases(23.33%) sputum culture report showed no isolation of pathogenic organism.Sensitivity patterns showed klebsiella had highest sensitivity to piperacillin and amikacin, streptococcus sensitive to cefotaxime and H.influenza to ceftriaxone and clarithromyc

Title: A PROSPECTIVE STUDY OF THYROID DYSFUNCTION AND CLINICAL PROFILE IN COPD PATIENTS IN A TERTIARY CARE CENTRE

Name of Presenter: **DR VARSHA RAJ MEENA**
 Authors (or Co-authors): **DR ANIL SAXENA,DR SUMAN KHANGAROT,DR AISHWARYA AP**
 Institution/Author Organization: **GMC KOTA**

INTRODUCTION:

COPD is a chronic systemic disease affecting the vital organ systems in the body, since it is not confined to affect only the respiratory system. Among the Endocrinological disorders,

Thyroid disease is quite common among COPD individuals. Hypothyroidism adversely affect the quality of life in COPD individuals. Severity of hypothyroidism linearly correlates with muscle weakness & myopathy.

OBJECTIVES:

A PROSPECTIVE STUDY OF THYROID DYSFUNCTION AND CLINICAL PROFILE IN COPD PATIENTS METHODOLOGY This present study will be conducted on 100 adult COPD.Patients were made to undergo pulmonary function tests, for 3 times at every 15 minutes interval and best of 3 readings was taken. The Forced Vital Capacity (FVC), Forced Expiratory Volume at the end of one second (FEV1),FEV1/ FVC ratio were recorded.

Results:

A total of 100 cases of COPD were evaluated, of which 61 (61%) were observed to be having thyroid disorders. Hypothyroidism was diagnosed in 55 cases and hyperthyroidism in 6 cases.

Conclusion:

The results of this study indicate that thyroid disorders are frequent in patients with chronic obstructive pulmonary disease patients. The thyroid functions were at lower normal range in patients with COPD. Hence COPD patients have higher prevalence of hypothyroidism.

Title: Treatment Response in Pulmonary SarcoidosisName of Presenter: **Dr. Ancy Elsa Thomas**Authors (or Co-authors): **Dr. Richa Gupta, Dr. D. J Christopher**Institution/Author Organization: **Christian Medical College, Vellore**

BACKGROUND: Treatment response in pulmonary sarcoidosis following treatment is not well studied. In particular, not a single study has addressed this for Indian subjects.

AIM:

To assess the short term improvement of clinical, physiological, radiological and quality of life(QOL) parameters with treatment in patients with pulmonary sarcoidosis.

METHODS:

It was a prospective, observational study in patients diagnosed with Pulmonary sarcoidosis. Clinical, physiological, radiological (Oberstein et al staging) and QOL(KSQ scoring) were assessed at baseline and after steroid therapy for 3-4 months

RESULTS:

After 3-4 months of treatment, the change in VAS score for cough was -8.41(CI:-11.5,-4.88, P value<0.001) and FAS scale for fatigue -8.4(CI:-11.95,-4.88, P value<0.001). Spirometry showed in increase of mean FVC from 2.29 to 2.39,p value<0.001. The total HRCT scoring reduced from 8.14 to 5.06(P <0.001).

CONCLUSION:

Our study demonstrated significant short term improvement in symptoms, lung functions, radiology and QOL after 3-4 months of treatment.

Title: Post Covid diffuse parenchymal lung disease(DPLD) – a new entityName of Presenter: **Dr ASHISH KUMAR PRAKASH**Authors (or Co-authors): **Dr Anand jaiswal, Dr Ashish Kumar Prakash, Dr Bornali Datta, Dr Nishant Gupta, Dr Amit Jain**Institution/Author Organization: **MEDANTA-THE MEDICITY****Background:**

Covid 19 causes a spectrum of disease. Pulmonary involvement leads to moderate and severe disease. Early inflammatory pulmonary phase is characterized by alveolitis and an

acinar shadow on HRCT.The inflammatory phase followed by a fibrotic phase. Methods-A total of 63 patients of RT-PCR confirmed covid pneumonia was enrolled. They were classified on the basis of CT finding as GGO/ Acinar (n=26), Early Fibrotic (n=6), Mixed (n=28) and ARDS (n=4) patterns.

Results:

Of the total subjects 92% were male and only 5(8%) were female. Majority were aged between 51-70 years. COPD was present in one patient. On follow up CT after three to four weeks (n=30) most of the CT showed either complete or near complete radiological resolution. Only two patients didn't show radiological resolution even after 3-4 weeks.

Conclusion:

We propose a term COVID 19 Diffuse Pulmonary Lung Disease for the HRCT pattern seen in this disease. DPLD due to covid is more common in male and in elderly people. Striking feature noted was that most patients didn't have chronic lung disease. Most of these changes resolve if a prolonged course of steroid is given. Those with severe pneumonia (ARDS) needs closer follow-up for evolving fibrosis and justifying need for antifibrotic.

Title: A STUDY OF CLINICAL AND RADIOLOGICAL PROFILE IN PATIENTS WITH INTERSTITIAL LUNG DISEASE (ILD) IN A TERTIARY CARE SETUPName of Presenter: **DR.R.BELINDA ANET**Authors (or Co-authors): **DR.R.BELINDA ANET, DR.SAMEER SINGHAL, DR.JAI KISHAN, DR.ACHCHAR SINGH**Institution/Author Organization: **M.M.INSTITUTE OF MEDICAL SCIENCES AND RESEARCH, MULLANA, AMBALA****INTRODUCTION:**

Bilateral infiltrative diseases involving the lung parenchyma with a varying degree of inflammation and fibrosis,that may present acutely or more commonly as a chronic condition, are as a group named as Interstitial Lung Diseases (ILD).

OBJECTIVES:

To study the clinical and radiological profile in patients with Interstitial Lung Disease(ILD) in a tertiary care setup, especially the co-relation between clinical, radiological finding and pathological finding if required.

MATERIALS AND METHODS:

The study was conducted in the Department of Pulmonary Medicine at MMMSR during a period of 2 years. The patients fulfilling the inclusion criteria after verifying the exclusion criteria were taken up for the study after taking informed consent.

RESULTS:

The most common age distribution 51-60 years (31.1%) with female preponderance(52.4%). Idiopathic Pulmonary Fibrosis(32.8%) is the most common ILD & overall presentation being dry cough(100%) and exertional dyspnoea (95.1%). The most common HRCT pattern is Non-IPF(54.1%) and correlates with diagnosis. Spirometry shows restrictive pattern(80.3%). DLCO is significantly reduced in Typical UIP pattern in comparison to Non-IPF and probable UIP pattern. FVC and DLCO have a positive correlation.

CONCLUSION:

ILD can be properly diagnosed and treated only in a tertiary care centre. HRCT chest is a sensitive tool in identifying the pattern of ILD and helps in early diagnosis.

Title: Prevalence of Pulmonary Hypertension in different kind of Interstitial Lung diseases at a tertiary care center : A study of 109 subjectsName of Presenter: **Dr Dipanshu Jain**Authors (or Co-authors): **Dr Anil Saxena , Dr Suman khangarot**Institution/Author Organization: **Government Medical College ,KOTA****Introductions:**

Pulmonary Hypertension is complication that may develop resulting to chronic lung disease, it further evaluations of symptoms ,morbidity ,mortality in these patients ;Prevalence of Pulmonary hypertension is about 30-40% in interstitial Lung Diseases. Material and methods - This is a cross-sectional observational study conducted in Department of Respiratory medicine, GMC ,kota Time line - 1 oct 2019 to 30 september 2020 all diagnosed cases of ILD were included with below exclusions: * patients those not given consent * Pulmonary Hypertension due to pre-existing cardiac disease Echocardiography was performed and Mean Pulmonary Artery Pressure was calculated using mahans equations : MPAP = 79-(0.45 X Pulmonary Acceleration Time). RVSP was calculated using TR velocity as RVSP= 4v2 + Right arterial pressure where V is the TR velocity,the severity was defined

as mild moderate and severe as MPAP bw 20-35 mmhg,36-50 mmhg and >50 mmhg respectively Observation and Results No. of patients as hypersensitivity Pneumonitis ,Connective tissue disease associated ILD,Idiopathic Pulmonary Fibrosis,Sarcoidosis and others was 35 (32.2%) ,33 (30.5%),17 (15.9%), 14(12.6%), 10 (8.8%) MPAP level > 20 indicated pulmonary hypertension . Out of 109 patients 51 diagnosed as Pulmonary Hypertension Conclusions- Pulmonary hypertension is detected in significant no.s of patients with ILD.

Title: Clinical and investigational profile of Sarcoidosis and Utility Of CT scan in prognostication

Name of Presenter: **Dr. Belgundi Preeti**

Authors (or Co-authors): **Dr. Belgundi Preeti, Dr. Sobha Subramaniam**

Institution/Author Organization: **Amrita institute of medical sciences**

Background:

Sarcoidosis is a multisystemic granulomatous disorder, misdiagnosed and treated as tuberculosis in highly prevalent countries and Knowledge about it is necessary for differentiation from other similar diseases and initiation of appropriate treatment.

Methods:

For this retrospective observational study, patients with histologically confirmed sarcoidosis in a tertiary hospital from 2014-2019 were included.

Results:

Out of the 65 patients, 61.5% were females. Mean age was 52.85 ± 12.46 years. 76.9% were non-smokers. Predominant symptoms were Weight loss (58.5%), Anorexia (44.6%) and cough (41.5%). Most common organs involved were Lung and intrathoracic lymph nodes (81.5%), Liver (29.2%), eyes (16.9%) and skin (15.4%). Radiologically, lymphadenopathy was most common. On Chest X-Ray, majority (64.6%) belonged to Stage I according to Scadding criteria whereas on CT scan, using the same criteria, Stage II was more common (43.1%) due to detection of more parenchymal opacities. 20(30.8%) patients were Upstaged on CT compared to the Chest Xray. 7 patients(10.8%) were downstaged. ACE levels were elevated in 41 (63.1%) patients but didn't correlate with radiological staging.

Conclusions:

CT evaluation of thorax at baseline is suggested in all patients as it leads to upstaging and downstaging which can influence the

management. Normal ACE level cannot rule out sarcoidosis.

Title: A COMPARATIVE STUDY OF CASES OF IDIOPATHIC PULMONARY FIBROSIS WITH DIFFUSE PARENCHYMAL LUNG DISORDERS OF KNOWN ASSOCIATIONS.

Name of Presenter: **DR RIKSOAM CHATTERJEE**

Authors (or Co-authors): **PROF AMITABHA SENGUPTA, PROF SOMENATH KUNDU**

Institution/Author Organization: **INSTITUTE OF POST GRADUATE MEDICAL EDUCATION AND RESEARCH (IPGME&R) ,KOLKATA**

Introduction:

Idiopathic Pulmonary Fibrosis (IPF) is a chronic progressive fibrosing interstitial lung disorder (ILD) with a generally poor outcome . Hence differentiating IPF from other causes of Diffuse Parenchymal Lung Disorders (DPLD) is of utmost importance.

Aims & Objectives:

1. To establish diagnosis of ILD.
2. Identify etiology
3. Compare IPF with secondary causes

Methodology:

Observational cross-sectional study among 60 adult DPLD cases (excluding infection, malignancy) attending Respiratory Medicine Department of a Tertiary Hospital .IPF was diagnosed as per ATS/ERS 2018 criteria and comparative statistical analysis of clinical ,HRCT ,spirometry ,serological markers and fibreoptic bronchoscopy (as necessary) were performed.

Results:

Connective tissue disease (especially Systemic sclerosis , Rheumatoid arthritis) ,was the commonest cause of ILD (36.6%) followed by IPF (20%),hypersensitivity pneumonitis (20%), pneumoconiosis (8.4%), Sarcoidosis (6.6%). IPF cases showed typical UIP in 75% . NSIP was seen in 77% of CTD-ILD. Hypersensitivity pneumonitis cases showed mosaic attenuation ,with upper lobe honeycombing (67%) .Age, smoking habit, enviromental and occupational exposure, extrapulmonary features, characteristic HRCT findings, and forced vital capacity are the major statistically significant discriminating parameters between IPF and secondary DPLDs.

Conclusion:

Combining clinical parameters with HRCT scan reliably differentiates IPF from secondary ILDs.

Title: Accurate Quantification of Fibrosis

Patterns in Interstitial Lung Disease Patients from Chest Imaging using Artificial Intelligence

Name of Presenter: **SUTHIRTH VAIDYA**

Authors (or Co-authors): **Vimal Raj, Abhijith Chunduru, Krishna Chaitanya, Saketh Chennamsetty, Adarsh Raj**

Institution/Author Organization: **Predible Health**

PURPOSE:

Classification and quantification of fibrosis patterns from chest imaging for interstitial lung disease patients is challenging for radiologists and pulmonologists. In this study, we develop and validate an artificial intelligence-based algorithm for the classification and quantification of pulmonary fibrosis patterns from chest CT imaging.

METHOD AND MATERIALS:

A software solution (LungIQ) using deep convolutional neural networks was developed by Predible Health using 367 chest CTs labelled by radiologists. The software identifies regions of ground-glass opacities, consolidation and honeycombing, and displays the percentage involvement in each lobe. We compared the results with those marked by a thoracic radiologist with 15 years of experience on an independent dataset of 85 patients with reported patterns on UIP and NSIP.

RESULTS:

The software solution demonstrated a sensitivity of 85%, 84% and 80% for ground-glass opacities, consolidations and honeycombing. None of the studies had significant deviations from the labels marked by the thoracic radiologist, with all differences attributable to unclear boundaries of the pattern itself.

CONCLUSION:

Artificial intelligence-based software solutions for the quantification of fibrosis patterns from chest CT imaging can help in improved diagnosis and monitoring of ILD patients. CLINICAL RELEVANCE ILD management can benefit from objective, quantitative metrics for monitoring of disease burden and response to treatment

Title: A Case of Connective Tissue Disorder Associated Interstitial Lung Disease Mimicking COVID-19

Name of Presenter: **DR. AMIT GOYAL**

Authors (or Co-authors): **DR.AMANPREET KAUR**

Institution/Author Organization: **GOVT.**

MEDICAL COLLEGE, AMRITSAR

Interstitial lung diseases (ILDs), are a heterogeneous group of disorders that are classified together due to similar clinical, radiographic, physiologic, or pathologic manifestations. The most common identifiable causes of ILD are exposure to occupational and environmental agents, especially to inorganic or organic dusts, drug-induced pulmonary toxicity, and radiation-induced lung injury. Secondly ILD also caused by the various connective tissue disorder. In Dec 2019 a new virus discovered in china named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), with the resultant disease process named coronavirus disease of 2019, or COVID-19. It primarily affects the lungs. Both ILD and COVID 19 cause respiratory symptoms in patient and also share radiological features. So this case highlights the diagnostic dilemma which occurs when clinically and radiologically feature of Rheumatoid Arthritis induced ILD mimics as COVID 19.

Keywords:

Interstitial Lung Disease(ILD), Rheumatoid Arthritis(RA), COVID-19

Title: Chemical pneumonitis due to recurrent micro aspirations – A rare case presentation

Name of Presenter: **DR ANIL SONTAKKE**

Authors (or Co-authors): **Dr Samrudhi Tayade, Dr Chetan Khedkar**

Institution/Author Organization: **NKP Salve Institute Of Medical Sciences & Research Centre and Lata Mangeshkar Hospital Nagpur**

We report a case of 48-year-old female with schizophrenia, presenting with cough mainly dry and breathlessness on exertion since six months. Routine radiological investigation was suggestive of reticular shadows in bilateral upper zones. HRCT chest was suggestive of diffuse areas of pneumonitis in bilateral upper zones with subpleural fibrosis with dilatation of esophagus in lower part with narrowing of gastric sphincter suggestive of achalasia cardia. On clinico-radiological correlation, patient was diagnosed as a case of chemical pneumonitis resulting from micro-aspirations due to achalasia cardia. Patient was advised to undergo surgical correction of underlying condition.

Conclusion:

Chemical pneumonitis due to recurrent micro aspiration is a rare entity; correction of underlying etiology is definitive treatment in this patient

Title: SARCOIDOSIS WITH CNS INVOLVEMENT

Name of Presenter: **DR ASHA G NAIR**

Authors (or Co-authors): **DR. ARUP BASU, DR AMIT DAMIJA**

Institution/Author Organization: **SIR GANGARAM MEDICAL**

INTRODUCTION:

Sarcoidosis is a multisystem inflammatory disorder. Neurosarcoidosis is uncommon and potentially serious manifestation of sarcoidosis, cranial nerve involvement being the most common. HISTORY A 28-year-old male, smoker, K/C/O KLINEFELTERS SYNDROME and thalassemia minor presented with hoarseness of voice (14 days), nasal twang, facial swelling especially periorbital (10 days) difficulty in swallowing progressing to nasal regurgitation and breathing difficulty (3 days).

PRESENTATION:

Neurological examination - B/L facial LMN palsy R>L and cranial nerve 4, 9 and 10 involvement. DIAGNOSIS Mantoux and TB QUANTIFERON GOLD were negative. S. Ca - 10.8, S. ACE-133.7. CECT Chest showed mediastinal lymphadenopathy with subpleural reticular densities in b/l lower lobes. BAL was negative for all microbiological tests. EBUS FNAC reported features suggestive of granulomatous lymphadenitis. MRI brain reported thick irregular enhancement of Right Glossopharyngeal nerve and smooth enhancement of left 9 CN. MANAGEMENT RT feeds started. Started on high dose IV steroids and gradually tapered. Neurological deficits improved.

CLINICAL IMPLICATION

- 70% have mild disease comprising cranial neuropathy, radiculopathy and peripheral small-fibre or large-fibre neuropathy.
- 30% have severe CNS inflammatory disease requiring corticosteroids and immunosuppression. Severe disease should receive biological therapies, including TNF α antagonists.
- Treatable disease and its management in a correct and timely way can avoid severe residual neurological impairments.

Title: DR. ATHUL THULASI, DR. DIKSHA TYAGI, DR. DHRUVA CHAUDHRY

Name of Presenter: **DR. ATHUL THULASI**

Authors (or Co-authors): **DR. DIKSHA TYAGI, DR. DHRUVA CHAUDHRY**

Institution/Author Organization: **PGIMS, ROHTAK**

Introduction:

Antisynthetase syndrome (AS) is an under recognized connective tissue disease with features of ILD, myositis and arthritis and characterized by presence of antibodies to anti aminoacyl tRNA synthetase. We present a case of refractory Antisynthetase syndrome in a young male.

Case summary:

A 29 year old gentleman having no comorbidities and addictions presented with fever, joint pain, dry cough, progressive breathlessness for 4 months and difficulty in standing up from squatting position- 1 month. On examination he was hypoxic, had bilateral fine creps and proximal lower limb weakness.

Blood investigations:

normal TLC, raised CRP, ANA positive (cytoplasmic pattern), Anti Ro52 positive, Anti Jo-1 positive. CPK total elevated (2110 IU/L), Normal TFT and NCV. HRCT- bilateral basal predominant GGO and consolidation. PFT- restrictive pattern.

Diagnosis:

AS was diagnosed as per criteria by Solomon et al.

Management:

Started on Prednisolone, MMF- improved clinico-radiologically. Presented 1 year later with worsening breathlessness, weakness. CPK -11000 IU/L. USG- skin and subcutaneous tissue thickening and oedema. HRCT- progression. Received pulse methylprednisolone and Rituximab and he improved.

Conclusion:

This is probably the youngest male case report of AS from India. This emphasizes the need to consider the possibility of AS even in young patients presenting with ILD and arthritis.

Title: PULMONARY ALVEOLAR PROTEINOSIS (PAP) MASQUERADING AS COMMUNITY ACQUIRED PNEUMONIA – A CASE REPORT AND REVIEW OF LITERATURE.

Name of Presenter: **DR. R. BELINDA ANET**

Authors (or Co-authors): **DR. JAI KISHAN, DR. ADITI GUPTA, DR. SAMEER SINGHAL**

Institution/Author Organization: **M.M. INSTITUTE OF MEDICAL SCIENCES AND RESEARCH, MULLANA**

INTRODUCTION:

Pulmonary Alveolar Proteinosis (PAP) is a lung disorder characterized by abnormal accumulation of pulmonary surfactant in the alveolar space, which impairs gas exchange

leading to a severe hypoxemia..

CASE REPORT:

A 35 years old male patient, nonsmoker, came to emergency department of MMIMSR with complaints of shortness of breath and dry cough and off since childhood and increased since 1 week associated with fever for 1 week.. CXray(A) suggestive of left middle and lower zone infiltrates. Blood ABG analysis showed hypoxemia along with metabolic acidosis. Sputum for AFB negative and gram stain and c/s showed klebsiella pneumoniae. CECT chest done showed crazy paving pattern and in right middle and left lower lobes(B). Bronchoscopy was planned and BAL taken for analysis. BAL fluid showed milky white colour and sent for gramstain and c/s, cytology, AFB and KOH. BAL for PAS stain was positive(C) and confirmed the suspicion of pulmonary alveolar proteinosis.

DISCUSSION:

Most of the PAP cases are primary due to mutation in surfactant proteins or Granulocyte Macrophage Colony Stimulating Factor (GM-CSF) receptor genes but it can also occur secondary to some infections or chemical inhalation or hematological disorder or autoimmune.

CONCLUSION:

HRCT showing crazy paving pattern holds the clue in suspicion of PAP. However most cases presents with super added infection and it is difficult to clinch the diagnosis unless we suspect and look for it.

Title: Familial IPF presenting as Cystic Lung Disease

Name of Presenter: **Dr. Bhumin Patel**

Authors (or Co-authors): **Dr. P.V Potdar, Dr Karan Singla, Dr Udaya.S.**

Institution/Author Organization: **MGM Medical Collage And Hospital, Navi Mumbai**

INTRODUCTION:

Idiopathic pulmonary fibrosis (IPF) is the most frequent and severe idiopathic interstitial pneumonia, with typical HRCT features and histologic pattern of usual interstitial pneumonia (UIP). A growing body of evidence shown that genetic factors contribute to disease risk. The role of rare variation FAM13A, TERT and RTEL1 gene regions was implicated as risk of IPF. The prognosis of interstitial pneumonia (UIP) is grim with short-term mortality rates in excess of 50% in most reported series.

HISTORY:

A 23year old fisherman nonsmoker presented

to OPD with c/ob breathlessness and dry cough x 3month.No other complaints or comorbidities .Similar history in elder brother who succumb due to the illness.On examination patient had clubbing and basal fine late inspiratory crepts.

DIAGNOSIS:

Chest-XRAY s/o bilateral reticulonodular opacities.PFT s/o restrictive ventilatory impairment and reduction in DLCO.HRCT chest showed diffuse Air cysts,nonnodular, interlobar and interlobular septal thickening. Patient underwent surgical Lung biopsy. Histology showed thickening of alveolar septa with restructuring of air spaces and formation of fibroblastic foci s/o usual interstitial pneumonitis.

MANAGEMENT:

Patient was started on Antifibrotic Pirfenidone and LABA inhalers and enrolled in pulmonary rehabilitation.Follow up PFT after one month showed significant improvement in FVC,FEV1,TLC AND DLCO.

CLINICAL IMPLICATION:

IPF have a variable clinical course, often progress to end-stage lung disease and death. In cases with A-typical presentation aggressive approach may be required.

Title: Sarcoidosis mimicking malignancy

Name of Presenter: **GAJULAPALLI UDAYA SANKAR**

Authors (or Co-authors): -

Institution/Author Organization: **RANGARAYA MEDICAL COLLEGE**

Sarcoidosis is a multisystem disorder of unknown origin and most commonly affects lungs. Diagnosis relies on demonstrating non-caseating granulomas on histologic specimen. In high resolution computed tomography, most characteristic findings are peribronchovascular thickening, perilymphatic nodular distribution and bilateral hilar lymphadenopathy. Confluent nodular opacities and large masses are rare presentation of the disease. It is well recognized that sarcoidosis can mimic infectious, malignant and granulomatous conditions. Here we report a case with high initial index of suspicion for lung malignancy in terms of clinical, lung imaging and endoscopic findings. The first case of nodular sarcoidosis was reported by McCord and Hyman in 1952 with multiple bilateral nodules imitating metastatic disease. The spontaneous resolution of the disease is common; however, upto 10% of the patients can progress to respiratory impairment and organ failure. Oral corticosteroids are most commonly used medication in treatment of

sarcoidosis. Other alternative therapies such as immunosuppressives and cytotoxic agents have been suggested. Clinicians should always be aware that sarcoidosis enters the differential diagnosis of the patients presenting with lung mass that encases and narrows the bronchial and vascular structures.

Title: A RARE CASE REPORT OF LYMPHANGIOLEIOMYOMATOSIS ASSOCIATED WITH TUBERCULOSIS

Name of Presenter: **HARITHA SREE CH**

Authors (or Co-authors): **Dr.K Rajendra kumar, Dr M kiran, Dr Chakravarthi, Dr.Ramya Gadam**

Institution/Author Organization: **RANGARAYA MEDICAL COLLEGE**

Introduction:

Lymphangioliomyomatosis (LAM), a rare disease of unknown etiology, seen almost exclusively in women of child bearing age. It may be associated with tuberous sclerosis. Its pulmonary manifestations vary from simple cough to the development of recurrent pneumothorax, hemoptysis and even complicated pleural effusions. This wide array of presentation makes the differential diagnosis extensive and the clinician must be familiar with this disorder to arrive at the correct diagnosis. Case: A 19 year old female patient, on ATT since 3 months (sputum AFB positive), presented to casualty with acute onset breathlessness. Chest X-ray showed left sided tension pneumothorax. ICT was inserted into left pleural cavity. CECT chest showed ICT in left pleural cavity, multiloculated right pneumothorax with bilateral multiple cystic lesions, suggestive of LAM. Pleurodesis was done and ICT was removed from left and later ICT was inserted on right side. Right lung got expanded, pleurodesis done on right and ICT was removed. Patient's collagen and thyroid profiles, ocular examination, ultrasound pelvis were normal. USG abdomen showed multiple hypoechoic lesions in spleen. CT abdomen showed multiple cystic lesions in spleen. Pleural fluid analysis suggested tuberculosis

Conclusion:

LAM is a rare disease and easily misdiagnosed. This is to stress how important is CT for diagnosis of LAM. CT chest of LAM shows diffuse, bilateral, thin walled, rounded

Title: AN INTERESTING CASE OF NEUROFIBROMATOSIS ASSOCIATED LUNG DISEASE

Name of Presenter: **DR. INDRANIL BANERJEE**

Authors (or Co-authors): **DR. CH. RADHIKA**

(Assistant Professor)

Institution/Author Organization: **MEENAKSHI MEDICAL COLLEGE HOSPITAL & RESEARCH INSTITUTE**

Introduction:

Neurofibromatosis is an autosomal disorder characterized by multiple neurofibromas, Café au lait spots, and Lisch nodules with a variable clinical systemic expression. Lung involvement in NF is only 5% of cases.

Case Report:

A 50 year old non-smoker man presented to the Chest OPD with c/o SOB for past 2 years and occasional episodes of wheezing, but no chronic cough. No family history of Neurofibromatosis. On examination he had multiple chest-wall, neck and face neurofibromas, previously diagnosed on biopsy. Chest wall auscultation presented grossly diminished vesicular sounds with expiratory crepitations. Chest X-ray presented fine reticular opacities on right and left lung basal segments. Chest CT High Resolution presented emphysematous lungs, interstitial thickening, multiple sub-pleural thin-walled cysts, limited fibrous and thickness of pleura on apical segments and lower lobes and multiple chest wall's subcutaneous nodules. Blood reports within normal limits. Spirometry had an obstructive pattern

Conclusions:

Neurofibromatosis associated with diffuse lung disease is a distinct clinical entity, characterised by upper lobe cystic and bullous disease and basilar fibrosis.

Title: A CASE STUDY OF ATYPICAL SARCOIDOSIS MISDIAGNOSED AS A MILIARY TUBERCULOSIS

Name of Presenter: **Dr.K.SARAVANAN**

Authors (or Co-authors): **Dr.D C PUNERA**

Institution/Author Organization: **Govt.medical college haldwani**

INTRODUCTION:

SARCOIDOSIS IS A CHRONIC INFLAMMATORY MULTISYSTEM DISEASE MOST COMMONLY INVOLVE LUNG IN YOUNG AGE ADULTS.DUE TO IT'S CLINICORADIOLOGICAL RESEMBLANCE LOOK LIKE TUBERCULOSIS IN COUNTRIES SUCH AS INDIA MISDIAGNOSED AND TREATED AS TUBERCUOLOSIS.

AIM:

TO DETERMINE ATYPICAL MILIARY PATTERN OF SARCOIDOSIS MISDIAGNOSED AS MILIARY TB IN ENDEMIC TUBERCULAR AREA .

METHODOLOGY:

A STUDY OF ONE FOLLOW UP CASE PRESENTED IN OUR RESPIRATORY MEDICINE DEPARTMENT IN KUMAON REGION.RESULTS:PATIENT WAS MISDIAGNOSED AND COMPLETED CAT 1 ATT .AFTER THAT PATIENT SYMPTOMS AND CXR FINDING DETORiate.REPEAT SPUTUM EXAMINATION AND MANTOUX TEST ALSO NEGATIVE.PATIENT ALSO NOT WILLING FOR INVASIVE PROCEDURES LIKE TBNA AND BRONCHOSCOPY AND BAL FLUID EXAMINATION.PATIENT BLOOD REPORT FINDING SHOWS HYPERCALCEMIA AND URINE HYPERCALCIURIA.SO WE SUSPECT SARCOIDOSIS AND SENT SERUM ACE LEVELS. ACE LEVEL ALSO VERY HIGH .SO PRESCRIBED STEROID.NEXT VISIT PATIENT SYMPTOMS AND CXR FINDINGS IMPROVEMENT WAS GOOD.

CONCLUSION:

ANY YOUNG ADULT COME WITH MILIARY PATTERN OF CXR AND SPUTUM FINDING NEGATIVE OF TB ALSO TO RULE OUT SARCOIDOSIS TO AVOID MISDIAGNOSIS AND TREATMENT.

Title: Post covid ILD with UIP pattern – A case report

Name of Presenter: **KAMMARA VINOD ACHARI**

Authors (or Co-authors): **KAMMARA VINOD ACHARI, MANAS BHANUSHALI, GIRIJA NAIR, ABHAY UPPE**

Institution/Author Organization: **DR DY PATIL HOSPITAL ,NAVI MUMBAI**

INTRODUCTION:

Covid-19 has a wide range of complications including post covid fibrosis. We present a case of post covid interstitial lung disease with a UIP pattern.

CASE PRESENTATION:

A 57-year- old male presented to the outpatient department with breathlessness for 10 days with an opening oxygen saturation of 85%. Patient was treated for covid-19 1 month back for which he received standard care including injectable remdesivir. HRCT thorax at the time of admission was suggestive of multiple GGOs and patchy consolidation that worsened over a month to present as UIP ILD. Repeat D-Dimer and CRP levels were normal. Patient desaturated on 6MWT.

MANAGEMENT:

The patient was started on antifibrotic pirfenidone after a normal LFT. A tapering dose of oral steroids was also started with pulmonary rehabilitation. The patient was prescribed long term oxygen therapy owing to a Pao2 level of less than 60mm of Hg and oxygen saturation of 85% on room air. The patient was asked to

follow up with COVID-19 antibody levels and repeat HRCT thorax after 1 month.

Title: SYSTEMIC SCLEROSIS SINE SCLERODERMA: A RARE ENTITY

Name of Presenter: **KRISHNAPRIYA S KUMAR**

Authors (or Co-authors): **S. P. AGNIHOTRI, GOVIND S. RAJAWAT**

Institution/Author Organization: **SAWAI MANSINGH MEDICAL COLLEGE, JAIPUR, RAJASTHAN**

Introduction:

Systemic Sclerosis Sine Scleroderma is a very rare subset of systemic sclerosis characterized by the total or partial absence of cutaneous manifestations with the occurrence of internal organ involvement and serologic abnormalities.

Case report:

A 35 year old female presented with complaints of progressive dyspnea on exertion since 1 year, dry cough since 8 months and bilateral pedal edema since 10 days, with no significant past medical history. General examination was normal with no evident skin changes. Auscultation revealed inspiratory crepitations over bilateral infra-scapular areas. Chest x-ray showed bilateral reticulo-nodular opacities and CECT chest showed interstitial septal thickening and ground glass opacities in bilateral lung fields with few subpleural cystic changes. Blood investigations were normal, except for positive Antinuclear (ANA) and antitopoisomerase-1 (Scl-70) antibodies. 2D-Echo suggested pulmonary arterial hypertension. Hence, diagnosis of systemic sclerosis sine scleroderma was made and was put on treatment with corticosteroids, diuretics and endothelin receptor antagonists. Her clinical condition gradually improved.

Conclusion:

Although skin thickening is considered as a hallmark of systemic sclerosis, there should be a high index of clinical suspicion in patients presenting with possible manifestations of systemic sclerosis without cutaneous involvement because early diagnosis and treatment can reduce the morbidity and mortality.

Title: HERMANSKY PUDLAK SYNDROME - A CASE REPORT

Name of Presenter: **Dr. M. RAJEEV NAIK**

Authors (or Co-authors): **Dr M. NARENDER**

Institution/Author Organization: **Osmania medical college, Hyderabad**

AIMS & OBJECTIVE:

To report a case of Hermansky –Pudlak syndrome .

CASE REPORT:

A 30 yr old male patient presented to our hospital with cough and shortness of breath and fever since 2months with oculocutaneous albinism and nystagmus. Patient was misdiagnosed as pulmonary tuberculosis and used antitubercular therapy twice. patient is a smoker with 10 pack yrs and non alcoholic. Examination of the respiratory system revealed bilateral basal inspiratory crackles. CT showed honey combing with cavity in left lung.

CONCLUSION:

oculocutaneous albinism with pulmonary fibrosis should be evaluated for HPS, and early diagnosis and treatment reduced mortality and morbidity

Title: A CURIOUS CASE OF DYSPNEA LABELLED AS FUNCTIONAL DYSPNEA

Name of Presenter: **Mohd Afaque**

Authors (or Co-authors): **Madhu kanodia, Shamim Akhtar**

Institution/Author Organization: **St Stephens hospital, delhi**

Case report:

63 yr old diabetic lady presented to the emergency dept with progressive dyspnea and stress secondary to increase in COVID cases in her locality. She was recently discharged from psychiatry dept and was diagnosed as a case of functional dyspnea. When she presented to our hospital her clinical examination revealed 92% SPO2 on room air, B/L lung crepitation, loud P2 on auscultation, with history of Raynaud's phenomenon, rest examination was unremarkable. Her CECT chest showed cardiomegaly with prominent pulmonary arterial system with B/L GGO's. 2D-ECHO revealed severe PAH, with preserved ejection fraction. She had high titers of anti SSA/RO 60kd and anti CENP- a/b Antibodies, other blood investigations were within normal limit. Thus diagnosis of severe Pulmonary artery hypertension (PAH) secondary to Systemic Sclerosis (Ssc) was made. She was treated by a multidisciplinary team approach. She showed symptomatic improvement after starting medications, and is on regular follow up on OPD basis.

Learning points:

Dyspnea, should be evaluated in detail and even rare causes should also be evaluated before labelling it as psychogenic. Here we evaluated her thoroughly and thus came to the

final diagnosis.

Title: A CASE REPORT OF PULMONARY FIBROSIS IN HERMANSKY PUDLAK SYNDROME (HPS)

Name of Presenter: **DR MOHAMMAD SAMEER AHMED**

Authors (or Co-authors): **DR MG KRISHNA MURTHY, DR T PRAMOD KUMAR , DR P ESHWARAMMA , DR G RAMULU, DR V VEENA**

Institution/Author Organization: **GANDHI MEDICAL COLLEGE AND HOSPITAL, SECUNDERABAD, TELANGANA -500003**

Introduction:

HPS is a rare autosomal recessive lysosomal storage disorder characterized by oculocutaneous albinism , bleeding diathesis, pulmonary fibrosis . History – A 44 yr old male presented with progressive dyspnea, cough for last 20 days. H/o similar complaints since 3 to 4 months. H/o prolonged bleeding to minor trauma 1 yr back. No H/o major surgery, trauma in past. no significant family history.

Presentation

Examination reveals pale skin, ocular nystagmus, decreased visual acuity, hair pigmentation , petechiae on face and trunk . O/E patient is dyspneic, RR 28/min, SPO2 84% R/A, PR 101/min, BP 110/70mm Hg , creptations in b/l lower interscapular , infrascapular, infraaxillary areas.

Diagnosis:

HRCT reveals bilateral reticulations predominant in lower lobes. Bleeding time prolonged 13 mins , CBP revealed platelet count of 50,000. Complications - pulmonary fibrosis , respiratory failure .

Management:

O2 support , lung transplantation. Drugs like pirfenidone, nintedanib for fibrosis. Pneumococcal vaccination for infection prophylaxis.

Learning point:

HPS manifests as pulmonary fibrosis in 3 - 4th decade causing significant morbidity and mortality. While encountering oculocutaneous albinism , bleeding diathesis , a rare genetic disorder like HPS should be kept in mind.

Title: A CASE REPORT OF PULMONARY LYMPHANGIOLEIOMYOMATOSIS MIMICKING like CHILDHOOD ASTHMA

Name of Presenter: **MOHAMMAD SAMEER AHMED**

Authors (or Co-authors): **DR MG KRISHNA MURTHY,DR T PRAMOD KUMAR,DR P ESHWARAMMA, DR G RAMULU,DR V VEENA,DR K ANEEF BASHA**

Institution/Author Organization: **GANDHI MEDICAL COLLEGE AND HOSPITAL**

INTRODUCTION:

It is a rare idiopathic ,diffuse progressive interstitial lung disease that affects women of child bearing age. HISTORY– A 16 yr old female presented with progressive dyspnea ,cough for last 7 days. History of similar complaints in past since age of 11 yrs .She was diagnosed as asthmatic in other hospital due to presence of wheeze and was treated accordingly. Patient also received a course of anti-tubercular regimen due to non resolving of symptoms 1 yr back in other hospital.

PRESENTATION:

She was dyspneic at rest, JVP raised,no clubbing ,SPO2 90 % room air ,PR -98/min, BP -100/70 mm Hg, RR -25/min, B/L Air entry was reduced ,wheeze heard bilaterally in infrascapular area.

DIAGNOSIS:

CXR PA view normal. HRCT suggestive of diffuse multiple cystic lesions in sub pleural and central regions with no interstitial thickening.

MANAGEMENT:

Definitive treatment is lung transplantation with other options available like antioestrogen therapy, Mtor2 inhibitors(sirolimus),simvastatin

COMPLICATIONS:

Pneumothorax,corpulmonale,respiratory failure.

CLINICAL IMPLICATIONS:

LAM causes cystic destruction of lung parenchyma present with airway obstruction producing wheeze mimicking like asthma. LAM being a rare disorder mimicking asthma may get undiagnosed .Early recognition of symptoms and HRCT would result in early diagnosis and better prognosis.

Title: case of sjogrens syndrome with rare clinical presentation ,NSIP, Bronchiectasis with pulmonary hypertension

Name of Presenter: **MADE V RAMA GOPINATH**

Authors (or Co-authors): **DR.KALYADAPUY SUNIL, DR.P.JAYAKAR BABU(PROF &HOD)**

Institution/Author Organization: **KATURI MEDICAL COLLEGE AND HOSPITAL**

INTRODUCTION:

This autoimmune exocrinopathy is characterized by lymphocytic infiltration of the lacrimal and salivary glands. In respiratory system pleuropulmonary abnormalities, LIP, pleuritis with or without effusion, tracheobronchial gland inflammation. HISTORY: A 50 year old female presented with h/o Grade II breathlessness for the past 3 years now progressed to Grade III for the past 6 months. H/O difficulty in swallowing for the past 6 months, dryness of mouth and eyes from 3 months, h/o stiffness of joints from 3 months. Known hypertensive from 3 years, Past h/o pulmonary TB. On examination bilateral rhonchi, fine end inspiratory crackles in infrascapular area. Cardiovascular examination loud p2, Ejection systolic murmur in pulmonary area. Routine haematological investigations shows elevated eosinophil count. Lip biopsy: Grade 2 lymphocytic sialadenitis. pulmonary function tests revealed moderate restriction, Schirmer's test positive. Serological tests- ANA-5.14, RA factor <8. Anti Ro was positive >200, Anti LA positive 127, Sm antibody, RNP, Scl-70, Jo-1 are negative. 2D Echo showed normal LV function, moderate TR with severe PHT (RVSP 78mmhg).

TREATMENT:

corticosteroids are the mainstay of the treatment, other drugs such as Azathioprine or cyclophosphamide, cyclosporine in resistant cases anti CD-20 monoclonal antibody Rituximab can be used. A subset of patients progress to fibrotic lung disease.

Title: Case of nitrofurantoin induced aggravation of rheumatoid arthritis-associated interstitial lung disease

Name of Presenter: **Nazmy Abdul Latheef**

Authors (or Co-authors): **Dr Rennis Davis**

Institution/Author Organization: **Amala Institute of Medical Sciences**

Introduction:

Interstitial Lung Disease is a term that broadly describes a diverse collection of more than 200 lung disorders. They all affect the tissue and space around the alveoli (air sacs), called the interstitium. It results in fibrotic and stiffened lung parenchyma. Case Report: 62-year-old female presented with history of gradually progressive breathlessness for past 6 months. Past history: Nitrofurantoin prescribed for recurrent UTI for past 6 months. On examination chest revealed NVBS+, bibasilar fine late inspiratory crackles. CT Chest revealed bilateral symmetrical reticular opacities in peripheral subpleural, inter and intralobular interstitium suggestive of NSIP. Labs: Hb 10.8, TC 12,500, ESR 95, LFT- WNL, RFT-

WNL, S. ACE- WNL. Sputum AFB was negative. Sputum culture revealed normal flora. ACCP positive, ANA-IF- nuclear homogenous 2+. Bronchoscopy report: Normal study. Bronchial aspirate- c/-s- no growth; no fungal elements seen; ZN stain- negative; bronchial aspirate CBNAAT- negative. Bronchial wash cytology: Shows inflammatory cells only. Cryobiopsy of lung: Histological appearance is that of interstitial pulmonary fibrosis with UIP pattern. Stopping of nitrofurantoin was followed by remarkable improvement. Conclusion: In cases of established ILD physicians should be vigilant in considering reversible causes of aggravation of disease process.

Title: A RARE CASE OF NON - FAMILIAL IDIOPATHIC PULMONARY FIBROSIS IN A YOUNG MALE ATHLETE

Name of Presenter: **Dr. P.Sravani**

Authors (or Co-authors): **Dr. Yugandhar Prof & HOD**

Institution/Author Organization: **Alluri Sita Ramaraju academy of Medical Sciences, ASRAM medical college, eluru, andhrapradesh**

Background:

IPF is the most common form of ILD, characterised by inexorable progression of interstitial pulmonary fibrosis resulting in restrictive Lung disease. IPF typically comes to medical attention mostly after 6th decade, and it is rare under 40 years. It is a lethal condition with median survival rate of 2-3 years after diagnosis.

CASE REPORT:

A 26 year old male athlete presented with complaints of SOB and Dry cough since 3 years aggravating with strenuous exercise. No other respiratory complaint. Not a smoker and alcoholic O/E: bilateral basal fine end inspiratory crackles

Diagnosis:

Chest X- ray: Bilateral reticulo - nodular infiltrates in lower zones

HRCT chest: early peripheral honeycombing changes predominantly in subpleural and subfissural areas along with GGOs and reticular changes in bilateral lung fields suggestive of early UIP changes

Cryolung biopsy: foci of interstitial expansion with fibrosis with peribronchiolar elastosis and fibrosis and focal type 2 pneumocyte hyperplasia suggesting UIP

CTD profile: negative

CONCLUSION:

Nonfamilial ILD cases without clinical H/O CTD and with UIP like pattern on background of histology specimens are extremely rare. Review of existing literature suggests the progression is equally insidious as in typical UIP cases, despite young age being a good prognostic factor.

Title: COVID-19 with pulmonary sequelae-primus non nocere

Name of Presenter: **Pranav Ish**

Authors (or Co-authors): **Nitesh Gupta, Rohit Kumar, Siddharth Raj Yadav, Baljeet Singh Virk**

Institution/Author Organization: **VMMC & Safdarjung Hospital, New Delhi**

A 62-year-old lady with no co-morbidities or past history of any respiratory disorder was diagnosed with severe COVID-19 with hypoxemic respiratory failure. She was treated with oxygen, parenteral methylprednisolone, Remdesivir and enoxaparin as per national guidelines and discharged on day 20 of admission with a saturation of 94% on room air. On follow up after 4 weeks, she complained of persistent dyspnea with no upper respiratory symptoms or fever. She had a fall in saturation to 90% (94% on discharge one month back) with tachypnea and tachycardia. A repeat CT chest was suggestive of marked architectural distortion, tractional bronchiectasis, parenchymal bands, inter and intralobular septal thickening and extensive cystic changes in bilateral lower lobes. The patient was prescribed oral prednisolone at 0.5mg/kg for 4 weeks and had symptomatic relief with improvement of saturation from 90 to 94%. She was given an informed choice for starting antifibrotic which was declined. Hence, in the absence of any proven long-term benefit of antifibrotics in post COVID-19 fibrosis at present and the unknown progression potential of such fibrosis, starting anti-fibrotics must be an informed choice and ideally only as a part of trial till further evidence.

Title: Appearance of new radiographic consolidations in a recovering patient of mild to moderate COVID-19 : A case of secondary organizing pneumonia

Name of Presenter: **RAMEES NAJEEB**

Authors (or Co-authors): **Dr Neeraj Kumar Gupta, Dr Shibdas Chakrabarty, Dr Rohit Kumar**

Institution/Author Organization: **VMMC and Safdarjung Hospital, New Delhi**

Introduction:

There are several case reports showing radiological and histological evidence for

different forms of diffuse parenchymal lung disease during the later course of COVID-19 infection including organizing pneumonia (OP). Case report 62 year old male patient with CAD, type 2 DM and in recovering phase of COVID-19 presented in our OPD with progressive breathlessness for 10 days. He had RTPCR positive COVID-19 illness 25 days ago. He was admitted for 10 days elsewhere and chest X-ray showed bilateral lower lobe ground glass opacities. At presentation in our OPD, oxygen saturation was 96 % on room air. Chest X-ray showed new peripheral consolidations in the right mid and lower zones. Repeat RTPCR was negative for SARS-COV-2. HRCT chest showed findings suggestive of OP. Patient had no fever and sputum cultures were negative. Prednisolone 60 mg/day was initiated and tapered to 40mg/day after one month following symptomatic and chest radiological improvement. He is currently under follow up. Discussion Organizing pneumonia, a distinct form of DPLD, may occur as a pulmonary reaction to various injuries including viral infection. Secondary OP should be considered in the differential diagnosis of patients with COVID-19 pneumonia with respiratory symptoms and radiographic opacities during the recovery phase even in mild/moderate cases.

Title: CPFE: A new entity within the spectrum of smoking related ILD

Name of Presenter: **RAMYA SAI.P**

Authors (or Co-authors): -

Institution/Author Organization: **Alluri Sitarama Raju Academy of medical science**

INTRODUCTION: The coexistence of emphysema and pulmonary fibrosis in the same patient, resulting in a clinical syndrome known as combined pulmonary fibrosis and emphysema (CPFE) that is characterized by dyspnea, upper-lobe emphysema, lower-lobe fibrosis, and abnormalities of gas exchange. This syndrome frequently is complicated by pulmonary hypertension, acute lung injury, and lung cancer. CASE REPORT: A 68 years old male presenting with dry cough and progressive dyspnea since 1 year. known diabetic with CAD(s/p PTCA). He is a moderate smoker who quit smoking recently. Recent cardiac evaluation revealed mild LVD with RVSP 70mmHg. On examination he has Gradell clubbing and bilateral basal fine crepitations were heard. CXR PA VIEW: B/L UZ hyperlucency with B/L LZ reticular opacities. PFT showed mild obstructive pattern but there is marked reduction in diffusion capacity on DLCO HRCT CHEST: showed emphysematous changes in bilateral upper lobes and interstitial fibrosis in bilateral lower lobes. CONCLUSION: The

presence of pulmonary arterial hypertension at diagnosis is a critical determinant of prognosis. CPFE is distinct under-recognized entity which can be better treated with early identification of the disease by advising HRCT chest in high risk patients there by reducing the complications.

Title: A 12 YEAR GIRL WITH EXTENSIVE SKIN LESIONS, MUSCLE WEAKNESS AND RAPIDLY PROGRESSIVE SHORTNESS OF BREATH

Name of Presenter: **DR RIKSOAM CHATTERJEE**

Authors (or Co-authors): **PROF SOMENATH KUNDU**

Institution/Author Organization: **INSTITUTE OF POSTGRADUATE MEDICAL EDUCATION AND RESEARCH (IPGME&R), KOLKATA**

Introduction:

Idiopathic inflammatory myopathies can present as interstitial lung disease and are associated with distinct clinical phenotypes and myositis specific antibodies. The presence of Anti melanoma differentiation associated gene 5 autoantibody has been known to be highly specific for acute onset rapidly progressive ILD.

History & Presentation:

A 12 yr girl from rural bengal presented with painful erythematous skin lesions over face ,eyelids neck ,elbows and chest wall with ulcerations and crusting, proximal muscle weakness of lower limbs for 4 months followed by rapidly progressive shortness of breath for 2 weeks. She was admitted with hypoxemic respiratory failure.

Diagnosis:

HRCT thorax : NSIP with organising pneumonia. ANA, ANA profile ,ARS (anti tRNA synthetase antibody) negative. Serum aldolase 23 U/L, LDH 900 IU/L. Quadriceps edema on MRI and myopathic changes on EMG. Serum anti MDA5 autoantibody elevated.

Management:

Initially pulse methylprednisolone and two doses of cyclophosphamide with high flow oxygen support switched to rituximab due to non response with subsequent clinicoradiological improvement.

Learning points :

1. Besides CADM (clinically amyopathic dermatomyositis), anti MDA5 antibody associated ILD can be associated with dermatomyositis with active muscle disease.
 2. Clinical course can be rapidly progressive and fatal.
 3. Strong suspicion and prompt immunosuppressive therapy is mandatory
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Title: A RARE CASE OF ISOLATED PULMONARY LANGERHANS CELL HISTIOCYTOSIS

Name of Presenter: **Dr. RITA BHIKHABHAI GOJIYA**

Authors (or Co-authors): **Dr. SANJAY TRIPATHI (HOD) Dr. SAVITA JINDAL (ASSO PROF)**

Institution/Author Organization: **A.M.C. MET MEDICAL COLLEGE AHMEDABAD**

INTRODUCTION :

Langerhans cell histiocytosis is characterized by Proliferation of mono nuclear langerhans cell admixed with variable numbers of Eosinophils, lymphocytes, plasma cell and neutrophils into the bronchioles and lung interstitium. It is disorder of langerhans cells involving Middle age smoker male. This disease could be neoplastic and arise from smoking related and immunomodulatory process. It predominantly involved upper lobe of lung, causing fine nodular infiltrate, advanced disease with cysts, cavitary lesions and honeycombing.

Case report :

Here we describe a case of 34 year old male who presented with chief complaint of breathlessness on exertion, fever, nausea, weakness and weight loss since 15 days for the first time in his life. Patient is cigarette smoker and rikshaw driver by occupation. Patient was started AKT from private hospital since 15 days and here ;admitted as AKT induce Hepatitis. So we hold the AKT. At the time of admission; all routine blood investigations was done. CBC and all sera within normal limits except SGPT which was 145 U/l. chest X-ray and HRCT was suggestive of multiple nodular opacity. After two days patient developed spontaneous pneumothorax, ICD insertion was done and pneumothorax was improved with the high flow O₂; HRCT thorax was done which is suggestive of langerhans cell histiocytosis, Confirmation was done by thoracoscopy; which showed multiple cysts like lesion over visceral pleura. Biopsy was taken from visceral pleura which confirms the diagnosis of langerhans cell histiocytosis. Patient was investigated to rule out other systems involvement which was unremarkable, so this is case of isolated pulmonary langerhans cell histiocytosis.

DISCUSSION:

Langerhans cell histiocytosis 80% occurs in bone; mostly in skull and long bones of arm and leg causing pain and swelling may cause fracture of bones.² Pulmonary langerhans cell histiocytosis occurs in 15-20% cases of langerhans cell histiocytosis; It is reactive proliferation of langerhans cell; but 40% are associated with BRAF mutation which are neoplastic in origin. It is reactive process

with a subset showing clonality but extra-pulmonary form of langerhans cell histiocytosis are neoplastic. Presentation is chronic cough, dyspnea, hemoptysis, pulmonary hypertension, vasculopathy and in 15-25% cases spontaneous pneumothorax and Diabetes Insipidus in 10% cases. Cessation of smoking, corticosteroid and immunomodulators are mainstay of treatment.

REFERENCES :

- (1) Vol.1 eRobbins and Cotran pathological Basis of Diseases, south asia edition.
- (2) <https://medlineplus.gov/genetics/condition/langerhans-cell-histiocytosis>.

Title: HERMANSKY-PUDLAK SYNDROME : A CASE REPORT

Name of Presenter: **DR SAURABH KUMAR MALL**

Authors (or Co-authors): **DR RENNIS DAVIS**

Institution/Author Organization: **AMALA INSTITUTE OF MEDICAL SCIENCES**

BACKGROUND:

Hermansky-Pudlak syndrome (HPS) is a rare autosomal recessive disorder characterized by oculocutaneous albinism and platelet storage pool deficiency with other organ involvement including pulmonary fibrosis and granulomatous colitis.

CASE REPORT:

A 49-year-old female with albinism presented with history of gradually progressive breathlessness and dry cough for past 8 months. Patient also gave history of easy bruising. She was born of consanguineous marriage and two of her four siblings had albinism. On examination, patient had oculocutaneous albinism and nystagmus. Patient had 90% SpO₂ on room air but her other vitals were stable. Chest auscultation revealed bilateral basal fine inspiratory crackles. Fundus examination showed bilateral albinotic fundus with compound myopic astigmatism. Her prothrombin time, partial thromboplastin time and platelet counts were normal, however, her bleeding time was prolonged. A peripheral smear examination revealed abundant platelet clusters. Chest HRCT showed bilateral reticular opacities with areas of subpleural honeycombing suggestive of usual interstitial pneumonia (UIP). The patient was started on oral steroids, LTOT and is under follow up.

CONCLUSION:

The case report is to bring forth the association of HPS with Pulmonary fibrosis (PF). A multidisciplinary work up as described including a HRCT lung leads to early diagnosis and treatment of PF, thus reducing the morbidity and mortality

Title: A CASE OF SERONEGATIVE SCLERODERMA WITH ILD, SUBCUTANEOUS EMPHYSEMA AND PNEUMOMEDIASTINUM

Name of Presenter: **DR. SAURABH MISHRA**

Authors (or Co-authors): **PROF. G. N. SRIVASTAVA, DR. RITAMVARA OLI**

Institution/Author Organization: **INSTITUTE OF MEDICAL SCIENCES, BANARAS HINDU UNIVERSITY, VARANSI**

BACKGROUND:

Scleroderma is a connective-tissue-disorder with multisystem involvement. It is diagnosed by the presence of characteristic clinical findings and is supported by specific auto-antibodies in 90% of cases. Pulmonary air leak syndrome is caused by rupture of over-distended alveoli which further gets trapped in different spaces around thorax causing pneumothorax, pneumomediastinum, pneumopericardium, subcutaneous emphysema.

CASE PRESENTATION:

A 48-year-old non-smoker female presented with breathlessness (MMRC-III) and dry-cough for 6 months; low-grade fever for 3 months; multiple joint pain involving wrist, knee and ankle joints; dysphagia and Raynaud's phenomenon. She was on treatment for hypothyroidism.

EXAMINATION:

On general-examination, pallor and clubbing were present. On head-to-toe examination, mucocutaneous telangiectasia was seen on buccal mucosa, thyroid swelling, sclerodactyly, fingertip pitting scars, shiny skin over face and pinched beak nose were noticed. On auscultation, bilateral basal fine inspiratory crepitation was present.

INVESTIGATIONS:

6-minute-walk-test suggested pulmonary involvement, PFT shown restrictive pattern, barium swallow test shown oesophageal stricture and subcutaneous emphysema, CECT-thorax shown UIP pattern ILD and pneumomediastinum, but all auto-antibodies were negative.

DIAGNOSIS:

Diagnosis was made by EULAR/ACR criteria, scored 14/34, which suggests a definite scleroderma.

MANAGEMENT:

Pneumomediastinum and subcutaneous emphysema was managed conservatively by high-flow oxygen and cyclophosphamide and

nifedipine was given as definitive treatment.

Title: DRUG INDUCED HYPERSENSITIVITY PNEUMONITIS IN SUSPECTED CASE OF N-COVID 19

Name of Presenter: **DR SHITAL N. PARMAR**

Authors (or Co-authors): **DR. KAMLESH G. VITHALANI**

Institution/Author Organization: **PDU MEDICAL COLLEGE RAJKOT**

DRUG INDUCED HYPERSENSITIVITY PNEUMONITIS IN SUSPECTED CASE OF COVID 19

Title: A CASE REPORT OF PULMONARY ALVEOLAR PROTEINOSIS (ILD) IN A PATIENT WITH ALCOHOLIC DEPENDENCE SYNDROME

Name of Presenter: **Sindhu Mastila**

Authors (or Co-authors): **DR M. RAJENDRA KUMAR(HOD & PROFESSOR), DR M. KIRAN(ASSISTANT PROFESSOR), DR CHAKRAVARTHY(ASSISTANT PROFESSOR), DR RAMYA(ASSISTANT PROFESSOR)**

Institution/Author Organization: **RANGARAYA MEDICAL COLLEGE**

Pulmonary alveolar proteinosis is a rare interstitial lung disease with a defect in macrophage function i.e. impaired ability to process surfactant and characterised by accumulation of phospholipoproteinaceous material in the alveoli and impairing gas exchange¹. Current estimates suggest an incidence of one in two million populations. There are 3 distinct classes 1) Acquired (90% of all cases) 2) Congenital 3) Secondary. Idiopathic pulmonary alveolar proteinosis is an auto immune from with presence of neutralizing antibody of IgG isotype against GM-CSF. In the present case a 35yrs old chronic alcoholic male patient presented with productive cough and shortness of breath, unsteady gait. No

history of occupational lung disease/smoking. The diagnosis was made by the presence of PAS positive amorphous eosinophilic material in bronchial lavage and Ground Glass Opacities, Interlobular fibrosis on HRCT- CHEST. Immediate bronchial lavage was done and he improved symptomatically. Now he is in follow up and on de-addiction therapy.

Title: Pulmonary Lymphangiomyomatosis and Role of Pleurodesis: A Rare Case Report

Name of Presenter: **Dr. Sonal Goyal**

Authors (or Co-authors): **Dr. Arti D. Shah, Dr. Kusum V. Shah, Dr. Jerin J. Dsilva**

Institution/Author Organization: **S.B.K.S. Medical Institute & Research Centre, Vadodara**

Introduction:

Pulmonary lymphangiomyomatosis (LAM) is a rare cystic lung disease, mostly seen in reproductive age women. Most common presentation is dyspnoea on exertion, may be associated with hemoptysis and chest pain. Spontaneous pneumothorax is a common finding in these patients. 66% had recurrence after chest tube placement. It was reduced to 27% after pleurodesis. So, pleurodesis plays a major role in treatment of pneumothorax.

History:

A 26 year old woman presented with chest pain for last 1 year, dry cough and shortness of breath aggravated for last 2 months. On CXR, right sided pneumothorax was seen. CT thorax showed bilateral multiple cysts and bullae with right sided pneumothorax, suggestive of LAM. Chest tube was inserted for pneumothorax, followed by pleurodesis to prevent its recurrence. On regular monthly follow up, no pneumothorax recurrence was noted.

Conclusion:

LAM should be considered as differential diagnosis in case of cystic lung disease and spontaneous pneumothorax. CT thorax can be used as an early diagnostic modality. Due to high recurrence rate of pneumothorax, pleurodesis could be considered after first pneumothorax episode.

Clinical Implications:

In LAM, early diagnosis and management is important. Pleurodesis may improve clinical outcome in patients of LAM related to pneumothorax recurrence.

Title: A RARE CASE OF RECURRENT

PNEUMOTHORAX ASSOCIATED WITH BOURNEVILLE DISEASE

Name of Presenter: **Dr.K.SOWMYA**

Authors (or Co-authors): **Dr.S.RAGHU, Dr.S.LAKSHMI KUMARI**

Institution/Author Organization: **GUNTUR MEDICAL COLLEGE, GUNTUR**

INTRODUCTION:

Lymphangiomyomatosis (LAM) is a multisystem disorder predominantly affecting women, characterized by cystic lung lesions, abdominal angiomyolipomas and lymphatic abnormalities. It occurs in Tuberous sclerosis(Bourneville disease), an Autosomal Dominant disorder resulting from germline mutations in TSC1 and TSC2 genes.

CASE REPORT:

A 20yr old female presented with sudden onset of dyspnea and Left sided pleuritic chest pain. O/E Red papules on face involving nose, nasolabial folds, cheek, hypopigmented macules on legs are seen .On auscultation absent breath sounds on left side. Past H/O recurrent pneumothoraces with repeated tube thoracostomy present for 8 times in past 2 years.

Investigations:

CBP - normal, Chest Xray- Left sided pneumothorax present. CT Chest,abdomen – Multiple large cysts in B/L upper lobes and small cystic lesions in B/L Middle and lower lobes. Pneumothorax present on Left side. Multiple lipomatous tumors in both kidneys and liver likely angiomyolipomas are present.

Treatment:

ICD tube thoracostomy and Tab.Sirolimus
Conclusion – LAM is a disease of women usually of reproductive age. LAM should be in differential diagnosis of cystic disease and recurrent pneumothorax.

Title: Interstitial lung disease with Chiladiti sign

Name of Presenter: **Dr Surabhi Jaggi**

Authors (or Co-authors): **Dr Siddarth Singh, Dr Varinder Saini, Dr Deepak Aggarwal, Dr Mandeep kaur Sodhi**

Institution/Author Organization: **Government medical College and Hospital Sector 32, Chandigarh**

INTRODUCTION:

Chilaiditi sign is the peculiar radiographic presentation of interposition of the colon between the diaphragm and the liver. When the Chilaiditi sign is associated with symptoms in the form of abdominal pain, distension,

vomiting, anorexia, constipation, shortness of breath, chest pain or respiratory distress etc, it is called Chilaiditi's syndrome.

DISCUSSION OF CASE:

70 year old male with a smoking history of 50 pack years presented to us with gradually progressive shortness of breath for 3 years and productive cough for month. On general physical examination patient was tachypneic with respiratory rate of 30/minute and febrile with temperature of 100 F. On auscultation, bilateral wheeze and bilateral basal crepts were present. HRCT chest was suggestive of interlobular interstitial thickening with areas of honey combing predominantly in bilateral subpleural region with Interposition of colon between liver and diaphragm, colonic haustral pattern seen S/O Chilaiditi sign. Patient was started on inhaled bronchodilators, antibiotics, pirfenidone and oral corticosteroids. Stool softeners and high fiber diet was added. He Improved partially with treatment.

DISCUSSION AND CONCLUSION

Since Chilaiditi sign can cause respiratory symptoms and respiratory distress and is associated with chronic lung diseases, it is important to exclude pulmonary involvement as the primary cause of chronic respiratory symptoms rather than attributing the respiratory symptomatology to Chilaiditi syndrome.

Title: An unusual case of rapidly progressing mucinous adenocarcinoma of lung mimicking interstitial lung disease

Name of Presenter: **Veena E R**

Authors (or Co-authors): **Dr. Lalita Fernandes, Dr. Durga Lawande, Dr. Nupur Kulkarni**

Institution/Author Organization: **Goa Medical college**

ABSTRACT BACKGROUND:

Most pulmonary adenocarcinomas present as solitary peripheral nodule with spiculate margin, and rarely have exacerbated clinical conditions. The usual presentation of lung cancer is digital clubbing, haemoptysis, weight loss, dyspnoea, chest pain and fatigue. There are case reports where neoplasm causes pulmonary neoplastic infiltration and acute respiratory distress syndrome in leukaemia and lymphoma but unheard of in lung cancers.

HISTORY AND PRESENTATION:

Here we discuss an unusual presentation of mucinous adenocarcinoma where a 54 year old female with diabetes mellitus and hypertension on treatment, was presented to us with shortness of breath and dry cough for

a period of one month. The vitals were stable on the first week which progressively worsened and within a week patient had to be kept on invasive ventilation.

INVESTIGATIONS AND TREATMENT:

The chest X-ray was showing bilateral lower zone infiltrates and HRCT was showing bilateral ground glass opacities and patchy consolidation. The constellation of symptoms mimicked acute interstitial pneumonia (AIP), a subtype of interstitial lung disease. The disease progressed and the presence of mucinous adenocarcinoma was detected on a post mortem biopsy.

CONCLUSION:

Further understanding of this subtype and its presentation will help in an earlier diagnosis and treatment.

Title: A study of different patterns of interstitial lung diseases in a tertiary health care Centre

Name of Presenter: **Dr. Chaitanya Kiran Gara**

Authors (or Co-authors): **Dr. Banani Jena, Dr. Priyadarshini Behera**

Institution/Author Organization: **IMS and SUM Hospital, Siksha O Anusandhan University, Bhubaneswar**

Introduction:

Interstitial lung diseases (ILDs) are a heterogeneous group of lung disorders characterized by varying degrees of inflammation and fibrosis in the lung parenchyma. The annual incidence of ILDs has variability been reported between 1 and 31.5/100000.

Aims and objectives:

To establish diagnosis of ILD and evaluate the complete pattern distribution taking in consideration clinical history, radiological findings, laboratory and serological investigations.

Methodology:

Hospital based Observational Study

Results:

A total of 100 subjects are taken into my study of which 37% male, 63% female; Cough is the commonest symptom (100%) f/b shortness of breath (98%) with a predominant restrictive defect; Clinically arthralgia(65%), skin manifestations(37%), mucosal involvement(14%) are seen in this study and radiologically definite UIP(78%), NSIP(20%) ; Considering above data the common ILD in

our tertiary Centre is IPF(28%) f/b rheumatoid arthritis(16%), systemic sclerosis(9%), SLE(8%), MCTD(7%), COP(6%), HP(5%), Sarcoidosis(5%), Dermatomyositis(5%), Polymyositis(4%), Drug induced ILD(2%), Occupational ILD(1%).

Conclusion:

With my study I have compiled the data of all ILD cases and study different patterns at our tertiary care Centre.

Title: EVALUATING THE ROLE OF HRCT IN ETIOLOGICAL DIAGNOSIS OF ILD

Name of Presenter: **DEV KUMAR**

Authors (or Co-authors): **Rajesh Agrawal, Divyendu Sharma**

Institution/Author Organization: **ROHILKHAND MEDICAL COLLEGE AND HOSPITAL, BAREILLY**

Introduction:

ILD is a group of disorders that involve the alveolar structures, pulmonary interstitium and small airways. Radiological patterns on HRCT thorax are the cornerstone for the diagnosis of ILD. Aim: To evaluate the role of HRCT in etiological diagnosis of ILD.

Methods:

A retrospective study was conducted in Rohilkhand Medical College and hospital, Bareilly. Medical records were analyzed of all diagnosed patients of ILD during April 2017 to March 2020.

Results: Out of 72 diagnosed ILD patients, in UIP pattern, IPF were 57.14% then CTD-ILD 35.7%, and HP in 7.14%. In NSIP pattern idiopathic in 53%, then CT ILD in 35.3% and HP in 11.7%. In nodular pattern was sarcoidosis in 58.3% and HP in 41.6%. In CTD ILD specific symptoms and investigations were joint symptoms, skin symptoms, GERD, and raynaud's phenomenon, ANA profile, RA factor, AntiCCP. In Sarcoidosis it was joint symptoms and hemoptysis investigations included Serum ACE levels, Urinary ca levels. Conclusion: HRCT patterns are highly sensitive of diagnosis of certain ILD but not sufficient to achieve etiological diagnosis which requires additional history and symptom complex along with other specified diagnostic modalities.

Title: SARCOPENIA IN CONNECTIVE TISSUE DISEASE ASSOCIATED INTERSTITIAL LUNG DISEASE (CTD-ILD)

Name of Presenter: **MARAM REDDY JEESHITHA**

Authors (or Co-authors): **PRASANTA PRADHAN**

, **C MOHAN RAO**

Institution/Author Organization: **KALINGA INSTITUTE OF MEDICAL SCIENCES**

Background:

Sarcopenia can alter physical performance, functional capacity, levels of physical activity and may also contribute to morbidity and mortality in CTD-ILD.

Aims and Objectives:

To determine the prevalence of sarcopenia in CTD-ILD

Methodology:

Patients with CTD-ILD were screened for sarcopenia using SARC-F questionnaire and then assessed for muscle strength, muscle mass and physical performance using chair stand test, BIA analysis and gait speed test as per EWGSOP2 criterion.

Results:

The study included 20 patients with CTD-ILD. The mean age of presentation was 45.9+6.5 years. Majority of the patients were female (15 cases). Systemic sclerosis associated ILD (SSc-ILD) was the most common type followed by mixed collagen tissue disease associated ILD (MCTD-ILD). The median time since diagnosis was 2 years. 16 patients were able to complete 6MWT with an average distance of 313.55+47.08 metres. Spirometry showed a mean FEV1 of 59.8+8.14 litres with a mean of 46.86+12.37 litres in patients with sarcopenia. Pre-sarcopenia was observed in 12 cases. Sarcopenia in 7 cases of which 4 cases were severely sarcopenic.

Conclusion :

A better understanding of the sarcopenia in ILD is necessary as early detection and intervention can improve the quality of life and mortality in these patients.

Title: THE CO-RELATION BETWEEN EXERCISE CAPACITY AND PULMONARY HYPERTENSION IN DIFFERENT TYPES OF INTERSTITIAL LUNG DISEASES IN A TERTIARY CARE CENTRE IN INDIA

Name of Presenter: **KAUMUDI DEVI**

Authors (or Co-authors): **MAHAVIR MODI, MD/ DNB PULMONARY MEDICINE, CONSULTANT**

Institution/Author Organization: **RUBY HALL CLINIC, PUNE, INDIA**

INTRODUCTION:

Interstitial lung diseases are characterized by progressive scarring and fibrosis of interstitium of the lungs. Interstitial lung disease can

markedly reduce patient's exercise capacity and make patient dependent on oxygen, and can be associated with pulmonary artery hypertension (class 3 WHO classification) with limited exercise capacity. We present a study done in our center where 75 patients of ILD are subjected to undergo 2-D echocardiography to assess the pulmonary hypertension and the co-relation between pulmonary hypertension with 6 minute walk distance and FVC.2-D echocardiography showing PASP > 20 are classified into mild (PASP 20-40) , moderate (41-55 PASP) and severe(PASP > 55) based on ERS journal 2019 , January edition.

METHODOLOGY:

All ILD work up done including spirometry for FVC, 6 minute walk distance, echocardiography to evaluate pulmonary pressure.

RESULTS:

Parameter	UIP	NSIP
Percentage of types of ILD	63 %	31 %
Severe pulmonary hypertension	11 %	7 %
Moderate pulmonary hypertension	38 %	22 %
FVC < 50 in severe PASP patients	50 %	50 %
Unable to perform 6 minute walk distance in severe pasp category	70 %	50 %

CONCLUSION:

- 1) The prevalence of severe pulmonary hypertension is more in UIP pattern (11 % vs 7 %)
- 2) Decline in FVC corelates with the severity of pulmonary hypertension.
- 3) Patients with severe pulmonary hypertension may not be able to perform 6 minute walk test.

Title: AN EVALUATION OF RISK FACTORS FOR DEVELOPING PULMONARY FIBROSIS IN COVID19 PATIENTS

Name of Presenter: **DR MONICA HARISH BANSAL**

Authors (or Co-authors): **DR GAURAV CHHABRA**

Institution/Author Organization: **GEETANJALI MEDICAL COLLEGE AND HOSPITAL**

BACKGROUND:

Coronavirus infection has emerged as a public health emergency worldwide most commonly presenting as atypical pneumonia. CT scan of chest and inflammatory markers have an important role in prognosis. Post-COVID infection leading to lung fibrosis has been a concern. MATERIALS AND

METHODS:

An observational study has been done in

patients of covid19 RTPCR positive, which were admitted in our hospital. Parameters taken: onset of symptom, detailed past and medical history, blood and radiological findings were compared during and after treatment.

RESULT:

In our study, 100 patients were enrolled, out of which 70% were males and 30% were females. Out of them, 65% of patients were having age of more than 60years, out of which 77% patients were having co-morbid conditions (Diabetes, Hypertension, CAD). Out of the total 100 patients included in our study, 60% of patients showed increase in inflammatory markers and amongst these, 75% were aged above 60years. In 25 patients who were aged above 60 years developed fibrotic changes as evident on CT scan.

CONCLUSION:

From our study we conclude that the positive predictor of pulmonary fibrosis in covid19 infection are old age, co-morbid conditions and increased inflammatory markers. Hence, CT scan holds an important value so that early treatment can be started and disease severity can be limited.

Title: EARLY DETECTION OF INTERSTITIAL LUNG DISEASE IN SYSTEMIC SCLEROSIS – WHERE DO WE STAND?

Name of Presenter: **MUNIZA BAI**

Authors (or Co-authors): **DHARM PRAKASH DWIVEDI, G VISHNUKANTH, NANDINI PANDIT, SIVARANJINI R, CHENGAPPA K G**

Institution/Author Organization: **JAWAHARLAL INSTITUTE OF POST GRADUATE MEDICAL EDUCATION AND RESEARCH**

INTRODUCTION:

Considering the frequency of lung involvement in systemic sclerosis and its impact on the prognosis, it is important to recognise patients with ILD early and treat them appropriately. One such modality that is understudied which can help in early diagnosis is by assessing changes of alveolar capillary permeability using Tc 99m DTPA aerosol lung scintigraphy.

OBJECTIVES:

1. To assess the pulmonary alveolar capillary permeability in patients with diffuse scleroderma using Tc 99m DTPA aerosol scintigraphy.
2. To identify the association of alveolar capillary membrane permeability assessed by using Tc 99m DTPA aerosol scintigraphy with spirometry, high resolution computed tomography (HRCT) findings, modified rodnan skin score (MRSS), six minute walk distance

(6MWD), nail fold capillaroscopy findings and serum concentrations of pneumoproteins - KL-6 and SP-D.

METHODOLOGY:

55 diagnosed adult cases of diffuse scleroderma satisfying the ACR/EULAR 2013 classification criteria were enrolled, aerosol scan and HRCT was performed. 35 out of the 55 patients underwent a battery of tests in addition to aerosol scan - spirometry, MRSS, nail fold capillaroscopy and serum concentrations for KL-6 and SP-D. Semiquantitative CT scoring used by Warrick et al was used to evaluate HRCT findings.

RESULTS:

Of the total participants (n=55), the mean T1/2 was found to be 44.6±23.5 minutes and there was a negative correlation between T1/2 & Warrick score of $r = -0.30$ ($p < 0.03$). There was a negative correlation between T1/2 & 6MWD of $r = -0.14$. Positive correlation was noted between T1/2 & FVC ($r = 0.19$) and T1/2 & MRSS ($r = 0.79$).

CONCLUSION:

Hence aerosol scan can serve as a novel diagnostic modality for the early diagnosis of interstitial lung disease in patients with diffuse cutaneous systemic sclerosis, thereby improving the long term outcomes.

Title: Clinical Profile of patients with Connective Tissue Disorder Related Interstitial Lung Disease - An observational study

Name of Presenter: **Nanditha Reddy**

Authors (or Co-authors): **Abhishekh Nuchin, Pranav Modi, Abhay Uppe, Girija Nair**

Institution/Author Organization: **DY Patil Hospital, Navi Mumbai**

Background and Introduction:

Connective tissue disease may be an underlying cause of Interstitial Lung Disease, and often patients may not present with a pre-existing diagnosis.

Aims and Objectives

To study the clinical profile of patients with CTD-ILD and identify the frequency and nature of lung involvement.

Materials and methods

Fifty patients of age 18 and above with clinical diagnosis of connective tissue disease and interstitial lung disease were included in the study. Symptomatology and history, chest x-ray and HRCT findings, microbiological aspirates in sputum, pulmonary function testing, 6MWT

and 2D-Echo findings were included in the clinical profile. Distribution of responses were examined using frequencies and percentages and cross tabulations were done between various subgroups.

Results

Two-thirds of patients with ILD had underlying Connective Tissue Disease. UIP pattern was the predominant in 88% of RA-ILD and NSIP pattern was predominant in other CTD-ILD. Restrictive abnormality on PFT with reduced DLCO was observed in all patients with raised pulmonary artery pressure in 70% patients. During the 6MWT, 64% of patients walked <350 meters and significantly reduced SpO₂ levels were observed after exercise P <0.05.

Conclusion

A high frequency of lung involvement was observed in patients with ILD diagnosed to have underlying CTD.

Title: ROLE OF TRANSBRONCHIAL LUNG BIOPSY IN HYPERSENSITIVITY PNEUMONITIS

Name of Presenter: **Samiksha S. Kamble**

Authors (or Co-authors): **Ketaki Utpat, Unnati Desai, J M Joshi, Ramesh N. Bharmal**

Institution/Author Organization: **TNMC and BYL Nair hospital**

INTRODUCTION:

Hypersensitivity pneumonitis (HP), is spectrum of interstitial, alveolar & bronchiolar lung diseases resulting from immunologically induced inflammation in response to inhalation of wide variety of organic dust exposure that are usually present at home, surroundings or work which may lead to irreversible lung damage. We assessed yield of transbronchial lung biopsy (TBLB) in diagnosing HP. AIM To study utility and diagnostic yield of TBLB in HP patients

METHODS:

retrospective study was conducted at tertiary care hospital based on available medical records of 36 patients. Role of TBLB in diagnosing HP was studied by and data was analyzed using percentages and mean.

RESULTS:

enrolled 36 cases of HP, included 7 men, 29 women. mean age was 50. mean forced vital capacity (FVC) was 46.58 liters. mean six minute walk distance was 290 meters. All were diagnosed as cases of HP on basis of clinic-radiological correlation. All cases underwent bronchoscopy with TBLB. Of 36; TBLB aided diagnosis in 21 (58.4%) & 15 (41.6%) had an inconclusive

biopsy. Of conclusive biopsies; 10 (27.7%) showed presence of granuloma with interstitial fibrosis and inflammatory infiltrate on biopsy histopathology, 9 (25%) showed no granulomas but interstitial fibrosis with inflammatory infiltrate and 2 (5.5%) showed chronic bronchiolitis. Yield of TBLB-58.4%. All patients tolerated procedure well.

CONCLUSION:

Thus, TBLB is a promising minimally invasive technique for diagnosing HP with good yield.

Title: Clinicoradiological profile of ILD in a tertiary care centre in coastal India

Name of Presenter: **Sanjai Narayanasamy**

Authors (or Co-authors): **Vyshak Uddur Surendra, Aswini Kumar Mohapatra, Thomas Antony**

Institution/Author Organization: **Kasturba Medical College**

Background:

Interstitial Lung Disease (ILD) is an increasingly diagnosed condition with the advent of CT imaging. The prevalence of each type of ILD, the clinical presentation along with the characteristic radiological findings and the treatment provided help us in understanding the distribution of the disease.

Objectives:

To study the clinical, radiological profile and treatment regimen of the patients diagnosed as ILD in a tertiary care centre.

Methodology:

A Retrospective study was done on clinical profile, laboratory and radiological investigations and the treatment received to the patients admitted with the diagnosis of ILD between 2016 and 2017 were analysed. Results: About 120 patients were analysed in the study, fatigue found to be the common presentation, 11% of the patients had associated connective tissue disorder, 14% of the patients were on home oxygen, 58% of patients were on oral steroids, UIP found to be the common pattern.

Conclusion:

IPF has been the predominant type of ILD in our study in coastal India/Karnataka. Radiological features along with clinical parameters help in the diagnosis of ILD.

Title: A MULTIDISCIPLINARY APPROACH FOR THE CLINICAL, RADIOLOGICAL, HISTOPATHOLOGICAL & SEROLOGICAL PROFILE IN PATIENTS WITH INTERSTITIAL

LUNG DISEASE

Name of Presenter: **Dr. Sujeet kumar karn**

Authors (or Co-authors): **Dr. G. N Srivastava, Dr. Ishan kumar, Dr. Neeraj dhameja, Dr. Devendra Dr. Brighton, Dr. Akhilesh**

Institution/Author Organization: **Institute of medical sciences, BHU**

Background:

Interstitial Lung Disease (ILD) refers to a heterogeneous group of more than one hundred distinct lung disorders that are grouped together because they share similar clinical, radiographic, and pathologic features. Diagnosing ILDs in India has proven to be a challenge as it is confounded by environmental and cultural factors in the midst of infections, especially Tuberculosis. The country has a lack of resources, standardized health care and guidelines for approach to ILD. While approaching a patient suspected to have ILD one should use a combination of a detailed history, clinical examination, radiographic findings, pathological features and serological tests.

Method:

Our study was a descriptive study designed to evaluate 50 suspected ILD with multidisciplinary approach at our institute here, Institute of medical sciences, BHU, Varanasi

Results:

We evaluated 50 patients (mean age 48.02 years; 54.0% females) of Interstitial Lung Diseases (ILD) with multidisciplinary approach. Connective tissue disease related ILD (26.0%) was the most common type of ILD, followed by Hypersensitivity pneumonitis (20.0%) and Idiopathic pulmonary fibrosis (18.0%). Sarcoidosis was diagnosed in a lesser proportion of patients (4.0%) as compared to other studies.

Conclusions:

TBLB appears to be an important diagnostic tool for the diagnosis of DPLDs. The use of a pattern-based approach to TBLB adds to its diagnostic yield and can be helpful in cases where open lung biopsy is not available

TAKE HOME MESSAGE :

complication are part of spectrum of PTB, however early diagnosis and management will help in salvaging of precious life.

Tuberculosis

Title: PREVALENCE AND PATTERN OF GENE MUTATION OF ISONIAZID AND/OR RIFAMPICIN RESISTANCE IN SMEAR POSITIVE PULMONARY TB CASES PRESENTING TO A TERTIARY CARE HOSPITAL IN WESTERN MAHARASHTRA

Name of Presenter: **DR AKHIL K R**

Authors (or Co-authors): **DR CDS KATOCH, DR VIKAS MARWAH,, DR GAURAV BHATI, DR DEEPU K PETER**

Institution/Author Organization: **ARMY INSTITUTE OF CARDIO THORACIC SCIENCES, ARMED FORCES MEDICAL COLLEGE, PUNE**

Introduction

Line Probe Assay (LPA) is a type of NAA (Nucleic acid amplification) test, which can simultaneously detect and identify genus Mycobacterium along with 16 different species and has high specificity (94%) and sensitivity (100), where rpoB gene is used for determining Rifampicin resistance and inhA and katG gene are used for determining Isoniazid resistance. A multisite validation study from India found LPA to be sensitive and specific tool for the detection of Rifampicin resistance in AFB smear-positive sputum specimens. Although similar studies have taken place in different parts of country, fewer studies are available from Maharashtra. This study will help to identify the predominant genetic pattern leading to resistance in this geographical area.

Aims and Objectives

To study the prevalence and pattern of Isoniazid and/or Rifampicin resistance and demographic profile in smear positive pulmonary TB cases presenting to a tertiary care hospital in western Maharashtra.

Methodology

Prospective observational study of the pattern of Isoniazid and/or Rifampicin resistance and demographic profile of 166 Sputum Positive patients.

Observation

The most common symptom was Cough. The mean age of presentation was 42 years with the oldest patient of 94 years and the youngest 3 years. 114 out of our 166 patients were males. MUT-3 was the most common rpoB mutation (51), MUT-1 was the most common KatG mutation (117) and MUT-1 was the most common InhA mutation (36) respectively in Western Maharashtra

Conclusion

Drug resistance TB still remains a major concern

and is responsible for significant mortality and morbidity in young people, with a male pre-disposition. An early diagnosis with molecular methods, which have high sensitivity and specificity helps in early initiation of Drug Resistant chemotherapy.

Title: Isoniazid Resistance : Genetic Pattern, Treatment Outcome And Relevance Of High Dose Isoniazid In Therapy

Name of Presenter: **Dr Arjun Bhatnager**

Authors (or Co-authors): **Dr Vishal Chopra, Dr Neeraj Kumar Gupta, Dr Shibdas Chakrabarty**

Institution/Author Organization: **VMMC and Safdarjung Hospital , New Delhi**

Introduction:

Incidence of drug resistant tuberculosis (DRTB) is rising in India. Management of DRTB is challenging and hence requires constant research and development in order to device better treatment options.

Research question:

Does high level (katG) isoniazid has poorer clinic-radio-microbiological presentation? Does high level (katG) isoniazid resistance has poorer clinical outcome than inhA subtype? Role of high dose isoniazid in inhA resistance subtype? (indirect evidence)

Aims and Objectives: To study the genetic pattern of isoniazid resistance and to assess the treatment outcome of standardized DRTB regimens in these patients.

Materials and methods:

This was a prospective observational study in which 100 isoniazid resistant pulmonary tuberculosis patients were enrolled. Patients were categorized as inhA or katG based on line probe assay from November 2016 to November 2017, started on respective standardized DRTB regimens and their treatment outcomes were assessed.

Results: Of total 68% were monoisoniazid resistant, 30% were multidrug resistant and 2% were pre-extensively drug resistant TB. Majority of isoniazid resistant cases had katG type of isoniazid resistance (74%) followed by inhA type (24%). Treatment outcome was more favorable with monoisoniazid resistant TB (65%) than MDR and XDR (53.8% and 50% respectively) on standardized treatment

according to RNTCP-PMDT guidelines (high dose isoniazid added to background regimen in inhA isoniazid resistant cases). Favourable treatment outcome was almost similar in both inhA and katG groups (68% and 62%). katG mutation was not found to have association with poorer clinical presentation or treatment outcome of the disease.

Conclusion:

This study reveals that categorization of the DR-TB patients on the basis of genetic type of isoniazid resistance has no significance in terms of clinic-radio-microbiological disease severity or treatment outcome while receiving treatment according to then current standard guidelines. Role of high dose isoniazid in treatment of inhA resistance seems insignificant indirectly in current study, may require larger studies.

Title: BAND PATTERN ANALYSIS OF MUTATIONS IN H-MONO RESISTANT TB PATIENTS BY LINE PROBE ASSAY AND TREATMENT OUTCOMES IN PATIENTS ATTENDING GHCCD, VISAKHAPATNAM

Name of Presenter: **ARYA RAMACHANDRAN**

Authors (or Co-authors): **VIJAYAKUMAR MD, SURYAKUMARI MD**

Institution/Author Organization: **ANDHRA MEDICAL COLLEGE**

INTRODUCTION

Mutations associated with Isoniazid resistance are more complex and occur in multiple genes (inhA & katG). Resistance to INH has been linked to poorer treatment outcomes, post-treatment relapse and death, at least for specific sites of disease. AIMS To carry out band pattern analysis of LPA reports of H-mono resistant tb patients and also to observe uncommon mutations in H-Mono resistant patients. To evaluate treatment outcomes of patients with INH mono-resistant TB.

METHODOLOGY

LPA reports were collected from IRL, at GHCCD, Visakhapatnam from March 2019 to March 2020. Band patterns were then analyzed as per the manufacturer's instructions.

RESULTS

100 valid LPA reports were collected, and their band patterns were analyzed. High-level H resistance (kat G gene mutation) was seen in 86 (86%) cases, and 14 (14%) have low-level H resistance (inh A gene mutation). MUT1 (of kat G) gene probe was positive in

79 cases(91.86%),and MUT 2(of kat G) in 6 cases(6.97%)and both were positive in 1 case(1.17%).MUT1 of inh A gene probe was positive in 12 cases(85.71%)wherein one case both MUT1 and MUT 2 was positive(14.28%). Successful treatment outcome was seen in 86%

CONCLUSION

The most common mutation of katG gene is at MUT1 region(91.86%)and in inhA gene MUT1(85.71%)is more common.Routine use of LPA can substantially reduce the delay in diagnosis &enable earlier initiation of appropriate drug regimen.

Title: To study the utility of Cartridge based nuclear acid amplification test in patients with presumptive Extra-pulmonary Tuberculosis

Name of Presenter: **Dr Basanth Kumar Patil**

Authors (or Co-authors): **Dr.Antonio Lamartine Dacosta, Dr.Anup Banur, Dr.Priyadarshini . S. Raikar**

Institution/Author Organization: **SSIMS AND RC DAVANGERE**

Introduction:

Presumptive Extra Pulmonary Tuberculosis refers to the presence of organ-specific symptoms and non specific signs. Cartridge-based nucleic acid amplification test(CBNAAT) detects the presence of TB bacilli and also Rifampicin susceptibility. Utility assessment of CBNAAT in hospital setting will help in fine tuning the diagnostic criteria in programmatic setting and strengthens the evidence based practice in TB care.

Objective: 1. To assess the yield of CBNAAT in detecting extra-pulmonary tuberculosis using samples of patients with presumptive extra-pulmonary TB. 2.To assess Rifampicin susceptibility in samples of presumptive extra-pulmonary TB patients using CBNAAT. Materials and Methods: Hospital-based, cross sectional study was conducted among the suspected extra pulmonary TB patients seeking medical care at a tertiary care teaching hospital in Central Karnataka, India. Pre tested, semi structured questionnaire was used. Samples from all the screened subjects during the study period were tested by CBNAAT for the Mycobacterium tuberculosis detection and Rifampicin Susceptibility.

Results:

Out of 107 samples subjected to CBNAAT 31(29%) were found positive for Mycobacterium Tuberculosis. All the samples were found sensitive for Rifampicin.

Title: Efficacy of Cartridge based nucleic acid amplification test in the diagnosis of tubercular pleural effusion

Name of Presenter: **Dr.Diti v Gandhasiri**

Authors (or Co-authors): **Dr.T.M. Dhamgaye**

Institution/Author Organization: **JNMC , Wardha**

Background:

India accounts for 1/4th of the global tuberculosis burden of which extra pulmonary tuberculosis comprises 15-20% of all cases. Patients with tubercular pleural effusion(TPE) require specialized investigations and diagnosis is usually based upon an array of investigations. Xpert MTB/RIF assay or CBNAAT, is a WHO-recommended test that simultaneously detects MTb and rifampicin resistance in <2 hours. In a rural set-up, it is imperative to verify its utility with relation to pleural biopsy.

Aims:

To perform CBNAAT on pleural fluid samples of suspect TPE cases and to calculate the efficacy of CBNAAT in diagnosing TPE in comparison to pleural biopsy.

Methodology:

Over a period of 2yrs, 61 patients who met with the inclusion & exclusion criteria were enrolled. Thoracentesis was performed in all subjects & 30ml of fluid collected was sent for routine investigations and CBNAAT. Results obtained, were analyzed and compared using standard formulas.

Results:

Pleural fluid was exudative in all the participants. We defined a composite reference standard (CRS) consisting of:histopathology of pleural tissue that identified granulomas or MTB identified in any other sample(e.g. sputum).We found the sensitivity of CBNAAT to be 46.15%, specificity was 100% (CI= 95%),PPV being 100% while NPV was 80.82% with a diagnostic accuracy of 85.53% in comparison to CRS.

Title: COMPARATIVE STUDY OF CATRIDGE BASED NUCLEIC ACID AMPLIFICATION TEST(CBNAAT) AND LINE PROBE ASSAY(LPA) IN DETECTING THE DRUG RESISTANCE IN TUBERCULOSIS PATIENTS

Name of Presenter: **Dr.Jaya Sravani Donepudi**

Authors (or Co-authors): **Dr.A.Sathya Prasad**

Institution/Author Organization: **Mamata medical college**

INTRODUCTION

Tuberculosis is a major health problem. The cornerstone of TB control remains early

diagnosis and treatment. Conventional methods are slow and cumbersome. During this time, patients may be inappropriately treated, drug resistant strains may continue to spread and amplification of resistance may occur. Novel technologies for rapid detection of anti-TB drug resistance have therefore become a priority. The CBNAAT and LPA have been endorsed by WHO for the rapid diagnosis of drug resistance. However, there is no clarity regarding the superiority of one over the other.

AIM

To compare CBNAAT and LPA and their role in detecting the drug resistance.

MATERIALS AND METHODS

A cross-sectional observational study conducted on 50 patients presenting with Tuberculosis in Mamata General Hospital, Khammam from October 2019 to September 2020. RESULTS Sensitivity and specificity of CBNAAT and LPA in detecting drug resistance of TB are 75%, 94% and 100%, 100% respectively. On comparison, CBNAAT showed 85.7% and LPA showed 100% agreement with culture.

CONCLUSION

With regard to RIF mono-resistance, LPA outperformed Gene-Xpert MTB/RIF and thus it is a better alternative to culture with regards to detection of Rifampicin resistance. Also, LPA has the advantage of detecting the isoniazid mono-resistance.

Title: ROLE OF CARTRIDGE-BASED NUCLEIC ACID AMPLIFICATION TEST (CBNAAT) IN EXTRA PULMONARY TUBERCULOSIS- A PROSPECTIVE STUDY

Name of Presenter: **MANSOOR AHMAD KHAN**

Authors (or Co-authors): **Zuber Ahmad, Imrana Masood, Nazish Fatima**

Institution/Author Organization: **JNMCH,AMU,ALIGARH**

INTRODUCTION:

Tuberculosis is one of the most common infections among the Indian population. Standard methods of Z.N. staining have low sensitivity and specificity in extra pulmonary tuberculosis Cartridge-based nucleic acid amplification test is a polymerase chain reaction based method for detection of mycobacteria which also detects rifampicin resistance, targeting the rpoB gene of mycobacteria, providing results within 2 hours and is a highly specific test for M.tb. This study evaluates the role of CBNAAT, and compares it with conventional methods in detecting M.tuberculosis.

MATERIALS AND METHODS:

The study group consisting of 100 subjects, assessed over 2 years on the basis of clinical history and examination findings, were put through a pre-set inclusion criteria (Pleural effusion, cervical lymphadenopathy, abdominal tuberculosis, tubercular meningitis) and samples were collected from each patient and analysed by CBNAAT and also tested by ZN-staining.

RESULT:

Out of 100 samples sent for CBNAAT and ZN staining and microscopy, 18 samples came positive for conventional staining method whereas 55 came out positive via CBNAAT; out of which 8 showed rifampicin resistance.

DISCUSSION:

Extra-pulmonary TB is a relatively common but under-diagnosed disease. Incidence of Rifampicin resistance is steadily on the rise and CBNAAT is proving to be a significantly efficient tool in diagnosis of extra-pulmonary tuberculosis.

Title: TO STUDY THE OCCURRENCE OF MDR – TB IN CASES OF GENITAL TUBERCULOSIS IN FEMALES OF FERTILE AGE GROUP THROUGH NAAT ON MENSTRUAL BLOOD

Name of Presenter: **DR. PALLAVI BAJPAI**

Authors (or Co-authors): **DR. EEMA CHAUDHARY**

Institution/Author Organization: **SUBHARTI MEDICAL COLLEGE, MEERUT, UTTAR PRADESH**

INTRODUCTION:

Female genital tuberculosis (FGTB) having infertility as commonest presentation, is a major health problem in developing countries. Real time polymerase chain reaction (PCR) for MTB DNA, targets the sequence of RRDR region of rpoB gene, known to be related to rifampicin resistance.

OBJECTIVES:

To study clinical presentations and occurrence of drug resistant tuberculosis in clinically suspected cases of genital tuberculosis, using newer diagnostic methods like NAAT (Nucleic Acid Amplification Test) on menstrual blood.

METHODOLOGY:

In prospective study of 50 female patients, after complete clinical examination, Day 1 or Day 2 Menstrual Blood samples were subjected to Ziehl-Neelsen staining and NAAT.

RESULTS:

In 84.00% of patients, post Anti Tubercular

Treatment (ATT) symptoms were improved. Multi Drug Resistance Tuberculosis (MDR TB) suspicion on the basis of ATT response was present in 7 patients. On menstrual blood real time PCR, MTB DNA was detected only in 1 patient and "Rifampicin resistance was not detected" only in 1 out of 50 patients.

CONCLUSION:

NAAT did not show significant results for detection of MTB DNA and rifampicin resistance through menstrual blood. NAAT results should be interpreted within the context of the patient's clinical features and they should always be performed in conjunction with AFB smear and culture.

Title: EVALUATION OF THE PREVALENCE OF ISONIAZID MONORESISTANT PULMONARY TUBERCULOSIS CASES BY LINE PROBE ASSAY IN A TERTIARY CARE HOSPITAL IN EASTERN INDIA

Name of Presenter: **PAULAMI PALCHOWDHURY**

Authors (or Co-authors): **Aitihya Chakraborty ; Anindita Rakshit ; Banya Chakraborty**

Institution/Author Organization: **CALCUTTA SCHOOL OF TROPICAL MEDICINE**

BACKGROUND:

India bears the highest burden of drug resistant tuberculosis cases. Recently Isoniazid mono-resistant cases are emerging in high number and has become a major threat to global tuberculosis control.

AIMS:

To find the prevalence of Isoniazid mono-resistant pulmonary tuberculosis cases by line probe assay from sputum samples of patients

METHODOLOGY:

70 sputum samples positive for acid fast bacilli by Ziehl-Neelsen staining were collected from pulmonary tuberculosis patients in four months (September 2019 to January 2020) and subjected to both CBNAAT (Cartridge based nucleic acid amplification) and Line probe assay using Genotype MTBDRplus VER 2.0. Results were interpreted following proper guidelines and manufacturer's protocol.

RESULTS:

Mycobacterium tuberculosis complex was detected in all 70 samples by both CBNAAT and LPA. CBNAAT showed 64 samples were Rifampicin sensitive and 6 were Rifampicin resistant (RR/MDR). By LPA it was found that 59 samples were sensitive to both Isoniazid and Rifampicin, 5 of them were resistant to both

(MDR), 5 were Isoniazid mono-resistant and 1 was Rifampicin mono-resistant.

CONCLUSION:

Isoniazid resistance is surprisingly prevalent globally but is missed out by rapid tests like CBNAAT. This has increased the likelihood of negative treatment outcomes, post treatment relapse and deaths if treated with wrong drug regimens.

Title: To compare the sensitivity of smear microscopy with CBNAAT in BAL of patients of suspected Pulmonary Tuberculosis in our tertiary care centre

Name of Presenter: **PIYALI SARKAR, RAJAT AGARWAL**

Authors (or Co-authors): **R. Agarwal, A. Kumar**

Institution/Author Organization: **ROHILKHAND MEDICAL COLLEGE & HOSPITAL**

Introduction:

CBNAAT is a Mycobacterium tuberculosis specific automated cartridge based nucleic acid amplification assay, using real-time PCR, providing results within 100 minutes. CBNAAT of BAL (bronchoalveolar lavage) a convincing diagnostic method for ruling PTB. In our institute in 2013, 130 cases were sputum negative out of 399 PTB cases, in 2014 total 439 PTB cases, 227 were diagnosed as sputum negative.

Objective:

To compare the sensitivity of smear microscopy with CBNAAT in BAL samples of patients obtained through fiber-optic bronchoscopy for diagnosis of PTB in patients with negative sputum smear for AFB/could not produce sputum and detection of Rifampicin resistance and sensitivity.

Method:

Retrograde study in 75 sputum scarce patients suggestive of PTB underwent Fiberoptic bronchoscopy and broncho-alveolar lavage analysis for diagnosis.

Results: Among 75 patients, 62 (82.67%) patients showed sterile on aerobic culture of BAL sample and 13 (17.33%) showed growth on BAL sample. In AFB microscopy of BAL sample 33 (44%) were positive and 42 (56%) were negative. Out of 75, 51 (68%) showed BAL CBNAAT positive and 24 (32%) showed BAL CBNAAT negative. In 55 (68%) BAL CBNAAT positive, Rifampicin resistance were 3 (5.9%) and Rifampicin sensitive were 48 (94.1%).

Conclusion:

CBNAAT in BAL fluid is a rapid diagnostic test in sputum smear negative PTB patients, improves

case detection and Rifampicin resistance/sensitivity, augments diagnosis. CBNAAT seems new milestone in 'Stop TB' strategy.

Title: Efficacy of CBNAAT in Diagnosis of Tubercular Pleural Effusion among Adult Patients Attending Tertiary Hospital

Name of Presenter: **Dr. Pravendu Pramanik**

Authors (or Co-authors): **Prof(Dr.) Abhijit Mandal, Guide, Prof(Dr.) Indira Dey, Co-Guide**

Institution/Author Organization: **Department of Respiratory Medicine, NRS Medical College & Hospital, Kolkata, West Bengal**

INTRODUCTION:

Tuberculosis can involve any organ or systems of the body. In India, extra pulmonary TB accounts for 15-20% of all TB cases, which remains undetected & untreated due to diverse presentations as well as due to lack of diagnostic means. Early detection of Tubercular Pleural Effusion and any drug resistance is important in the management of TB pleural effusion.

AIMS & OBJECTIVES:

To evaluate the efficacy of CBNAAT in diagnosis of tubercular pleural effusion as an alternative diagnostic tool

METHODOLOGY:

The data were collected from 50 patients, who met the inclusion & exclusion criterias, were analyzed using proper statistical tools & methods.

RESULTS:

In our study of 50 suspected tubercular pleural effusion patients, pleural fluid CBNAAT MTB detected in 30% of patients (Positivity rate:30%), all were sensitive to Rifampicin. Pleural fluid AFB was positive in 14% of patients.

CONCLUSIONS:

CBNAAT is a valuable simple diagnostic test for microbiologically confirmed tubercular pleural effusion. It has potential for greatly enhancing the microbiologically confirmed diagnosis of tubercular pleural effusion compared to pleural fluid AFB smears (P value<0.001).

Title: Diagnostic yield of bronchoalveolar fluid among sputum AFB and CBNAAT Negative presumptive pulmonary tuberculosis patients: An observational study

Name of Presenter: **Dr. SAKSHI DUBEY**

Authors (or Co-authors): **Dr.M.S**

BARTH WAL, DR. NITHIN GAIKWAD, DR. SHAILESH MESH RAM, DR. MAHAVIR BAGRECHA

Institution/Author Organization: **DR. DYPATIL MEDICAL COLLEGE**

Diagnostic yield of BAL among sputum AFB and CBNAAT Negative presumptive PTB patients
Background: Tuberculosis is one of the most common chronic infections globally, especially in developing countries like India. Early diagnosis, and microbiological confirmation of pulmonary TB is important to break the chain of transmission. This study was carried out to study usefulness of fiberoptic bronchoscopy in sputum smear negative and CBNAAT negative patient of presumptive TB. Methods: It was an observational study done at Department of pulmonary medicine of a tertiary hospital in Pune which included 100 cases of presumptive TB whose sputum were negative on sputum AFB and CBNAAT. Cases with relative or absolute contraindication for bronchoscopy were excluded from study. Results: Mean age of subjects was 47.31; M:F was 1.2; 5% had past history of TB. Chest X-ray findings were alveolar opacities (40%), inhomogeneous opacity (24%), cavitory lesions (20%), cystic lesion (8%) and fibrosis (6%). BAL for CBNAAT testing detected 15% mycobacterial TB, 2% MTB with Rif resistance. Zinstain detected 10% AFB, on culture 14% showed AFB growth, 4% had malignant cell findings. Diagnostic efficacy of Zinstaining of BAL showed 42.86% sensitivity, 95.35% specificity, 60% PPV, 91.11% NPV and 88% diagnostic accuracy. BAL CBNAAT testing had 78.57% sensitivity, 93.02% specificity, 64.71% PPV, 96.39% NPV and 91% diagnostic accuracy.

Conclusion:

Fiberoptic bronchoscopy is useful investigation in establishing accurate and early diagnosis of lower respiratory tract infection.

Title: THE ROLE OF CB-NAAT IN DIAGNOSING TB LYMPHADENITIS AND CORRELATION WITH FNAC- A PROSPECTIVE CROSS SECTIONAL STUDY

Name of Presenter: **DR. N. VIGNESH**

Authors (or Co-authors): **DR. V. VINOD KUMAR**

Institution/Author Organization: **GOVT. STANLEY MEDICAL COLLEGE, CHENNAI**

INTRODUCTION:

The diagnosis of tuberculous lymphadenitis is challenging due to the pauci-bacillary nature of disease. Recently, WHO recommends GeneXpert/CBNAAT to be used as a replacement test for usual practice (including microscopy, culture, histopathology) for testing TB lymphadenitis (conditional recommendation).

In India, INDEX - TB GUIDELINES, 2016 recommends Xpert MTB/RIF should be used as an additional test to conventional smear microscopy, culture and cytology in FNA specimens (strong recommendation). Hence a study was planned to find out the effectiveness of FNA CB-NAAT in diagnosing TB lymphadenitis.

METHOD:

A hospital based prospective cross sectional study was conducted for a period of 12 months. 94 presumptive tuberculous lymphadenitis cases were included in this study. They were subjected to Ultrasonogram, Fine Needle Aspiration Cytology (FNAC), Smear for microscopy and Fine Needle Aspirate for CB-NAAT. The data were analysed using appropriate statistical methods.

RESULTS:

In total 94 cases 50 male, 44 female. Majority of the aspirates are from lymph nodal from cervical swellings. CBNAAT has detected 73 / 94 of cases as TB lymphadenitis. The additional yield of doing CBNAAT in FNA material was 15 cases which were not detected by FNAC and 65 cases of smear microscopy negative cases. Resistant to rifampicin was identified in (4 / 94 cases) of 73 CBNAAT positive cases.

CONCLUSION:

FNA still remains the cheapest test to diagnose TB lymphadenitis. In addition to cytology if we done CBNAAT it has an important role in diagnosing many TB lymphadenitis cases. In addition it offered rapid detection of rifampicin-resistant M. Tuberculosis strains which is an added advantage

Title: Evaluation of sputum and BAL CBNAAT among the suspected cases of nodular Tuberculosis

Name of Presenter: **Dr. Vinatha kodam**

Authors (or Co-authors): **Dr.M.Ramu, Dr.C.N.Prasad, Dr.Satish chandra**

Institution/Author Organization: **Prathima institute of medical sciences**

INTRODUCTION:

Pulmonary Tuberculosis (PTB) is a communicable disease that is a major cause of ill health, one of the top ten causes of deaths worldwide. Hence prompt recognition and effective isolation of those patients is a high priority. AIM: To evaluate the role of CBNAAT in suspected nodular PTB patients for the early diagnosis of active disease.

METHODOLOGY:

A cross sectional study was conducted on 46 subjects (60.9% males, 39.1% females) with nodular lesions suspected to be due to PTB and were subjected to sputum and BAL analysis (ZN stain, CBNAAT with Rifampicin sensitivity).

RESULTS:

Out of the 46 patients, sputum ZN stain positivity was 23.9%, sputum CBNAAT and BAL ZN positivity was 41.3%, BAL CBNAAT positivity was 100%. Thus all the cases of sputum negative came as BAL CBNAAT positive ($P < 0.05$). Among only nodular lesions (54.34%), sputum ZN yield was 24%, sputum CBNAAT and BAL ZN yield was 40%, BAL CBNAAT gave 100% yield which was comparative with those having nodules with other lesions (45.6%).

CONCLUSION:

BAL CBNAAT is a better diagnostic test among subjects with HRCT findings suggestive of PTB. CBNAAT aided by HRCT Chest and suggestive clinical presentation may be helpful in early institution of Antitubercular treatment.

Title: Rifampicin Resistance in New Pulmonary Tuberculosis Patients with Type2 Diabetes Mellitus

Name of Presenter: **Dr VIPUL KUMAR**

Authors (or Co-authors): **APARNA YADAV, KB GUPTA, JYOTI YADAV**

Institution/Author Organization: **PT BD SHARMA POST GRADUATE INSTITUTE OF HEALTH SCIENCES, ROHTAK (HARYANA)**

Introduction

Key research gaps exist to determine the clinical relevance of potential effects of diabetes on TB drug resistance, particularly in settings of undergoing epidemiological transition.

Objectives

Rifampicin Resistance in New Pulmonary Tuberculosis Patients with Type2 Diabetes Mellitus

Methodology

All the patients (50) included in the study, were newly diagnosed PTB with type 2 DM who did not have any other co-morbid illnesses and no history of ATT. Sputum/ Induced sputum/BAL was sent for CBNAAT.

Results

Of the 50 diabetic patients, who were diagnosed as PTB, 36 (72%) cases were diagnosed as rifampicin resistant or sensitive on the basis of CBNAAT in sputum, 11 (22%) on induced sputum and rest 3 (6%) on BAL samples. Out of 50 patients, 10 (20%) were rifampicin resistant and 40 (80%) were rifampicin sensitive. The

mean FBS and PPBS of the cases are 195.81 ± 59.08 and 302.02 ± 99.01 mg/dl respectively. The mean serum HBA1c was 9.66 ± 2.24 showing a poor glycaemic control.

Conclusions

20% of diabetic patients out of 50 New cases were found to be rifampicin resistant. The prevalence rate observed is much higher compared to the primary rifampicin resistant cases seen among non diabetics. However the study had a few limitations such as small sample size and no control group.

Clinical Implications

Early detection of TB and its resistance status in diabetics can help in improving the care and treatment outcomes of both diseases in the patients. Therefore, larger scale studies are needed to explore further in this area.

Key Words

TB, DM, Drug Resistance, Rifampicin

Title: The place of "CBNAAT" in diagnosis of EPTB versus the "Gold standard" MGIT Culture, and it's importance in diagnosis of Drug Resistant EPTB.

Name of Presenter: **Dr. Yadvendra Singh**

Authors (or Co-authors): **Dr. Lalit Singh, Dr. Anurag Agarwal, Dr. Rajeev Tandon**

Institution/Author Organization: **Shri Ram Murli Smarak Institute of Medical Sciences, Bareilly, Uttar Pradesh, India.**

BACKGROUND:

EPTB being a disease with varied presentation, it's diagnosis is usually missed or delayed leading to increased prevalence of EPTB, and in later course rise in drug resistant cases as a result of missed diagnosis or poor follow up.

INTRODUCTION :

In the era of quicker diagnosis with advanced technology, there is a need to highlight the importance of CBNAAT in the early diagnosis of drug sensitive as well as drug resistant EPTB cases, in contrast to MGIT Culture.

AIMS AND OBJECTIVES :

To compare microbiological diagnostic modalities (ZN Staining, GeneXpert) with MGIT Bactec Culture as Gold Standard in diagnosis of EPTB.

To study the yield of CBNAAT in diagnosis of drug resistant EPTB cases.

Methodology :

In our study different systemic body fluids were subjected to ZN Smear, CBNAAT, MGIT Culture

and the results were studied and compared. The yield of these modalities was compared in terms of positivity rate of detection. Further the role of CBNAAT in detecting Rifampicin resistant EPTB cases was studied.

Result :

The positivity rate of CBNAAT was higher than ZN smear, which was in turn higher than MGIT culture. and it played an important

Title: CLINICAL AND MOLECULAR-DST PROFILE OF PATIENTS DIAGNOSED WITH EXTENSIVELY DRUG RESISTANT TUBERCULOSIS

Name of Presenter: **Yash Jagdhari**

Authors (or Co-authors): **Ajay Verma, Richa Mishra, Kanchan Srivastava, Surya Kant**

Institution/Author Organization: **Department of Respiratory Medicine, KGMU**

Background

Insight into the clinical and molecular characteristics of XDR TB cases is essential to reduce the incidence and effectively treat the cases of XDR TB, which has remained a challenge. Objectives • To identify the clinical profile in cases of XDR TB. • To identify the mutations and drug-resistance pattern in cases of XDR TB based on molecular drug susceptibility tests. Methodology The clinical parameters, results of Xpert MTB/RIF, GenoType MTBDRplus and MTBDRsl of 53 patients newly diagnosed with XDR TB referred to nodal DR-TB Centre KGMU, Lucknow from the period of 1st May 2019 to 30th April 2020 were analysed.

Results & Conclusion

The patients had median symptom duration of 14 months. An antitubercular regimen was being initiated for a median of 3rd time, with a 13 month median duration of previous ATT intake, second-line drugs being consumed for a median of 7 months. The most prevalent mutations conferring resistance to rifampicin, isoniazid, fluoroquinolones and second-line injectables were rpoB S531L, katG S315T1, gyrA D94G, and rrs a1401g respectively. In addition to being resistant to rifampicin, isoniazid, levofloxacin and kanamycin, 52.83%, 75.47%, 91.30% and 17.39% were resistant to high dose moxifloxacin, amikacin/capreomycin, high dose isoniazid and ethionamide respectively.

Title: CA125 as marker to monitor response of anti tuberculosis treatment

Name of Presenter: **AJAY RAO**

Authors (or Co-authors): **DR UDAY KAKODKAR**

Institution/Author Organization: **GOA**

MEDICAL COLLEGE**Introduction :**

Monitoring response to anti TB drugs is not easy in patients unable to expectorate. Microscopy and culture is gold standard, but a quantitative tool for objective measurement of response is necessary. Hence we aimed to study whether CA125 can be used as a marker for monitoring response

Aim:

To evaluate serum CA125 values as a marker of activity of tuberculosis infection.

Methodology:

A prospective study was conducted in 100 patients in Department of Pulmonary Medicine. The patients were divided into two groups i.e. sputum smear positive (Group 1) and sputum smear negative (Group 2), started on anti-TB regimen and CA125 values at the start, 3months and end of treatment were monitored. Patients with malignancies (lung and ovary), non-malignant gynaecological conditions and immunocompromised group were excluded.

Results:

we observed a significant association with CA125 values (p value 0.00) using the SPSS14 software. The mean observed in group 1 was 196.04(SD 80.21), 93.12(SD 37.6), 41.44(SD 12.7) and group 2 was 70.3(SD 29) 43.26(10.37) 31.66(SD 5.46) at start, 3months and 6months respectively.

Title: PROPORTION OF TUBERCULOSIS PATIENTS SWITCHING OVER FROM FDC TO LOOSE DRUGS DUE-TO ADR

Name of Presenter: **Dr. Ananthu Joseph**

Authors (or Co-authors): **Dr. K. Anitha Kumari, Dr. Sanjeev Nair**

Institution/Author Organization: **GOVERNMENT MEDICAL COLLEGE, THIRUVANANTHAPURAM**

BACKGROUND:

Weight based Fixed dose combinations(FDCs) were introduced in the TB-Control program a few years back along with the introduction of daily treatment. The proportion of adverse drug reactions(ADR) with the weight-band based daily treatment and the proportion who had to be switched from the FDCs to loose drugs is not known.

AIM AND OBJECTIVES:

To determine the proportion of TB patients on 1st-line anti-tuberculous drugs who switch over to individual drugs because of ADR
Factors associated with ADR to first line anti-TB

drugs

MATERIALS AND METHODS:

Cohort study of 250 newly detected tuberculosis patients, registered in 1 TU and started on FDC, followed up for 6months for any ADR and need to change from FDC to loose drugs.

OBSERVATIONS:

Out of 250 patients 56.40% developed ADR, 35.60% required treatment for ADR and 23.20% had to hold FDC, out of which 63.79% needed loose drugs(14.80% of total (95%CI:10.64%,19.82%)). Gastro-intestinal symptoms contribute to majority of ADR(52.4%). Higher proportion of ADR was there in HIV co-infection (p-value<0.001). Mortality was higher in patients on loose drugs (p-value<0.001).

DISCUSSION and CONCLUSIONS:

14% of TB patients on first-line drugs developed ADR severe enough to change from the FDC, proportion being higher than the thrice-weekly regimen.

Title: A STUDY OF DIAGNOSTIC VALUE OF PLEURAL FLUID ADENOSINE DEAMINASE (ADA) LEVEL IN CASES OF PLEURAL EFFUSION

Name of Presenter: **Dr. ANAYA M PRAKASHKAR**

Authors (or Co-authors): **Dr. ARVIND S PANDEY Dr. PALAK BHATT**

Institution/Author Organization: **Surat Municipal Institute of Medical Education and Research, SMIMER, SURAT**

INTRODUCTION:

Pleural effusion is accumulation of fluid in pleural space. ADA is helpful for establishing the etiology of tubercular pleural effusion & rule out other diagnosis; thus ADA has become an important diagnostic tool in the evaluation of exudative pleural effusions.

AIMS:

To study the diagnostic value of ADA level in various etiology of pleural effusion. To find out sensitivity, specificity, positive predictive value & negative predictive value of ADA in diagnosis of pleural effusion.

METHODOLOGY:

A prospective cohort study carried out in 50 patients of pleural effusion and fluid samples were sent for ADA examination. Data collected and appropriate statistical analysis done.

RESULTS:

If 40 IU/L is taken as cut off value for exudative

pleural effusion; Sensitivity: 97.06% Specificity: 75.00% PPV: 89.19% NPV: 92.31% . Mean value of ADA in 37 diagnosed case of tubercular pleural effusion is 72.4 & 13 non- tubercular pleural effusion is 23.6. p>0.05 in cases where ADA value is >40 (Exudative effusion)

CONCLUSION:

High negative predictive value of ADA suggests that ADA has more value in diagnosing patients with exudative pleural effusion and when more than 100 IU/l was taken as cut of limit of ADA level, it was seen in tuberculosis only.

Title: WEIGHT SCALAR CURVE AS A FIELD SURROGATE TOOL FOR ASSESSING TREATMENT RESPONSE IN TUBERCULOSIS PATIENTS

Name of Presenter: **DR. ANISH . A, SENIOR RESIDENT**

Authors (or Co-authors): **DR. VENUGOPAL K P**
Institution/Author Organization: **GOVT. MEDICAL COLLEGE, KOTTAYAM**

BACKGROUND

Monitoring weightgain may be useful in resource-poor settings to assess treatment response. Although multiple retrospective studies were carried out in past, there is a lack of prospective studies conducted on this topic .

OBJECTIVES

- To determine the average weight change in TB patients at the completion of treatment .
- To determine whether initial weight gain predicts "treatment success" .
- To determine factors associated with significant weight gain.

METHODS

This study was an observational study conducted in a tertiary center on tuberculosis patients started on ATT. Patient, disease and anthropometric characteristics were studied and results statistically analysed.

RESULTS

The weight of study subjects had a significant increase at treatment completion, with mean weightgain(3.37 ± 1.56) kg. Majority of patients had significant weightgain at initial months itself. Younger age group, higher appetite score and absence of diabetes mellitus were found to favour weight gain.

CONCLUSION

Patients had increased appetite and weight gain during initial months of treatment. Absence of weightgain initially should alert the physician to search for causes of treatment failure including development of drug-resistance or an alternate diagnosis.

FINANCIAL DISCLOSURE

Received RNTCP grant.

Title: THE IMPACT OF TUBERCULOSIS ON LEUCOCYTES

Name of Presenter: **BEERA NITHIN JOSEPH**

Authors (or Co-authors): **Dr A.Sathyaprasad, HOD Respiratory Medicine**

Institution/Author Organization: **MAMATA MEDICAL COLLEGE**

Introduction:

Tuberculosis is one of the top 10 causes of death worldwide and remains the leading cause of death by a single infectious agent. India has the highest burden of disease worldwide. In such low income countries, routine investigations such as sputum microscopy, complete blood picture, chest X-ray form the corner stones of control programs. In tuberculosis, a wide spectrum of changes were reported in leucocytes which demonstrate the effects of tuberculosis on leucocytes and vice versa. Aims and objectives: To study the changes in leucocytes of patients suffering with pulmonary tuberculosis.

Methodology:

Cross sectional study in 100 patients (non pregnant adult population) with newly diagnosed pulmonary tuberculosis (People suffering with HIV, CKD, CLD and malignancy are excluded).

Results:

70 patients showed leucocytosis. 30 patients had normal TLC. None of them had leucocytopenia. Conclusion: Pulmonary tuberculosis is associated with leucocytosis in majority of the patients.

Title: PREVALENCE OF PULMONARY ARTERIAL HYPERTENSION IN PATIENTS OF HEALED PULMONARY TUBERCULOSIS AND ITS ASSOCIATION WITH QUALITY OF LIFE

Name of Presenter: **BHANU PRATAP PANDEY**

Authors (or Co-authors): **Gajendra vikram singh, SANTOSH KUMAR, KOMAL LOHCHAB**

Institution/Author Organization: **S.N.MEDICAL COLLEGE**

INTRODUCTION:

Pulmonary hypertension is defined as mean pulmonary arterial pressure >25 mmHg at rest. Pulmonary arterial hypertension is categorized in diagnostic group 1 of pulmonary hypertension. Prior to the availabilities of specific therapies PAH was considered a rapidly

fatal illness with a median survival 2.8yrs.

AIMS AND OBJECTIVES:

1)To estimate the prevalence of PAH among Healed pulmonary Tuberculosis patients & To Estimate the Quality of life of these patients.

METHODS:

It was a prospective study of 94 cases of healed pulmonary tuberculosis . Detailed history, ECG, 2D-ECHOCARDIOGRAPHY and 6MWT was done for every cases, quality of life was assessed through SGRQ.

RESULTS:

Out of 94 patients 36 patients were developed PAH prevalence was 38.29%. We evaluated quality of life for all cases and compared and We found that quality of life was poor among healed pulmonary tuberculosis cases but quality of life was more poorer among those cases who developed pulmonary arterial hypertension .

CONCLUSION:

PAH is a major problem in patients of healed pulmonary tuberculosis and there is association between PAH and poor quality of life. We can manage PAH by early diagnosis and appropriate treatment. And we can improve quality of life of these cases by considering them for pulmonary rehabilitation .

Title: IMMUNONUTRITIONAL STATUS AND PULMONARY CAVITATION IN PATIENTS WITH TUBERCULOSIS

Name of Presenter: **DR. JYOTHI MARIAM JOSE**

Authors (or Co-authors): **Prof K V V Vijayakumar MD., Dr.V Suryakumari MD., Dr.K Preethi MD**

Institution/Author Organization: **ANDHRA MEDICAL COLLEGE, VISAKHAPATNAM**

Introduction :

Several reports have described the importance of immunological and nutritional factors in the morbidity and mortality of patients with tuberculosis. Here we evaluate the association between pulmonary cavitation and immunonutritional status in patients with pulmonary tuberculosis.

Material & Methods :

Retrospective analysis of the data of 43 patients with sputum CBNAAT positive active pulmonary tuberculosis without bacterial pneumonia admitted at Government Hospital for Chest and Communicable Diseases/ Andhra Medical College, Visakhapatnam between July 2019 to December 2019. We studied the association of Age, Gender, Body Mass Index (BMI),

Duration of symptoms, previous tuberculosis history, Comorbidities, Smoking , Alcoholism, Haemoglobin , Total WBC count, Neutrophil to lymphocyte ratio (NLR), platelet to lymphocyte ratio (PLR) on the occurrence of pulmonary cavitation in TB patients. This association is statistically modelled using a penalised maximum likelihood logistic regression model.

Results :

Increased severity of inflammation might be associated with pulmonary cavitation in patients with tuberculosis. We couldn't find any association between pulmonary cavitation and BMI

Discussion :

Statistically significant associations were observed between pulmonary cavitation and high NLR (p value 1.531*10⁻⁹), high neutrophil, low lymphocyte, low haemoglobin (p value 0.017) and smoking (p value 1.531*10⁻⁹). There was no significant association between cavitation and BMI (p value 1).

Title: EVALUATION OF CAUSES OF LATE REPORTING OF PULMONARY TB CASES TO MICROSCOPIC CENTRE IN A SOUTH KERALA DISTRICT

Name of Presenter: **Dr. K. Venugopal**

Authors (or Co-authors): **Dr. Anu Vargheese, Dr. Sreelatha P. R**

Institution/Author Organization: **Govt. General Hospital , Alappuzha**

INTRODUCTION

RNTCP is being implemented all over India since 1993. A high rate of high-grade sputum positive cases is noted in many districts since then still continues due to late reporting (advance stage) and cause for same needs to be explored.

AIM OF STUDY

To study various factors contributing to late reporting of pulmonary TB cases.

MATERIAL & METHOD

All high grade (2+ & 3+) cases detected in Alappuzha TU were interviewed as per a pre-tested questionnaire. The study was conducted at District TB Center, for a period of 6 months which is the Head Quarters of Alappuzha TU.

OBSERVATION

42 cases qualifying the inclusion criteria were analyzed. 30 (71%) cases were 3+ and 12 were 2+, of which 38 were male. Only 18 (43%) were aware about TB disease, its symptoms, mode of diagnosis and treatment. Majority are having only primary education. Nearly 57% has co-morbid condition with following

distribution. Diabetes Mellitus–11(26%), COPD–5(12%), Cardiac Disease–7(17%), Multiple Disease–2(4.76%), Chikungunya–1(2%). 17(40%) made initial consultation with private practitioners and 25(60%) with Govt. doctor and an average of 6 week delay was noted before referral to RNTCP and is more predominant among private practitioners. 3(7%) reported to the microscopic center by their own initiative.

CONCLUSION

Late reporting of TB cases to microscopic center is of multi factorial causes. Delay in referral to RNTCP for diagnosis, Low literacy, co-morbid condition, awareness about the tuberculosis is all probably the major contributing factors. More elaborative studies in this matter are required.

Title: SCREENING OF HEALTHCARE AND NON-HEALTH CARE WORKERS FOR PREVALENCE OF LATENT TUBERCULOSIS INFECTION at INSTITUTE OF RESPIRATORY DISEASES, SMS MEDICAL COLLEGE, JAIPUR

Name of Presenter: **KOMAL CHAUDHARY**

Authors (or Co-authors): **Dr.Suresh Koolwal, Dr.G.S Rajawat**

Institution/Author Organization: **Institute of Respiratory Diseases, SMS Medical College Jaipur**

Aim:

To assess the prevalence of latent tuberculosis infection (LTBI) in Health care workers (HCWs) and Non-health care workers. Methodology: A prospective study done among HCWs and non-health care workers. Risk assessment of LTBI using single step tuberculin skin test (TST) with 10 international units (IU; 0.1 ml) of tuberculin done. An induration ≥ 10 mm as a cut off point for TST positivity. TST positive participants were further subjected to detailed evaluation. Co-relation between TB infection and the sociodemographic characteristics, duration of possible exposure to TB, BCG scar, comorbidities were estimated using Chi square test.

Results:

Total 135 eligible subjects consented to participate in study. Based on the size of induration we assigned them into low, moderate and high- risk groups. TST induration size and the TST results suggested that 36.29% (49/135) were infected with TB using a TST induration ≥ 10 mm as a cut off point. Prevalence is high among resident doctors (55.1%) and nursing staff (22.4%) as compared to other groups. Statistical analysis suggested that age, duration of exposure, and working areas is significantly associated with TB infection.

Discussion: Implementation of proper safety control measures and adopting strategies to prevent and control TB in HCWs is need of hour.

Title: TUBERCULOSIS IN HIV PATIENTS IN A TERTIARY CARE CENTER IN TELANGANA

Name of Presenter: **Dr. M. RAJEEV NAIK**

Authors (or Co-authors): **Dr M. NARENDER**

Institution/Author Organization: **Osmania medical college, Hyderabad**

INTRODUCTION:

HIV infection and TB are two major public health problems in most of developing countries including India. The diagnosis of patients suspected of tuberculosis who are sputum smear-negative for acid-fast bacilli or who are unable to produce sputum (sputum scarce) is a daily challenge for clinicians in HIV-endemic settings. Failure to confirm a TB diagnosis negatively impacts both patients and TB control.

AIMS/OBJECTIVES:

To study the role of Sputum Induction to aid in the diagnosis of Smear Negative or Sputum Scarce Presumptive Pulmonary Tuberculosis in adults with HIV.

METHODOLOGY:

The study was conducted a total of 50 patients of Presumptive Pulmonary Tuberculosis with HIV co- infection. All necessary investigations { Chest X-ray PA view/ CT chest, CD4+ count, Sputum AFB stain microscopy & Sputum CBNAAT & Induced Sputum sample- AFB Stain Microscopy & Sputum CBNAAT } were carried out. Sputum Induction was performed by using the Hypertonic Saline Nebulisation and Induced Sputum sample could be collected.

RESULTS:

Out of 50 pts 90% (45 out of 50) of pts provided a specimen ≥ 1 mL, which were of adequate quality. 13% (6 out of 45) of sputum induction specimens were Direct AFB smear microscopy-Positive and 24% (11 out of 45) of sputum induction specimens were CBNAAT -Positive.

DISCUSSION:

With the development and roll-out of novel TB diagnostic tests, such as the MTB/RIF assay, specimen acquisition has become an even more important diagnostic bottleneck. Given the simplicity, safety and performance data from TB studies, there is increasing advocacy for the widespread roll-out of sputum induction in primary care clinics in resource-limited, HIV-endemic settings.

CONCLUSION:

This study provides robust outcome data on the

routine diagnostic utility of sputum induction for adults with suspected smear-negative or sputum-scarce TB. Same-day smear microscopy diagnosis in outpatients undergoing sputum induction, raises concerns about the use of sputum induction as the preferred initial sputum sampling strategy for adult outpatients with suspected smear-negative or sputum scarce TB.

Title: A COMPARATIVE STUDY ON EFFECTS OF SUBSTANCE DEPENDENCE ON NEWLY DIAGNOSED PULMONARY

Name of Presenter: **Dr MAINAK MUKHERJEE**

Authors (or Co-authors): **DR (PROF) SUSMITA KUNDU, DR (ASST PROF) RIVU BASU**

Institution/Author Organization: **R.G.KAR MEDICAL COLLEGE & HOSPITAL**

Introduction:

Pulmonary Tuberculosis (PTB) in majority of cases is reactivation PTB, which is mostly due to reduction in immunity. Substance dependence compromises immunity, and promotes PTB.

Aims and Objectives:

To study the effects of substance dependence on PTB and comparison between newly diagnosed PTB and newly diagnosed Drug resistant PTB (DR-TB).

Material and Methods:

This prospective, longitudinal study included 60 consecutive PTB (both DS & DR) patients. After detailed history, clinical examination, sputum examination and radiological study, the effects of substance dependence were assessed.

Observations:

The mean age of DR-TB patients was alarmingly low (35.67 ± 13.3 years) in comparison to whole study population (46.9 ± 15.2 years) and that of drug sensitive PTB (50.78 ± 14.2 years). Substance dependence was more in male patients. DR-TB was associated strongly with substance dependence and they also had delay in sputum conversion and radiological improvement, more adverse effects and less body weight improvement. Adherence to ATD was less in all kinds of substance dependence while adherence and outcome was better in patients who quit substance dependence after starting ATD.

Conclusion:

As substance dependence increases chances of DR-TB and complicates treatment, every PTB patient must be actively searched for any substance dependence and intervened accordingly.

Title: STUDY TO EVALUATE THE ROLE OF CHEST RADIOGRAPH AND SPUTUM SMEAR FOR AFB IN FOLLOW UP OF PULMONARY TUBERCULOSIS PATIENTS WHO COMPLETED A FULL COURSE OF ANTI TUBERCULOSIS THERAPY

Name of Presenter: **Dr.Meghana Yadav Mekala**
 Authors (or Co-authors): **Dr.K.Sailaja**
 Institution/Author Organization: **MEDICITI INSTITUTE OF MEDICAL SCIENCES**

INTRODUCTION:

Recurrent TB is an indicator of effective TB control. It can be a relapse or reinfection. Suboptimal dosage and duration of treatment, poor adherence, immunocompromised status, cavitary disease, extreme age are the risk factors for recurrence of TB. AIM: This study aims to evaluate the role of chest radiograph and sputum smear for AFB in follow up of patients who completed a full course of ATT by estimating the rate of recurrence.

METHODOLOGY:

An observational study was conducted on 60 cured cases of pulmonary tuberculosis who were followed up for a period of one year. Chest radiograph and sputum smear for AFB were done at the end of 6th month and 1 year follow up. Patients with MDR TB and extrapulmonary tuberculosis have been excluded.

RESULTS:

Of the 60 subjects, residual radiological lesions were seen in 16 (26.67%) subjects at the end of treatment, of these 11 (18.33%) subjects showed symptoms such as cough, breathlessness. Of these, one subject showed recurrence, the rate of recurrence being 1.67%. Recurrence in this subject is attributed to old age, diabetes, smoking, persistent end of treatment fibrocavity.

CONCLUSION:

The role of chest radiograph and sputum for AFB is limited in follow up of patients without major contributing factors for recurrence.

Title: BURDEN OF PRE-EXTENSIVE DRUG RESISTANT AND EXTENSIVE DRUG RESISTANT PULMONARY TUBERCULOSIS AMONG MULTI DRUG RESISTANT PULMONARY TUBERCULOSIS PATIENTS

Name of Presenter: **DR. MOHD ANAS KHAN**
 Authors (or Co-authors): -
 Institution/Author Organization: **Government medical college haldwani uttarakhand**

INTRODUCTION

Drug resistant tuberculosis (DR-TB) is a threat

to global TB care and prevention program. Emergence of pre extensive and extensive drug resistant (pre-XDR/XDR) strain made this task further challenging. Globally In 2019, 3.3 percent of new and 18 percent of previously treated TB cases had multidrug resistant TB (MDR/RR-TB). India having 27 percent of total cases. AIM To determine the burden and resistance pattern of pre-XDR and XDR-PTB among MDR-PTB patients in Kumaon region

METHODOLOGY

This was a record based retrospective study involving collection of patients data enrolled at DR-TB center, Deptt Of Respiratory medicine between 01 august 2019 to 31 July 2020.

RESULTS

Total =207 PTB patients, all resistant to both isoniazid and rifampicin. Out of 207, 22 patients (10.6%) resistant to either Fluoroquinolone (FQ'S) or second line injectable drugs. 21 out of 22 resistant to FQ'S (levofloxacin) and only 1 resistant to second line injectable (kanamycin) 13 out of 22 (59.09%) are cases of primary and 9 (40.9%), patients had previous history of ATT intake 2 patients out of 207 (0.96%) showed resistant to both FQ'S and second line injectable, 1 primary and 1 previously treated PTB case.

CONCLUSION

High percentage of pre-XDR and XDR-PTB is alarming. Early detection of DR-TB through strengthening of laboratories is necessary to reduce transmission and adjusting treatment in pre-XDR/XDR-TB.

Title: A study of clinical profile of cases of MDR-TB and evaluation of challenges faced in initiation of second line Anti tuberculosis treatment for MDR-TB cases admitted in drug resistance tuberculosis centre

Name of Presenter: **Dr Mudra khare**
 Authors (or Co-authors): **Dr Abhijeet khandelwal, Dr Kumar girendra, Dr Vinod kuma**
 Institution/Author Organization: **Index medical college MP**

INTRODUCTION

Multi Drug Resistance (MDR) : A TB patient, whose biological specimen is resistant to both H and R with or without resistance to other first line drugs. MDRTB patients may also have additional resistance to any/all FQ OR any/all SLI anti-TB drug.

OBSERVATIONS

•In our study, out of a total 130 MDR-TB patients, majority (30%) were in the age group 31–40

years .

- This difference was found to be statistically significant (Z-score = 2.96, p = 0.00308).
- Cough was the most common symptom 91.5% patients followed by loss of appetite.
- smoking were found to be 59 (45.4%) and 40 patients (30.8%) were also consuming alcohol on a regular.

DISCUSSION

The emergence of resistance to FLDs and SLDs used to treat TB has become a significant public health problem in India and an obstacle to effective TB control.

- majority of the MDR-TB cases (30.23%) were in the younger age group (31–40 years) mean age was 36.80 year.
- The majority belonged to loss of follow up.
- A very comprehensive education about the disease, treatment, early control of ADR and comorbidities associated is very important for improved compliance

•In our study, out of 130 cases, 115 (88.5%) had taken FLDs and 15 (11.5%) had taken SLDs. Most of the patients were from the rural area, that is, 67.7% of total and rest 32.3% resided in the urban area.

CONCLUSION

Majority of our patients were from rural areas with lower socioeconomic status and low level of education.

- The most common symptom was cough, followed by loss of appetite, shortness of breath, fever, chest pain, and hemoptysis.
- Most of the patients had taken ATT from RNTCP in which loss of follow up and recurrent were major contributors of MDR-TB suspect in our study.
- comorbidities associated with MDR patients including anemia, diabetes, COPD, asthma, renal failure, DVT, etc.

Title: BDAQUILINE in management of MDR and XDR TB patients

Name of Presenter: **Dr Nitin**
 Authors (or Co-authors): -
 Institution/Author Organization: **DEPARTMENT OF PULMONARY MEDICINE , B .J.MEDICAL COLLEGE**

INTRODUCTION:

BEDAQUILINE, a new drug approved by US FDA in December 2012, being bactericidal in nature, it targets ATP synthase enzyme hampering energy metabolism. In GUJARAT it was initiated under RNTCP CONDITIONAL ACCESS PROGRAMME in subgroup of DR TB patients from July 2016.

METHODOLOGY:

The prospective study was conducted at PULMONARY MEDICINE DEPARTMENT AHMEDABAD from July 2018 to July 2020. Total no. of 153 patients meeting the criteria of MDR,pre XDR and XDR were given BDQ WITH OBR according to their second line LPA.before starting the regimen all baseline investigation were done. follow up of all patients were done with daily ECG for initial 14 days to rule out any QTC abnormality .Regular follow up of all patients were done monthly up to the end of IP phase by ECG ,sputum culture and CXR.

CONCLUSION: BDQ might be used in new effective regimens for the treatment of MDR/XDR TB patients with better tolerability than expected and reported effect on QTC interval which was not leading to life threatening arrhythmia can managed in specialised centres.

Title: Time to culture conversion with Bedaquiline containing regimen in preXDR and XDR tuberculosis patients at nodalDRTB centre,Warangal

Name of Presenter: **Radhika Muduganti**

Authors (or Co-authors): **Dr.Ravan Kumar,Dr. Phanikumar,Dr.Sunitha**

Institution/Author Organization: **Kakatiya Medical College**

BACKGROUND

Bedaquiline,a diarylquinoline that inhibits mycobacterial ATPsynthase,has been associated with accelerated sputum culture conversion in multidrug-resistant tuberculosis patients when added to an optimised background regimen for 24weeks.

OBJECTIVES

To determine the the time to culture conversion with Bedaquiline containing regimen in pre XDR and XDR tuberculosis patients.

METHODS

This is a prospective observational study in which pre XDR and XDRTB patients were treated with Bedaquiline and OBR,received 400 mg of bedaquiline once daily for 2 weeks, followed by 200 mg three times a week for 22weeks.The primary efficacy end point was the time to sputum-culture conversion in liquid broth.Patients were followed for 24 weeks from baseline.

RESULTS

out of 67 patients 43males 24females,mean BMI of the population 16.66,62 preXDR(59-FLQresistant,3-SLIDresistant), 5 XDR. 62 patients were culture negative by the end of 24weeks,3 deaths,2 LTFU.Mean time for

culture conversion was 49.32 days.Rate of culture conversion at 4weeks 30.1%,8weeks 56.7%,12weeks 80.5%,24weeks 91.2%.We have also studied the association of various factors with favourable outcome(culture conversion at 6months).Severity of disease on CXR was associated with the outcome(p value=0.005). We have not found any significant association with time to culture conversion.

CONCLUSIONS

The addition of bedaquiline to a preferred background regimen for 24 weeks resulted in faster culture conversion irrespective of BMI,age,resistance pattern,comorbidities like diabetes,smoking history.

Title: A COMPARATIVE STUDY OF HYPERTONIC SALINE WITH ISOTONIC SALINE INDUCED SPUTUM IN DIAGNOSIS OF SPUTUM AFB NEGATIVE CLINICALLY SUSPECTED TUBERCULOSIS PATIENTS

Name of Presenter: **Dr.Rathish.M**

Authors (or Co-authors): **Dr.N.Nalini Jayanthi Prof and HOD Department of Respiratory Medicine**

Institution/Author Organization: **SRM medical college Hospital and Research Institute**

PURPOSE OF THE STUDY:

To compare the sensitivity of hypertonic saline with isotonic saline induced sputum in diagnosis of sputum Acid Fast Bacilli negative clinically suspected pulmonary tuberculosis patients.

RESULTS:

Out of 35 patients in hypertonic saline group tuberculosis was detected in 25 (72%) patients with sensitivity of (83%) , PPV (100) .Out of 35 patients in isotonic saline group tuberculosis was detected in 20 patients (57%)with the sensitivity of (71%) and PPV (100). Both test did not confirm tuberculosis in 10 patients.

CONCLUSION:

This study concludes that there is no significant difference between hypertonic saline and isotonic saline in diagnosis of sputum negative clinically suspected tuberculosis patients. In this study induction of sputum with hypertonic saline is associated with post procedural adverse events of bronchoconstriction, cough, wheeze which limits its use in Obstructive Airway Diseases and isotonic saline is not associated with such events and hence can be used in patients with Obstructive Airway disease patients who are

Title: RISK FACTORS FOR DEVELOPMENT OF

MULTIDRUG RESISTANCE IN TUBERCULOSIS

Name of Presenter: **Richu Bob Kurien**

Authors (or Co-authors): **D J Christopher**

Institution/Author Organization: **Christian Medical College, Vellore**

Background and Aim:

India has a high burden of drug resistant tuberculosis. This study was done to identify the risk factors which lead to development of Multidrug resistant(MDR)TB.

Methodology:

We did a prospective observational case-control study from March 2019 till July 2020 in a tertiary care centre, in South India. All diagnosed TB were recruited along with age matched asthmatic controls attending the Pulmonary Medicine OPD. Demographic, detailed clinical information and laboratory test results, including XPERT TB-PCR, AFB smear, culture and DST results were collected. MDR/XDR-TB was compared with controls and drug sensitive TB. Results: 31 cases each of MDR/XDR-TB and drug sensitive TB along with 31 controls participated in the study. Multivariate logistic regression analysis identified the following risk factors for development of MDR/XDR-TB when compared to drug sensitive TB: Residence in urban area(OR=4.13;CI=1.10-15.61), previous TB treatment(OR=16.23;CI=2.76-95.27), presence of household contacts(OR=11.84;CI=1.78-78.87) and hypertension(OR=7.29;CI=1.01-52.86). Compared to controls, significant risk factors for MDR/XDR-TB were: Diabetes mellitus(OR=90.26;CI=4.05-2010.94) and low BMI(OR=12.27;CI=1.44-104.10).

Conclusion: Our study identified important risk factors for MDR-TB which includes previous TB treatment, household contacts and hypertension. Diabetes and undernourishment contributed to development of MDR-TB among normal population.

Title: A STUDY ON PREVALENCE AND TREATMENT OUTCOME OF EXTENSIVELY DRUG RESISTANT TUBERCULOSIS IN A NODAL DRUG RESISTANT TUBERCULOSIS CENTRE

Name of Presenter: **DR. RUMKI DAS**

Authors (or Co-authors): **Dr. (Prof.) Atin Dey, Dr. (Asso. Prof.) Somnath Bhattacharya.**

Institution/Author Organization: **R. G. Kar Medical College & Hospital, Kolkata.**

Introduction:

Extensively Drug Resistant TB is defined as a TB patient whose sputum is culture positive for Mycobacterium tuberculosis, resistant

to Isoniazid and Rifampicin, any one of the Fluoroquinolones and to at least one of the three injectable second line ATDs.

Aims and Objectives:

The objectives are to study the prevalence of XDR-TB, outcome, occurrence of adverse drug reactions(ADR), clinical presentations and drug resistance pattern of XDR-TB patients.

Methodology:

This is a descriptive, retrospective, longitudinal, observational and analytical study. Data collected from Nodal DRTB centre of RGKMC&H.

Result and Analysis:

Prevalence of XDR-TB is 7.63%. Majority of cases are male & from rural area, out of 41 patients, 22(53.66%) showed ADR (GI Symptoms(36.59%)-most common). Most common clinical presentation is Cough (92.68%). Treatment Success (Cured + Treatment Completed) found in 13(31.71%), 21(51.22%) Died, Treatment Default in 6(14.63%), Treatment Failure in 1(2.44%).

Conclusion:

Study showed, Prevalence (7.63%) is high, Outcome is poor. Male patients and rural people are predominantly affected. Patients with body weight <45kg, Low BMI, Addictions & Co-morbidities has poor outcome. Patients with ADR defaulted more. So, early detection of ADR, their prompt treatment and taking care of nutrition and addictions has a very important role.

Title: Fighting the adverse drug reactions (ADR) due to anti tuberculosis therapy (ATT) during COVID 19 pandemic.

Name of Presenter: **Sachin Vidyasagar**

Authors (or Co-authors): **Dr. Gayathri,Dr. Gangadharan**

Institution/Author Organization: **Saveetha medical college**

Introduction

Even though tuberculosis is curable by proper and continuous treatment it still remains a major global health problem. As world comes together to tackle the COVID-19 pandemic, due to long lockdown and transformation of healthcare facilities as dedicated COVID care centres, treatment of long standing health problems like TB and related ADR was at great difficulty. With the practical applicability of telemedicine we could really help those in need. Materials and methods This is a retrospective study done with inclusion of patients started on first line ATT, who developed ADR this year. A total of 134 cases

were taken. Results A total of 39 ADR's were reported among 134 cases. Gastrointestinal manifestation were the most frequently observed (38%), followed by cutaneous (31%). Discussion After starting on ATT patients were constantly kept on check through phone call everyday for the first week, then once in two weeks for the first two months and once a month there after and whatsapp groups were also started for helping the patients in need. ADR and suspected drug were identified. Manifestations which were mild were treated on an OPD basis and severe cases were admitted, which was very less.

Title: COMPLETION PROFILE OF ISONIAZID PREVENTIVE THERAPY IN PLHIV AT ART CENTRE OF A TERTIARY CARE HOSPITAL

Name of Presenter: **Dr. SANKET KRISHNA DESAI**

Authors (or Co-authors): **Dr. DURGA LAWANDE**
Institution/Author Organization: **GOA MEDICAL COLLEGE, BAMBOLIM GOA**

Introduction:

One third of the world's population is estimated to be infected with M. tuberculosis. Lifetime risk of an individual with LTBI for progression to active TB is 5–10%. Prevention of active TB disease by treatment of LTBI is a critical component of the WHO End TB Strategy. PLHIV are nearly 29 times more likely to develop TB as compared to people without HIV. Hence Isoniazid Preventive Therapy(IPT) is a key intervention for the prevention of TB.

Objectives:

To access the treatment completion profile of IPT in PLHIV at Tertiary Care Hospital. Materials and methods: A Prospective Cohort Study was conducted from Jan 2019 to April 2020. A total of 613 PLHIV were enrolled for study and initiated on IPT. Monthly follow up was done to assess the adherence and adverse drug events. Results: Of the 613 PLHIV included, 82.2% of the study subjects successfully completed IPT. IPT was stopped in 8.8 % subjects due to adverse drug events(ADR) and 7.8% of study subjects defaulted treatment. Most common ADR overall implicated were gastrointestinal (57%) followed by Hepatitis.

Conclusion:

The level of acceptance and completion of IPT was found to be high. Adverse drug events were seen in small percentage of subjects.

Title: OUTCOMES OF DIETARY COUNSELLING IN PATIENTS WITH PULMONARY TUBERCULOSIS

Name of Presenter: **DR. SHARAN KUMAR V G**

Authors (or Co-authors): **Prof. DR.PAJANIVEL R, DR.VIMAL RAJ .R, Prof.DR.ABHIJIT V BORATNE**

Institution/Author Organization: **MAHATMA GANDHI MEDICAL COLLEGE AND RESEARCH INSTITUTE,PUDUCHERRY**

INTRODUCTION:

Undernutrition and TB have a bidirectional relationship, leading to activation of latent infection, delayed recovery, recurrence & increased mortality. Prompt diagnosis of malnutrition is necessary as one third of the adult PTB population are malnourished in India. Hence dietary counselling plays major role in outcome of PTB patients.

AIM:To assess the impact of dietary counselling on the nutritional status and health-related quality of life of tuberculosis patients.

METHODOLOGY:

Nutritional status and quality of life was assessed in 46 PTB patients after randomizing into control and experimental groups. Anthropometry, diet consumption by 24 hour recall method, SGRQ, Serum albumin & protein were the tools used for assessment. Specialized & standard dietary counselling were given to experimental and control groups respectively and followed till the completion of treatment.

RESULTS

Nearly half the patients were underweight (42.33%), Diabetes Mellitus was the predominant comorbidity (24.44%).The BMI,total protein &serum albumin levels increased after dietary counselling in experimental group. SGRQ symptom score significantly reduced in the experimental group in underweight individuals (p = 0.0036)

CONCLUSION

Specialized dietary counselling was found to have positive impact on nutritional status and quality of life in PTB patients. Keywords: tuberculosis, counselling, nutrition, quality of life.

Title: PITFALLS IN TOBACCO SMOKING CESSATION SERVICES- A CHALLENGE TO EFFECTIVE TUBERCULOSIS CONTROL PROGRAMME

Name of Presenter: **Dr Shilpa KV**

Authors (or Co-authors): **Dr Thomas George, Dr Mani O K ,Dr Muraly C P, Dr Parvathi Rajendran**

Institution/Author Organization: **Government Medical College Thrissur**

INTRODUCTION

Tuberculosis and tobacco consumption-major cause of morbidity and mortality worldwide. TobaccoSmokingassociatedwithtuberculosisas causal factor,delayed diagnosis defaults relapse delayed smearconversion,drugresistance and mortality.This study evaluates prevalence of tobaccosmoking in pulmonary Tuberculosis patients attitude towards smoking awareness and practice of effective tobacco cessation services thereby highlighting the need for reinforcing Tb-Tobacco collaborative activities

AIM

- Assess tobacco smoking prevalence,pattern in Tuberculosis patients
- Knowledge ofSmoking impact in tuberculosis treatment and outcome
- Smoking cessation advices and practices given by HCW on each followup

METHODOLOGY

Cross-sectional study conducted among 200 new Sputum positive TB patients registered in RNTCP in tertiary care centre (self administered questionnaire)

RESULTS

200 Pulmonary TB patients included. 135 (67.5%) - smokers. Mean age of starting smoking - 22 +/- 2. Reason for initiation - peer pressure (83.5%). Most had history of multiple failed quit attempts (76.2%). 30.5% got prior advice on smoking cessation from HCW and PHC. 71.6% advised by healthcare workers to quit smoking when registered in RNTCP. None received formal smoking cessation advice, referred to smoking cessation clinics afterwards. 79% had intention to quit smoking, 88% not aware of smoking impact on TB.

CONCLUSION

Smoking prevalence remains high in TB. Majority unaware about smoking cessation services. Smoking cessation programme if implemented as integral part of RNTCP - better treatment outcome. National framework for Tb-Tobacco collaborative activities between two national programmes RNTCP, NTCP introduced in 2017. But effective outreach of programme activities were not reassessed much.

Title: ACTIVE CASE FINDING FOR TUBERCULOSIS AMONG HEALTH CARE WORKERS IN A TERTIARY CARE CENTER

Name of Presenter: **SNEHA LEO**

Authors (or Co-authors): **MANJU RAJARAM, MADHUSMITA MOHAPATRA, PALANIVEL CHINNAKALI, NOYAL MARIYA JOSEPH**

Institution/Author Organization: **JAWAHARLAL INSTITUTE OF POSTGRADUATE MEDICAL**

EDUCATION AND RESEARCH**INTRODUCTION:**

Health Care Workers (HCW) are at the frontline in battle against TB. In a high TB burden country like India, HCWs are at high risk of developing TB due to frequent exposures to both diagnosed and undiagnosed TB patients.

OBJECTIVES:

Among HCWs, we conducted a cross sectional study, to determine the number and proportion with 'Presumptive TB' and among them 'Active TB' by means of Active Case Finding (ACF).

METHODOLOGY:

A pre-structured questionnaire including a symptom screen was administered. Those HCWs who screened positive for any of the symptoms were considered "presumptive tuberculosis" and were further evaluated for diagnosis. Association of demographic and clinical factors with presumptive and active TB were analysed.

RESULTS: Among 1,001 HCWs screened, 51 (5.1%) had presumptive TB. On further evaluation, we diagnosed 5 (0.5%) active TB (2 PTB and 3 EPTB). Exposure to TB patients in family and workplace, frequent exposures, recent alcohol use and BMI <23 were significantly associated with presumptive and active TB.

CONCLUSION:

0.5% among those screened and 10% among those evaluated were found to have active TB and these were the yield of our ACF. Thus ACF for TB among HCWs should be routinely implemented to aid early diagnosis and treatment initiation in this vulnerable population.

Title: COMPARATIVE STUDY BETWEEN SAME DAY SPUTUM SMEAR MICROSCOPY AND CONVENTIONAL SPUTUM SMEAR MICROSCOPY IN PATIENTS WITH PRESUMPTIVE PULMONARY TUBERCULOSIS

Name of Presenter: **SOUMYADEEP GHOSH**

Authors (or Co-authors): **SIBES KUMAR DAS**

Institution/Author Organization: **MEDICAL COLLEGE, KOLKATA**

BACKGROUND

WHO has recommended same day sputum collection strategy instead of conventional two days sputum collection strategy to reduce drop out rate. This study compares accuracy and agreement of these two methods.

AIMS

To compare the smear positivity rate between same day and conventional sputum smear microscopy.

METHODOLOGY

The cross sectional comparative study included randomly selected 250 patients attending the respiratory medicine outpatient department and admitted in the Respiratory Medicine indoor of Medical College Hospital, Kolkata. Three good quality sputum specimens i.e. first spot, second spot (after one hour) and next day early morning specimens were collected. All three specimens, stained with fluorescent stain were examined by same RNTCP lab technician in the Designated Microscopy Centre, Medical College, Kolkata. A positive result from any one of the three sputum samples was recorded as a proven TB case. We then compared the results of the smear microscopy obtained by the two methods.

RESULT

In our study, same day method diagnosed 67 (29.1%) cases and missed 6 (8.21%) Whereas the conventional method diagnosed 71 (30.8%) cases and missed 2 (2.7%) cases.

CONCLUSION

In diagnosing sputum positive pulmonary tuberculosis cases, conventional sputum microscopy method is more sensitive than same day method.

Title: 1 YEAR SERIAL FOLLOW -UP OF CLINICAL & RADIOLOGICAL STATUS OF TUBERCULOUS PLEURAL EFFUSION ON TREATMENT WITH ATT AND ORAL STEROIDS

Name of Presenter: **Sudarshan ramdas mante**

Authors (or Co-authors): **Dr NT Awad**

Institution/Author Organization: **Lokmanya tilak general hospital**

AIMS-

1. To evaluate the clinical effect of introducing steroid to drug regimen for TB pleural effusion in terms of cough, chest pain, dyspnea, fever.
2. to study radiological improvement post steroid treatment

INTRODUCTION-

Pleural effusion occurs in upto 30% of cases of tuberculosis and typically involves young age groups as an immunological phenomenon at the time of primary infections. pleural effusion causes chest pain, breathlessness along with the constitutional symptoms like fever, cough etc. these effusion may resolve and heal without any long term sequelae most of times, however in some pts there may be

development of pleural thickening or fibrosis. adjunctive use of corticosteroids with ATT for TB pleural effusion is believed to cause early and effective recovery from the symptoms .

METHODOLOGY-

40 PTS of TB pleural effusion divided into two groups, one received ATT regimen and other group received oral prednisolone 0.75mg/kg for 4 wks ,later taper over 2wks.both groups were followed fortnightly upto 2 months and at the end of treatment with CXR

RESULT-

The incidence of composite of roentgenographic sequelae or clinical symptoms was significantly decreased in the prednisolone group as compared to control group(21%vs48%)

Title: A STUDY OF PROFILE OF EXTRAPULMONARY TUBERCULOSIS CASES DIAGNOSED IN A RURAL MEDICAL COLLEGE

Name of Presenter: **DR SUNIL YADAV**

Authors (or Co-authors): **DR ARTI JULKA, DR SWAPNIL JAIN, DR BHAVYA SHAH**

Institution/Author Organization: **RD GARDI MEDICAL COLLEGE , UJJAIN**

Introduction-

India is a highest TB burden country in the world. The lung being the most common (80-85%) organ involved which is also responsible for spread of infection in the community. Extra pulmonary tuberculosis (EPTB) is found in 15-20% among the total TB cases, which may involve all organs except hairs, nails and cornea. However, immunocompromised are independent risk factor for EPTB.

Material & Methods-

This is an observational study of magnitude of EPTB cases in rural based tertiary care centre and there HIV status. Data is based on all consecutive EPTB cases diagnosed at RDGMC Ujjain from the year 2014 to october 2020.

Results-

In our study EPTB case detection is higher (34.1%) than NTEP, which could be due to multidisciplinary approach available at medical college level. PLEF (29.3%) , LNTB(27.5%), Abdominal koch's(18.3%), Bones TB(12.7%), CNS TB(8.2%) and others (4.0%) . TB-HIV co-infection found in <10% cases while >10% reported nation wide.

Discussion-

EPTB cases are usually non-infectious but these are responsible for causing high morbidity and mortality in the patients. Invariably HIV

test should be done in TB infection, especially mandatory in dissemination TB infection. The non-tubercular mycobacterium infection is another possibility to be taken care of.

Title: TUBERCULOSIS PARADOX DURING THE NOVEL CORONA VIRUS PANDEMIC

Name of Presenter: **Dr Sushmita Vinod**

Authors (or Co-authors): **Dr V Gangadharan, Dr Sathish Kumar**

Institution/Author Organization: **Saveetha Medical College and Hospital**

Introduction:

As world comes together to tackle novel coronavirus (COVID-19) pandemic, it is important to ensure that measures for tuberculosis (TB) prevention and care are taken to offer uninterrupted and safe TB treatment.

Aims and Objectives:

To know effect of COVID-19 pandemic on tuberculosis.

Materials and Methods:

This was a retrospective study, done with inclusion of newly diagnosed patients started on ATT. Hospital records were analyzed regarding type of TB- pulmonary or extra-pulmonary. A total of 155 cases were identified. Majority of patients were treated on an OPD basis. Results: A total of 155 cases of tuberculosis were diagnosed from January to November 2020, out of which 77 (49.6%) were cases of pulmonary tuberculosis and 78 (50.3%) extra-pulmonary tuberculosis. 47.4% of extra pulmonary cases were TB lymphadenitis, 18% TB effusion, 7.7% TB skin, 6% TB brain, 4.6% were TB breast and spine.

Conclusion:

Data revealed 49% reduction of newly detected cases when compared to previous year. Extrapulmonary cases were more than pulmonary cases which may be attributed to usage of face masks, low bacillary burden, functional immune system due to good diet and reduction in number of patients visiting hospital. Immense awareness is required to detect extrapulmonary tuberculosis by pathological, molecular, culture methods during the COVID pandemic.

Title: A STUDY ON DRUG RESISTANCE PATTERN IN CASES OF DIABETES WITH PULMONARY TUBERCULOSIS

Name of Presenter: **Tamishi Sharma**

Authors (or Co-authors): **Eema Chaudhary, Vivek Gautam**

Institution/Author Organization: **Subharti**

Hostipal

INTRODUCTION:

Tuberculosis has been considered global public health emergency. Chronic hyperglycemia alters the treatment outcome and prognosis of TB to a great extent. Diabetes is a known risk factor for the development of active TB and an estimated 15% of patients with TB in countries with a high TB burden have diabetes. Hence, the study was planned to study the drug resistance pattern in cases of Diabetes with PTB.

AIMS AND OBJECTIVES:

1. To study the drug resistance pattern in cases of diabetes with PTB. 2. To study the association between DM and MDR-TB (diagnosed by CBNAAT and DST).

METHODOLOGY:

Patients were selected according to inclusion-exclusion criteria and subjected to ZN staining, DST, RBS and HbA1c.

RESULTS:

When MDR/XDR was compared according to HbA1c level, it was found to be statistically significant. Also, significant difference was found in relation to treatment outcome among the subjects according to HbA1c level.

CONCLUSION:

From the results of our study, we suggest that each and every patient must be screened for diabetes before starting ATT because the control of resistance and blood sugar is very important to decrease morbidity and to prevent the propagation of resistant tuberculosis to society at large.

Title: Ultra sound features of tuberculous lymphadenitis

Name of Presenter: **Vishali. k**

Authors (or Co-authors): **mahilmaran.a**

Institution/Author Organization: **Madras medical college**

Introduction:

USG is a non invasive method widely available but its use in diagnosing tuberculous lymphadenitis is less well studied.

Aim and objective :

To evaluate the USG features of clinically suspected tuberculous lymphadenitis
To compare the results of USG features with Composite reference standard

Methodology:

We conducted a cross-sectional observational study .74 patients with proven tuberculous

lymphadenitis were subjected to USG examination. The features looked for are identification of abnormal node, site, nodal multiplicity, size, USG features characteristic of tuberculous lymphadenitis. The results were correlated with the CRS.

Results:

The USG features observed were

- 1.hypoechoic with intra nodal necrosis(49%)
- 2.nodal matting(17%)
- 3.Necrosis with or without abscess or sinus formation (23%)
- 4.displaced vascularity on colour Doppler(7%)
- 5.loss of fatty hilum(2%)
- 6.strong internal echoes(2%)

In our study “when a single node exhibited 2 or more USG features” the sensitivity of diagnosing tuberculous lymphadenitis was found to be 64.8% whereas it was only 35.1% when a node had only single USG feature(P=0.019).

Conclusion:

USG can be used as an adjunct in diagnosing tuberculous lymphadenitis. It also aids in image guided FNAC of intra nodal necrosis.

References:

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Jun Ho Park MD Dong Wook Kim MD
First published: 01 September 2014
<https://doi.org/10.7863/ultra.33.9.1619>

Title: COMPLEX TRACHEOBRONCHIAL STENOSIS-A RARE COMPLICATION OF ENDOBRONCHIAL TUBERCULOSIS

Name of Presenter: **AMIT CHAUHAN**

Authors (or Co-authors): **DR.SHUBRA JAIN,DR. NARENDRA KHIPPAL,DR.GEETA SOLANI,DR. RAKESH GODARA**

Institution/Author Organization: **SMS MEDICAL COLLEGE,JAIPUR**

BACKGROUND-

Endobronchial tuberculosis (EBTB) occurs in about 10–40% of patients with active tuberculosis. Tracheal stenosis is a results from trauma, prolonged orotracheal intubation, tracheostomy etc. Rare causes

such as Wegener’s granulomatosis, sarcoidosis, tuberculosis etc .

MATERIAL AND METHODS-

A 19-year-old female presented with complaints of persistent dry cough, change in voice, dyspnea since 3 days. Past history and general examination was unremarkable. Respiratory system examination revealed absent breath sounds over left hemithorax. Chest radiograph showed left lower lobe collapse. Contrast enhanced computed tomography of thorax revealed tracheal narrowing with left main bronchus stenosis. C-ANCA and P-ANCA were negative. Serum ACE level, S.calcium, Urinary calcium was in normal limit. Fiberoptic bronchoscopy showed tracheal stenosis starting from sub glottic level. Due to non visualisation of distal part, rigid bronchoscopy with serial balloon dilatation in trachea and left main bronchus was done.

RESULTS-

Bronchoalveolar Lavage for Pyogenic culture was sterile. Mycobacterium tuberculosis was detected by BAL for CBNAAT and Anti Tubercular Treatment was started.

CONCLUSION-

EBTB can present with or without evidence of parenchymal disease on imaging.Delay in medical therapy is shown to increase the likelihood of progression to fibrostenosis.Early diagnosis and treatment is often missed due to its varied clinical presentation.

Title: BCGOSIS: WHEN A BOON TURNS INTO BANE

Name of Presenter: **Anurag Tripathi**

Authors (or Co-authors): **Dr Malay Sarkar, Dr R S Negi, Dr Sunil Sharma**

Institution/Author Organization: **Indira Gandhi Medical College**

Background:

Intravesical instillation of Bacillus Calmette-Guérin (BCG) has been shown to be an effective form of immunotherapy for bladder cancer. Originally developed as a live vaccine against tuberculosis, BCG has been demonstrated to significantly reduce the risk of progression following Trans Urethral Resection of Bladder Tumour for superficial bladder cancer.

Aim:

To demonstrate the importance of being aware of complications that are associated with BCG immunotherapy in bladder cancer.

Methodology:

We describe case of a 55 year old male patient with low grade bladder cancer who was admitted with history of fever, general malaise, reduced appetite, nausea and vomiting following second course of intravesical BCG instillation. Routine blood investigations, cultures, CT thorax, bone marrow biopsy and samples for CBNAAT were unremarkable and negative with non-resolution of pyrexia despite being on broadest spectrum antibiotics.

Result:

A diagnosis of systemic BCGosis was kept as diagnosis of exclusion and patient started on antituberculosis treatment (ATT) and tapering doses of steroids to which he responded with no recurrence of pyrexia after completion of ATT and stoppage of steroids.

Conclusion:

When systemic reactions develop, a high degree of awareness and suspicion helps to catch the diagnosis and treat the complications of intravesical BCG.

Title: Caverno-cutaneous fistula-A rare clinical case

Name of Presenter: **Aparna suresh**

Authors (or Co-authors): **DR.G.N. SRIVASTAVA**
Institution/Author Organization: **Institute of medical sciences,banaras hindu university**

INTRODUCTION

Spontaneous drainage of tubercular cavity by way of caverno-cutaneous fistula without pleural spillage is a rare presentation.This is a rare case of spontaneously ruptured tubercular cavity with a cutaneous fistula at the site of old healed thorocostoma,which was initially misdiagnosed as hydropneumothorax which makes it a unique and one of a kind presentation.

HISTORY

A 35year,male presented with high grade fever with evening rise of temperature along with productive cough for 3 weeks ,with a sudden episode of vigorous coughing along with hemoptysis around 100ml.Following which he complaints of discharge of blood and pus from his old surgical scar site at back of chest. Past history of ATT intake and ICTD followed by thoracostoma for pyothorax in the year 2007. .

CLINICAL FINDINGS

Physical examination revealed a healed scar in the posterior aspect of the right hemithorax at the level of the 9th intercoastal space.Detailed Examination of the scar revealed a sinus of 1.5cm in the centre, through which blood

mixed with pus along with air was leaking out with cough and respiration. Pallor and clubbing was present. Auscultation air entry was diminished in the right suprascapular, scapular and infrascapular area along with creps in the left suprascapular areas.

DIAGNOSIS

Diagnosis was made with the help of contrast enhanced computed tomography followed by xray sinogram which confirmed cavity with fistulous connection aided by other serological and microbiological work up.

MANAGEMENT

Patient became symptomatically better with anti tubercular therapy(ATT), antibiotics and pus drainage in lateral positioning by dilating the ruptured thorocostoma

Title: Intractable anoperineal disease of tuberculosis

Name of Presenter: **A.Asha Fathima.**

Authors (or Co-authors): -

Institution/Author Organization: **Osmania Medical College, Hyderabad.**

Introduction

Anoperineal disease of tuberculosis is extremely rare (less than 1 percentage)

Case report

A 51 year old male came with c/o anal pain, intermittent fever, perineal fistula for 8 months, weight loss (12 kg). He underwent treatment in multiple hospitals, but had no improvement.

Investigations

Cxray PA view - normal, Routine blood investigations -normal except ESR -62mm/hr, viral markers -negative.

Upper GI scopy, colonoscopy - normal

Local examination-complex fistula in ano (4 O clock position), Underwent laser fistulectomy. HPE - Hyperplastic squamous epithelium with ulceration, diffuse dense chronic inflammatory infiltrates histiocytes, granulomas showing epithelioid histiocytes, langhans giant cells with blood vessel proliferation and areas of fibrosis, necrosis, haemorrhage. (Suggestive of fistulous tract lined by tuberculosis granulation tissue).

Based on clinical and HPE - patient is started on Cat I ATT - 8 months, on follow up -patient clinically improved and fistula - healed completely, no new fistulous lesions.

Discussion

Tuberculous fistula occurs as recurrent and non-healing. Diagnosis is based on HPE and

clinical improvement to ATT. Main DD - crohns disease excluded based on clinical, HPE, radiological investigations.

Title: POST-TUBERCULOSIS FIBROSING MEDIASTITIS

Name of Presenter: **DR.DHIVYABHARATHI.S**

Authors (or Co-authors): **DR.A.MAHILMARAN, DR.A.SUNDARARAJAPERUMAL.**

Institution/Author Organization: **INSTITUTE OF THORACIC MEDICINE,MADRAS MEDICAL COLLEGE**

INTRODUCTION

Fibrosing mediastinitis is a rare late sequela of granulomatous inflammatory process defined by the presence of fibrotic mediastinal infiltrates that obliterates normal fat planes. Due to its rarity, often under-recognized.

CASE REPORT

A 80 year old male known case of treated PTB 50 yrs back presented with complaints of hemoptysis one episode and cough with expectoration for 1 week. No history of radiation, trauma, surgery, malignancy, arterial/venous thrombosis. On examination normal and vitals are stable. Chest X ray reveals right upper lobe collapse with tracheal shift. CECT chest revealed collapse of right upper lobe with tracheo mediastinal shift to right side, SVC is compressed between the 1st rib and brachiocephalic trunk with multiple tortuous collaterals around right head of humerus and right paravertebral region. Multiple subcentimetric calcified pretracheal and paratracheal nodes noted. Nodular fibrosis with calcification in bilateral upper lobes. Sputum analysis are negative for both mycobacterial and fungal infections. ECHO showed stable cardiac status. S.ACE, S.electrolytes, Usg thyroid are normal. With the patients known history of tb and radiological finding of svc obstruction revealed tuberculosis as the likely cause. Patient is on follow up.

CONCLUSION

Although rare, fibrosing mediastinitis should be a diagnosis of exclusion. Active infection must be excluded. The management is largely towards symptoms palliation or percutaneous stenting of vascular structures.

Title: MDR TB IN PAROTID GLAND

Name of Presenter: **Dr.KODATI BINDU**

Authors (or Co-authors): **Dr.M.SRAVAN KUMAR,Dr.PHANI KUMAR**

Institution/Author Organization: **KAKATIYA MEDICAL COLLEGE**

INTRODUCTION

Tuberculosis of parotid gland is a rare clinical entity which causes some difficulties in diagnosis because of similarities in presentation to that of a neoplasm.

HISTORY AND CLINICAL PRESENTATION

A 25 year old male presented to department with swelling of left side of face since 6 months with loss of appetite, weight loss. PHYSICAL

EXAMINATION

A spherical shaped single swelling measuring 5/6 cm over left mandibular region, smooth surface, skin over swelling normal, no tenderness present.

INVESTIGATIONS AND DIAGNOSIS

FNAC of swelling of parotid gland- Histopathology suggestive of necrotising granulomatosis. FNAC for CBNAAT-MTB detected very low. Rifampicin resistance detected.

MANAGEMENT

Shorter regimen for MDR-TB started

CONCLUSION

The result of this study showed that a rare cause tuberculosis should be considered in a patient presenting with parotid gland swelling.

Title: A RARE CO-OCCURRENCE OF TAKAYASU'S ARTERITIS AND TUBERCULOSIS

Name of Presenter: **DR .MANISHA JAIN**

Authors (or Co-authors): **DR.NARENDRA KHIPPAL,DR.MOHD.JAVED QURESHI**

Institution/Author Organization: **S.M.S MEDICAL COLLEGE AND HOSPITAL**

INTRODUCTION

Takayasu's arteritis is a large-vessel vasculitis of unknown aetiology characterised by involvement of the aorta and its major branches. Mycobacterium tuberculosis can be a trigger for the development of Takayasu's arteritis. Most recent reports suggest that cross-reactivity between mycobacteria and a human heat shock protein might have a key role. CASE REPORT A 27 years old female presented with fever, cough and weight loss for the past one month. On examination bilateral radial pulses were absent with elevated blood pressure. Chest X-ray and CT-thorax showed consolidation of bilateral upper lung lobes. Sputum-CBNAAT was positive for mycobacterium tuberculosis. CT-angiography showed stenosis of right axillary artery and bilateral renal arteries with pseudo-aneurysm of infra-renal aorta. Patient was diagnosed as Takayasu's arteritis with pulmonary tuberculosis with secondary

hypertension and started on anti-tubercular drugs,steroids,other immunosuppressants and anti-hypertensives.Renal artery stenting done and patient improved symptomatically and is under follow-up.

CONCLUSION

This case-report highlight the role of detailed physical examination including vascular examination and correct use of CT/ MR angiography to diagnose TA. Due to high prevalence of the disease in Asian countries,tuberculosis can be an etiological factor either triggering the autoimmune process or directly responsible for granulomatous lesions in TA.

Title: Rare Presentation of Tuberculosis as a Mediastinal Mass with Tracheo-mediastinal Fistula and its complete resolution with Anti-Tubercular Treatment

Name of Presenter: **Dr. Manu S**

Authors (or Co-authors): **Dr.Veena E R,Dr. Durga Lawande,Dr.Lalita Fernandes,Dr. Nupur Kulkarni**

Institution/Author Organization: **Goa Medical College**

Background

Tuberculosis (TB) is an infectious disease caused by Mycobacterium Tuberculosis. TB is a mysterious disease with wide variety of presentation,mediastinal mass with trachea -mediastinal fistulae being the one, which is extremely rare. Airway fistulas are often associated with oesophagus and pleural space, but mediastinal involvement is rare. The reported causes for trachea-mediastinal till date are tracheal/mediastinal lymphoma, radiation/laser therapy, chemotherapy for lung carcinoma, notably bevacizumab and surgical intervention. No cases have been reported as due to tuberculosis. History and Presentation 64 year old male with diabetes mellitus, presented with symptoms of cough, loss of appetite and weight and hoarseness of voice of one month duration. Diagnosis Chest x-ray showed mediastinal widening. CT thorax showed heterogeneously enhancing mediastinal mass at subcarinal region with few nodular densities in both upper lobes. Bronchoscopy revealed left vocal cord palsy, destruction of carina with fistulous communication with mediastinum. TBNA sent for culture grew Mycobacterium Tuberculosis. Management Patient was treated with anti-tubercular drugs for 10 months.

Result

Patient improved significantly with repeat CT showing complete resolution of the fistula. Learning point We shouldn't fail to diagnose

tuberculosis in a country like India which presents in a wide variety of unexpected ways, which is completely curable.

Title: SPLENIC TUBERCULOSIS CLINICAL CASE

Name of Presenter: **PRADEEP CHAUDHARY**

Authors (or Co-authors): -

Institution/Author Organization: **JLN MEDICAL COLLEGE**

Introduction:

This case evaluated retrospectively. Splenic TB is normally seen as part of miliary TB and is rarely present as an isolated entity. Hence, the misdiagnosis rate is high.

Case report:

50 yr old male smoker, nondiabetic presented with fever, abdominal discomfort and loss of appetite for preceding 2 months.No other complaints.His wife took ATT 2yr back. No lymph nodes were palpable. Abdominal examination revealed tenderness in left hypochondrium.ESR(65mm/hr) and Hb(9 gm/dl).Mantoux test was positive.CXR was normal. Sputum for AFB & CBNAAT was negative.USG abdomen showed multiple hypochoic lesion within spleen.CT s/o splenic abscess.Patient had undergone exploratory laparotomy with open splenectomy. Histopathological examination showed areas of caseation surrounded by multiple granulomas of epitheloid cells and Langhan's giant cells.Acid fast staining showed numerous AFB's.

Discussion:

Most reported cases of splenic tubercular abscess had miliary TB with HIV infection. According to pathomorphological classification there are five types of finding on ultrasound of splenic tuberculosis: miliary,nodular,abscess,calcific and mixed type. Histopathologically tuberculosis infection identified by caseation along with granuloma of epitheloid cells and Langhans giant cells.

Conclusion:

Splenic tuberculosis is an important manifestation of tuberculosis and should always be included in differential diagnosis along with malignancy in patients presenting with pyrexia of unknown origin and having splenomegaly.

Title: UNUSUAL ACRAL PRESENTATION OF TUBERCULOSIS VERRUCOSA CUTIS

Name of Presenter: **Dr. Rishab Rampradeep**

Authors (or Co-authors): **Dr Prasanth G,Dr V Gangadharan,Dr P Jayaganesh**

Institution/Author Organization: **Saveetha Medical College Hospital**

Tuberculosis verrucosa cutis (TVC) is a paucibacillary form caused by an exogenous re-infection in sensitised individuals. Starting out as erythematous papules, it gradually evolves to an asymptomatic verrucous plaque, rarely ulcerating. We report a case of histopathologically confirmed TVC of the small toe in a 23-year-old male with strong contact history. Patient presented with a 3-month history of a slowly enlarging papular, warty growth over his left 5th toe, following an injury, eventually ulcerating, not associated with any pain or discharge. Patient's neighbour and father had both been previously treated for tuberculosis. The lesion was managed conservatively with topical ointments and home remedies but failed to regress. Local examination revealed an ulceroproliferative growth involving the toe circumferentially. Purified protein derivative test was strongly positive with excoriation and ulceration. Histopathological examination revealed characteristic findings suggestive of TVC. Patient was consequently started on oral antituberculous therapy and is on regular followup. While TVC often occur on the hands, lower extremity involvement is usually seen in children Cutaneous manifestations of tuberculosis, remain an important differential in patients with chronic non-healing ulcers, in the absence of comorbidities like diabetes mellitus or other causes of immunosuppression.

Title: An auricular mystery revealed by Cartridge Based Nucleic Acid Amplification Test(CBNAAT)

Name of Presenter: **Dr. Sathish Kumar M**

Authors (or Co-authors): **Dr.A. Mahilmaran, Dr.A.Sundararajaperumal, Dr.D.Nancy Glory, Dr.G.Allwyn Vijay**

Institution/Author Organization: **Institute of Thoracic medicine, Madras Medical College**

Introduction:

Chronic otitis-externa due to Mycobacterium tuberculosis complex is extremely rare and very few cases have been presented in the medical literature. Head and neck area make up 2–6% of extrapulmonary tuberculosis(TB) and 0.1–1% of all forms of TB.

History & Presentation:

A 31-year-old female presented with history of gradually progressing bilateral hard of hearing, ear discharge for past 3 months. Her husband was treated for pulmonary tuberculosis 5 years back. Her Pure-tone audiogram showed bilateral mixed hearing loss. HRCT revealed features of mastoiditis.

Diagnosis:

On examination of the external auditory canal(EAC), soft-tissue lesion was present and Tympanic membrane could not be visualised bilaterally. Biopsy was taken from both EAC and sent for Histopathological examination(HPE) and Cartridge Based Nucleic Acid Amplification Test(CBNAAT). HPE showed vascularised inflammatory granulation tissue and Rifampicin sensitive Mycobacterium Tuberculosis was detected in CBNAAT.

Management: Patient was started on ATT and treated as Tuberculosis of EAC which showed resolution of clinical symptoms

Clinical Implications:

Strong clinical suspicion, careful history taking and clinical examination with stepwise approach will help in identifying the rare presentation, thereby treatment can be initiated at an early stage to limit the disability and improve the quality of life of the patient.

Title: Addressing side effects of ATT

Name of Presenter: **Shreya gudi**

Authors (or Co-authors): **Dr. T.K. Biswas**

Institution/Author Organization: **MGM medical college, Navi Mumbai**

Burden of Tuberculosis is more pronounced in India than any other country. To tackle this, the FDC of Anti-Tubercular therapy (ATT), have remained our most reliable weapons. While the utility of ATT is indisputable, practicing physicians can never afford to overlook the wide spectrum of adverse effects of the drugs that range from mild GI discomfort like nausea and vomiting to severe disabling neurological disturbances. Due to these complications, ATT drugs need a keen eye and constant monitoring to ensure both patient well being and drug compliance. One such manifestation is the Drug rash with eosinophilia with systemic symptoms (DRESS) syndrome which is severe, idiosyncratic, multisystem reaction characterized by triad of fever, rash and multi-system involvement. Although DRESS syndrome is quite commonly seen with aromatic anticonvulsants, DMARD's and other variety of drugs, it is in fact very rarely seen with ATT. Due to the rarity of this presentation and relative paucity of scientific literature this adverse effect could potentially be missed. Our case report aims to highlight this unusual reaction and help in appropriately identifying and treating the same.

Title: SCAR IN A TB PATIENT

Name of Presenter: **DR.SIVASANKARI.R**

Authors (or Co-authors): **DR. K N MOHAN RAO**

(PROF & HOD),DR.PARINITA S (ASS.PROF)

Institution/Author

Organization:

RAJARAJESWARI MEDICAL COLLEGE AND HOSPITAL

Tuberculosis is a common infectious disease in the developing country ,cutaneous adverse reactions (CADR) with anti-tubercular treatment (ATT) can make further management difficult. Among ATT ,cutaneous reaction has been reported with the rifampicin, isoniazid and ethambutol,pyrazinamide,streptomycin and PAS either single or combination of two drugs .

We report a case of a 60 year old male type II diabetic ,immunocompetent was diagnosed with sputum positive tuberculosis and started on ATT following which he developed pustular eruption diffuse over his body.He was also started on insulin for the de ranged sugars and sequential re- challenging of Att with insulin was done ,but reactions did not subside .He was withheld of all the medications, including ATT and insulin .

On withholding the insulin, and confirmed IgE mediated allergy to insulin exhibited allergic reactions to all types of basal insulin. The pustulous reaction subsided and was switched over to Oral hypoglycemic drugs and confirmed the diagnosis as insulin induced pustulosis reaction.

Title: RETROPHARYNGEAL ABSCESS PRESENTING AS MDR-TB WITH PULMONARY INVOLVEMENT

Name of Presenter: **Syed Shabbir Hussain**

Authors (or Co-authors): **Ashfaq Hasan, Syed Mahmood Ahmed, Aleemuddin NM, Fahad Abdullah**

Institution/Author Organization: **Deccan College Of Medical Sciences**

Extra-pulmonary multi-drug resistant (MDR) TB is uncommonly seen in an immunocompetent adult. We report a rare case of MDR-TB with lung parenchymal involvement presenting as multiple abscesses distributed over the extremities as well as a retropharyngeal abscess in a 19 year old male. Retropharyngeal abscesses in adults are typically pyogenic, and are secondary to local sepsis. Patients are generally immunocompromised. Tubercular retropharyngeal abscesses in themselves are very rare, even in the presence of pulmonary TB. To date, there are no cases reported as MDR. Medical therapy remains the mainstay of treatment but the role of surgical drainage becomes very important as well.

Title: Endogenous lipid pneumonia in association with pulmonary TB

Name of Presenter: **DR.V. BHUVNESWARI**

Authors (or Co-authors): **DR.V JOSEPH BALA SIREESHA**

Institution/Author Organization: **MNR MEDICAL COLLEGE AND HOSPITAL**

ABSTRACT Lipoid pneumonia is rare disorder results from accumulation of lipids in alveoli. we report a 42yrs old female who presented withwhite mucoid expectoration and shortness of breath since 3months ,hemoptysis since 10 days.on examination she was normal except for pallor and coarse crepitations in right infrascapular and right infra axillary area. Chest xray revealed non homogenous opacity in right lower lobe.HRCT SCAN revealed large ill defined consolidation with air bronchograms and few cavities involving posterio basal and lateral segments of right lower lobe.Sputum for acid fast bacilli negative. FNAC and open lung biopsy revealed focal area of necrosis, neutrophils and plenty of macrophages with lipid droplets suggesti ve of lipoid pneumonia. Bronchial washing for cbnaat revealed positive for mycobacterium tuberculosis. As there was no history of ingestion or aspiration of oils it was endogenous and association with pulmonary tuberculosis. The relevant literature is reviewed. [INIDIAN J CHEST DIS ALLIED Sci 2006;48:143-145]

Title: DRUG INDUCED ERYTHRODERMA AND HEPATITIS TO ALL 1st LINE ANTI-TUBERCULAR DRUGS- A RARE CASE

Name of Presenter: **DR. AHMED SAFWAN. M**

Authors (or Co-authors): **DR. SONAM SPAGAIS, PROF. RAJKUMAR**

Institution/Author Organization: **VALLABHBHAI PATEL CHEST INSTITUTE**

INTRODUCTION:

Cutaneous adverse drug reactions (CADR) secondary to all the 1st line drugs is extremely rare, but dangerous form of CADR necessitating urgent cessation of medications.

CASE:

31-year-old male was diagnosed as microbiologically confirmed pulmonary tuberculosis and treatment was started with category 1 ATT under DOTS. He developed erythroderma all over the body after 2 months of starting the ATT. Withdrawal followed by sequential reintroduction of all the first line drugs showed reappearance of erythroderma. However, on clinical and radiological evaluation patient symptoms and the radiological lesions were improved. So, it was decided to discontinue ATT with close fortnightly follow up. Patient was

asymptomatic for next 6 month, there after he was developed anterior chest swelling and needle aspirate revealed pus and CBNAAT report showed MTB detected low with rifampicin sensitivity. The treatment was started with second line drugs including kanamycin, levofloxacin, linezolid, cycloserine and clofazimine. Swelling was resolved completely which was further confirmed by CT chest.

CONCLUSIONS:

Early recognition of CADR and timely management is vital to ensure a better outcome. In our case, the patient did not tolerate any of the 1st line ATT due to erythroderma. Patient was treated with 2nd line drugs and was declared cure.

Title: Disseminated Miliary Silicotuberculosis - A case Report and Review

Name of Presenter: **Dr. AKSHADA MOHAN VERNEKAR**

Authors (or Co-authors): **Dr. Jofin George, Dr. Uday C. Kakodkar, Dr. Neha Kharangate**

Institution/Author Organization: **GOA MEDICAL COLLEGE AND HOSPITAL, BAMBOLIM GOA**

INTRODUCTION

Silicosis is a fibrosing disease of the lungs caused by inhalation, retention and pulmonary reaction to crystalline silica. The co-existence of silicosis and tuberculosis is called Silicotuberculosis. The prevalence is estimated to be <8/1000 miners currently. We present an interesting case of silicotuberculosis on account of its unusual presentation. The relevant literature has been reviewed.

CASE HISTORY

55 years old male actively working in cement industry for around 20 years presented with dry cough, weight loss, exertional dyspnoea, fever since 3 months along with abdominal distension and swelling of bilateral feet since 7 days. The diagnosis was made based on history, sputum CBNAAT showed M. Tb detected, chest radiograph showing bilateral reticular nodular shadows and CECT thorax and abdomen showing diffuse nodular opacities with ground glass appearance with crazy paving in the upper zones of the lungs with omental fat stranding. He was started on antituberculosis treatment along with the management of comorbidities. On subsequent visits patient showed clinico-radiological and microbiological improvement.

CLINICAL IMPLICATIONS

The synergistic effect of silicosis and

tuberculosis can lead to massive fibrosis. The mortality risk is higher if tuberculosis develops among silicosis. Hence early diagnosis and prompt treatment is the key in the management of silicotuberculosis.

Title: A Clinical Dilemma in COVID 19 Pandemic : Missed CARCINOMA & TB coincidence.

Name of Presenter: **Dr LAKKAM ALEKHYA**

Authors (or Co-authors): **Dr LATHA SARMA**

Institution/Author Organization: **KRISHNA INSTITUTE OF MEDICAL SCIENCES, SECUNDERABAD, TELANGANA**

CASE REPORT :

A 33 year old male with c/o cough and SOB past 3 months was admitted elsewhere, treated as COVID (RT PCR negative) and discharged. He later developed SOB after 2 weeks, came to our hospital for further evaluation and management. CTPA done, negative for PTE, dense peribronchovascular consolidation in bilateral perihilar regions and surrounding the segmental bronchi. Few perifissural irregular nodules seen along the bilateral oblique fissures and upper lobes. Patchy subpleural areas of consolidation in bilateral lower lobes - initial DD were sarcoidosis and pulmonary edema. Evaluated and treated accordingly, for which no proper improvement noted. Cryobiopsy done, revealed primary SIGNET RING CELL CARCINOMA of LUNG. PET CT had no additional findings. Bronchial washings done, revealed MTB detected in GeneXpert with indeterminate Rif resistance. ATT was started. Chemotherapy planned after Medical Oncologist opinion.

Title: A CASE REPORT OF POTTSPINE WITH LEFT GLUTEAL ABSCESS AND CUTANEOUS TUBERCULOSIS

Name of Presenter: **ALEKYA KALLA**

Authors (or Co-authors): **DR.M.G.Krishnamurthy, DR.T.Pramod kumar, Dr.P.Eshwaramma, Dr.P.Ramulu, Dr.V.Veena**

Institution/Author Organization: **GANDHI HOSPITAL AND MEDICAL COLLEGE ,SECUNDERABAD, TELANGANA**

Introduction-

Vertebral TB is most common form of skeletal tuberculosis. Exudate formed at lumbar vertebrae most commonly enters psoas sheath to form psoas abscess. Collection can follow gluteal vessels to form abscess in gluteal region. History -33 year female presented with complaints of pain in lower back, pain abdomen, fever since 1 month, dyspnea and itchy skin lesions over body since 7 days with

spo2-84% room air being referred from local hospital with left hydropneumothorax-icd insitu with surgical emphysema over left chest wall and abdomen. On Examination, A swelling of 10x8cm in lower back, another swelling of 4x5cm in left iliac region and multiple necrotic papular lesions were seen over chest and abdomen. Patient had history of pulmonary kochs 5 years ago. Diagnosis- CT chest showed loss of left lung volume with rib crowding and left pneumothorax. Paraspinal abscess was noted in posterior chest wall and upper lumbar level (L2) extending into gluteal region. Sputum for AFB and CBNAAT were negative. Pus was positive for AFB and sensitive to rifampicin. Management. Patient improved with open drainage of abscess, antituberculous therapy and intravenous antibiotics. Complications and learning points- It should be considered in differential diagnosis of chronic back pain and treatment must be started early to prevent complications like paraplegia and cold abscess

TITLE : A Case of Pulmonary Non Tuberculous mycobacteria Mimicking Pulmonary Tuberculosis

Name of Presenter: **DR. AMIT GOYAL**

Authors (or Co-authors): **DR. AMANPREET KAUR**

Institution/Author Organization: **GOVT. MEDICAL COLLEGE, AMRITSAR**

Nontuberculous mycobacteria (NTM) are naturally-occurring organisms found in water, soil and wild animals. They are harmless to most people but when a person inhales the organism from the environment NTM led to lung infection. Most people don't become ill except for some susceptible individuals, a slowly progressive and destructive disease can occur. Chronic respiratory disease is a strong risk factor. Here, we report a case of pulmonary nontuberculous mycobacterial (NTM) infection with M. abscessus. This case highlights the diagnostic confusion which occurs when persistent sputum Acid-Fast Bacilli (AFB) smears are positive, but Nucleic acid amplification test is negative.

Keywords:

Nontuberculous mycobacterium (NTM); Mycobacterium abscessus

Title: SPECTRUM OF RARE CUTANEOUS ADVERSE REACTIONS TO FIRST LINE ANTITUBERCULOSIS DRUGS

Name of Presenter: **Dr. AnuSree S.C.**

Authors (or Co-authors): **Dr.K.Anbananthan, Dr.A.Ramasamy, Dr.A.Manimaran**

Institution/Author Organization: **THANJAVUR MEDICAL COLLEGE**

BACKGROUND:

Cutaneous adverse drug reactions are one of the commonest side effects of ATT. Early recognition, prompt withdrawal of suspected ATT drug and administration of steroids in severe cases are the corner stone of its management.

CASE DETAILS:

Four patients admitted with cutaneous adverse reactions to anti tuberculosis therapy in various forms such as, Toxic Epidermal Necrolysis, Severe Exfoliative Dermatitis, Lichenoid eruptions, Erythema Multiforme during different time periods. Among four cases first two were drug sensitive pulmonary tuberculosis, next two cases were EPTB like spinalTB and TB lymphadenitis. Offending drug was stopped and treated with supportive measures, antihistaminics and steroids. ATT rechallenging done for all the patients as per.Nationalguidelines and the offending drug identified as isoniazid, Rifampicin Ethambutoland Pyrazinamide respectively and the drug replaced with levofloxacin. During L week observation, Patients were stable and no cutaneous adverse reactions. Patients were advised to continue modified ATT as per guidelines.

CONCLUSION:

Severe hypersensitivity reactions to anti tuberculosis drugs are rare but may be fatal and must be recognize early to reduce associated morbidity and mortality.

Title: Multifocal tuberculosis:Many faces of an old menace

Name of Presenter: **Dr. D. Arulmurugan**

Authors (or Co-authors): **Dr. A.Mahilmaran, Dr.A. Sundararajaperumal, Dr.D. Nancy glory, Dr.G.Allwyn vijay**

Institution/Author Organization: **Institute of thoracic medicine,Madras Medical College**

Introduction:

Skeletal tuberculosis accounts for 1-5% of all tuberculosis infections,50%involve the vertebral column, 1-3%involvement of ribs and 1-2%sternum. Multifocal involvement is uncommon and is associated with disseminated disease.

History & Presentation:

17 years male presented with cough and expectoration, weight loss, appetite loss and fever for 4 months. Swelling in Presternal and left lateral chest wall for 1month tender on examination.No comorbidities/prior ATT intake.

Diagnosis:

Xray chest shows heterogenous opacity in right midzone, lytic lesion in posterolateral aspect of left 8thrib and opacity in right paravertebral region along D8 &D9 vertebrae. CT-chest shows right middle lobe consolidation, centrilobular nodule with tree in bud pattern in right middle and lower lobe, lytic lesion with soft tissue component in body of sternum and posterolateral aspect of left 8thrib, prevertebral abscess along D8 and D9 vertebrae with D8 anterior vertebral body erosion.Sputum Acid fast bacilli – positive, sputum and pus aspirate from multiple chest wall swelling CBNAAT detected Rifampicin sensitive M.tuberculosis.

Management:

Patient started on Anti- tuberculous treatment and is on follow-up.

Clinical implication:

Multifocal skeletal involvement due to Tuberculosis in young immunocompetent individual is rare. The key to diagnosis is to bear in mind that Tuberculosis can present in multiple unusual sites.

Title: Left fibular Osteomyelitis as early generalization of disseminated tuberculosis.

Name of Presenter: **A.Asha Fathima.**

Authors (or Co-authors):-

Institution/Author Organization: **Osmania Medical College, Hyderabad**

Introduction :

Tuberculosis of long bones (rare), remains clinically quiescent followed by involvement of bone or bone with joint involvement.

Case report :

A 16 year old female came with c/ o left lower leg pain, limping, swelling which appears on walk and subsides with rest since 10 days. She is on ATT since 2 months for left cervical lymphadenopathy of kochs. Now her appetite improved, swelling subsided, tolerating ATT.

Investigations :

CX-ray PA view - Normal ,FNAC lymph node - Casseous granulomatous seen , smear for AFB not detected. x-ray left leg AP and lateral view -lytic lesions seen. MRI left leg -altered marrow signal intensity, mild cortical irregularities, periosteal reaction, adjacent soft tissue edema. Ultrasound guided aspiration of swelling left leg -pus -smear for AFB not detected, Gene xpert - M. Tuberculosis detected, resistance to rifampicin not detected, c/s -sterile. She is advised to continue ATT for 12-16 months, absolute rest(non weight bearing). On follow up she developed -sinus discharge - where

locules are broken, local syringing done.,After which granulation tissue developed -wound healthy.

Discussion :

Tuberculosis Osteomyelitis (metaphysis - epiphysis) to be kept as differential diagnosis of chronic bacterial Osteomyelitis (metaphysis). Sequestra is less extensive in tuberculosis. Hence early diagnosis and intervention needed.

Title: A CASE OF SPUTUM POSITIVE PULMONARY KOCH'S IN RT-PCR POSITIVE SARS CoV2 PATIENT

Name of Presenter: **DR.AUDIPUDI SWETHA**

Authors (or Co-authors):

DR.N.GOPICHAND,DR.V.ARUNA

Institution/Author Organization: **Siddhartha Medical College.**

Introduction:

Coronaviruses are large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome. Novel coronavirus (nCoV) is a new strain that has been previously identified in humans. It has been named as "SARS-CoV-2" and the disease it caused has been named as Coronavirus disease 2019 which is an emerging pandemic today. Cases present from mild common cold to pneumonia and ARDS.

Material & Methods:

A case study of 75 year old male whose nasal swab was positive for SARS CoV2 RT-PCR presented to state covid hospital, Vijayawada with chest symptoms. Chest Xray showed B/L Emphysematous lung fields with bilateral infiltrates with left hydropneumothorax. Tube thoracotomy was done and sputum and pleural fluid collected was sent for CBNAAT.

Results:

Pleural fluid examined, suggestive of exudative nature. Sputum examined, CBNAAT result is MTB detected Rifampicin sensitive. •Discussion: All cases with suspicion of Koch's should not missed. Every pneumonia should be screened for MTB, other bacterial, fungal infections despite SARS CoV status.

Title: Atypical Presentation

Name of Presenter: **Dr Avani Rajput**

Authors (or Co-authors):-

Institution/Author Organization: **Bharati Hospital ,Pune**

50 year male came with complaints of cough and year male came with complaints of cough which increased on oral intake of food since 10 days and cervical pain since 3 months. Chest X-RAY done s/o right CP angle blunting and cardiomegaly .HRCT THORAX : b/l pleural effusion and tracheoesophageal fistula formation confirmed by upper GI endoscopy .Bronchoscopy done BAL sample taken from fistulous tract on GENEXPERT :MTB detected rifampicin sensitive . patient started on ATT developed hepatitis gradually dose of ATT increased with LFT monitoring .Ryles tube inserted and feeding through ryles tube continued till 2 months followed by repeat bronchoscopy which showed partial resolution of fistulous tract .

Title: Right Tubercular Hydropneumothorax with pulmonary Tuberculosis with Thrombocytopenia with Moderate Anemia

Name of Presenter: **AYUSH PANDEY**

Authors (or Co-authors): -

Institution/Author Organization: **SGT UNIVERSITY, GURUGRAM**

Introduction- The incidence of new TB cases from India is estimated to be 204/100000 population (Global Tb report 2018) History- A patient with both pulmonary and extrapulmonary TB is classified as a case of Pulmonary TB. Presentation- 22-year-old male, Devender presented with complaint of cough with expectoration for 1 month, generalized weakness, fever since 20 days, cold extremities, and palpitations since morning. On examination, the patient was tachypneic with RR- 24/min, BP- 84/60 mm Hg, PR-54/min, and absent air entry on the right side. Diagnosis- Pulmonary TB with right tubercular hydropneumothorax with thrombocytopenia with moderate anemia Management- ICD tube was inserted on right side, and investigations revealed Hb 8.7 gm/dl, TLC 20100, Platelets count was 30,000. Pleural fluid and sputum were CBNAAT detected. ATT (anti-tubercular treatment) was started along with antibiotic coverage. The patient was transfused with 2 unit FFP (fresh frozen plasma), 2 unit whole blood, and 1 unit RDP (random donor platelet). Due to loss of appetite and deranged LFT, modified ATT (anti-tubercular treatment) was started and reintroduction of ATT was done one by one on repeated LFT reports. Repeat CBC showed improved hemoglobin and platelet count with Hb 12.1, TLC 11000 and Platelet count 8,50,000. ICD tube was removed after 15 days. Complications- Hydropneumothorax

Title: Pulmonary tuberculosis and TB varrucosa cutis-can they coexist?

Name of Presenter: **Dr. B. Divya**

Authors (or Co-authors): **Dr.S.Raghu, Dr.D.Sudheer**

Institution/Author Organization: **Guntur Medical College**

Introduction:

Cutaneous tuberculosis is uncommon in tropics like India. Here we are presenting, a case of pulmonary tuberculosis in a patient with Tb varrucosa cutis, which is a rare and unusual combination .

CASE REPORT:

28 yr old Male patient come with the chief complaint of SOB, dry cough, generalized weakness from 20 days. On general examination thick, hyperkeratotic lesion on left planter skin from 1 yr. At the time of onset patient experienced only roughened surfaces which is gradually progressive into hard, hyperkeratotic area. History of trauma at the site of the lesion 1 year back. Hemogram normal, TST positive, sputum CBNAAT mtb detected, Biopsy from the lesion shows thickened epidermis with small epithelioid granulomas in dermis, necrosis absent. CXR shows left upper zone fibrotic changes. Patient showed good clinical improvement with ATT.

Discussion:

Tb varrucosa cutis is rare skin lesion. Diagnosis of Tb varrucosa cutis confirmed with clinical & histopathological examination.

Conclusion:

In this case Tb verrucosa cutis preceded the pulmonary Tb which is unusual presentation in our clinical observation .

Title: A rare case report of Miliary TB presenting with Secondary Amenorrhea

Name of Presenter: **Dr. C.Praneetha**

Authors (or Co-authors): **Dr.Md Mateenuddin Saleem , Dr.Tanzil Rahaman. R**

Institution/Author Organization: **Kamineni institute of medical sciences, Narketpally**

INTRODUCTION: TB has marked reversible effect on menstrual cycle by causing hormonal dysregulation. It causes functional disorder in hypothalamic-pituitary-ovarian axis leading to decreased FSH, LH, Estrogen levels. Few studies have showed menstrual abnormalities with pulmonary tuberculosis. Incidence of menstrual abnormalities even in non-genital tuberculosis was noted 66%, of which incidence of secondary amenorrhea was 26.5%.

PRESENTATION:

A 17yr old girl presented dry cough, weight loss, fever with evening rise of temperatures, amenorrhea, occasional abdominal pain for past 3 months. General examination was unremarkable except for cervical lymphadenopathy. CT chest showed bilateral extensive nodular lesions throughout lungs. USG pelvis showed left adnexal cyst. Sputum for CBNAAT reported positive, rifampicin sensitive. Endometrial curettage was done in view of her amenorrhea which revealed epithelioid giant cells with caseating granulomas.

TREATMENT:

CAT 1 DOTS was started along with symptomatic treatment and nutritional optimization. Patient achieved spontaneous menstruation after 2 months of treatment. USG pelvis showed resolution of lesions.

CONCLUSION:

In TB endemic countries its association with reproductive morbidity should not be ignored as early intervention would reduce & reverse reproductive morbidity as well. Good response to ATT with resuming menstruation supported our presumed diagnosis of secondary amenorrhea as a comorbidity in this case.

Title: Uncommon presentation of scrofuloderma in era of anti- tubercular treatment.

Name of Presenter: **Dr Chetan Rajendra Khedkar**

Authors (or Co-authors): **Dr B. O. Tayade, Dr Samruddhi Tayade, Dr Himali Kardile**

Institution/Author Organization: **NKP Salve Institute Of Medical Sciences and Research Centre And Lata Mangeshkar Hospital**

Scrofuloderma is a rare presentation of cutaneous tuberculosis characterized by nodules, sinus tract, purulent exudate, scarring and deformity.

We present a case of 30-year-old male previously clinically diagnosed as a case of Hidradenitis suppurativa, non-responsive to antibiotic treatments and now presenting with complaints of intermittent low-grade fever, weight loss of 6 months duration with a gradually increasing swelling with seropurulent discharge through sinus tract and scarring near the left axilla.

The clinical examination of swelling revealed underlying non tender, matted left axillary lymphadenopathy with no local raised temperature with bilateral nontender matted inguinal lymphadenopathy. The chest x-ray

examination revealed no active pleural parenchymal lesion. The local sonography examination of the swelling revealed the presence of multiple heterogenous matted lymph nodes with sinus tract communicating with the subcutaneous plane. The histopathological examination of the lymph nodes showed the presence of epithelioid granulomas and Langerhans giant cells with foci of caseation necrosis staining positive for acid fast bacilli. The clinico-radiological & histopathological correlation confirmed the diagnosis of Scrofuloderma and patient was started on anti-tubercular treatment. We present this case as the site of lesion posed as a clinical diagnostic dilemma in absence of radiological and histopathological investigations.

Title: PRIMARY EXTRAPULMONARY MDR TB IN IMMUNOCOMPETENT ADULT PRESENTING WITH PLEURAL EFFUSION

Name of Presenter: **DR.D.SHIVA KUMAR NAYAK**

Authors (or Co-authors): **Dr.M.SRAVAN KUMAR, Dr.B.PHANI KUMAR,Dr.PRAVI**

Institution/Author Organization: **KAKATIYA MEDICAL COLLEGE**

BACKGROUND/INTRODUCTION

India is a high tuberculosis burdened country. TB mainly affects the lungs, but cases of extrapulmonary TB are also on rise. MDR-TB develops due to spontaneous mutations in the genes of the bacilli and it requires really higher load of bacteria for the development of primary MDR-TB. Prevalence of primary MDR-TB in India is around 3.5%; however, this prevalence is 20.5% among previously treated cases. Thus the case of primary MDR-TB with extrapulmonary involvement is very rare form of the disease, even in the immunocompromised patients.

HISTORY AND CLINICAL PRESENTATION

A 72 year old male presented to the department with 20 days history of Dry cough, fever, dyspnea, right chest pain.

No past history of tuberculosis. No contact or family history of tuberculosis.

PHYSICAL EXAMINATION

signs of pleural effusion on right side of chest.

INVESTIGATIONS AND DIAGNOSIS

Chest X-ray shows right lower zone homogenous opacity with blunting of right cp angle, right upper zone nonhomogenous opacity.

Diagnostic thoracentesis - straw coloured exudative fluid (protein - 4.5, glucose 43, ADA - 87).

MANTOUX TEST - positive,

pleural fluid cbaat-mtb detected very low, rifampicin resistance detected. sputum aFB 2 samples - negative under fluorescent microscopy. All other routine investigations were normal.

MANAGEMENT - patient started on MDR SHORTER REGIMEN.

CONCLUSION

The present case will broaden our understanding of these rare presentations of a common disease and will also serve as a tool for early diagnosis and management of primary extrapulmonary MDR-TB.

Title: KOCH'S THYROIDITIS

Name of Presenter: **Dr.Divyanjali**

Authors (or Co-authors): **Dr.M.Sravan Kumar, Dr.Phani Kumar**

Institution/Author Organization: **Kakatiya Medical college**

INTRODUCTION :

Tuberculosis of thyroid is uncommon disease. It is sometimes associated with Regional lymphadenopathy. Diagnosis is often difficult as clinical presentation may resemble Goiter or acute thyroiditis.

History and clinical presentation:

A 24 yr female presented with complaints of fever - 1m, dry cough - 20d, vomitings - 10d, Neck pain - 1week. Contact History of PTB present - mother 5 yrs. back.

Physical examination:

Small swellings were present on lower 1/3rd of SCM, normal vesicular sounds were heard on auscultation.

Investigations and Diagnosis :

Sputum AFB - negative,

Chest X-ray PA view - superior mediastinal widening

CECT chest - multiple enlarged lymph nodes in pretracheal, para tracheal, retrosternal,

Para esophageal region with small areas of necrosis.

USG neck - bilateral enlarged lymph nodes level -4, ill defined hypoechoic lesion in left lobe of thyroid

FNAC of cervical lymph node - reactive lymphadenitis

FNAC of thyroid - suspicious of papillary carcinoma of thyroid.

Biopsy of thyroid - structures of thyroid with Epithelioid granuloma, Langhans giant cells Lymphocytic infiltrates (Koch's thyroiditis)

Management:

Patient started on ATT.

Conclusion:

Tuberculosis of thyroid sometimes wrongly diagnosed as carcinoma. Final diagnosis should be made on H/p examination.

Title: A RARE CASE PRIMARY TUBERCULAR OSTEOMYELITIS OF STERNAL MANUBRIUM WITH INVOLVEMENT OF STERNOCLAVICULAR JOINT

Name of Presenter: **DR. G. REETU SINGH**

Authors (or Co-authors): **V. Vinod Kumar, K.R. Anand**

Institution/Author Organization: **STANLEY MEDICAL COLLEGE**

INTRODUCTION

Sternal TB is a rare phenomenon constituting 0.3% of all osteomyelitis. This clinical case report depicts a case of isolated tubercular osteomyelitis of the sternum

CASE REPORT

58 year old female admitted with complaints fever for past one month, pain and swelling over the anterior aspect of chest for 20 days. Physical examination revealed a swelling of size 4x3 cm present on the anterior chest wall over the manubrium. CT chest showed internal air pockets in the left half of upper end of manubrium with surrounding soft tissue collection and air pockets. MRI chest showed osteomyelitis of the manubrium with abscess extending into anterior mediastinum, left sternoclavicular joint. **DISCUSSION** Osteomyelitis of sternum usually occurs due to chest trauma, mediastinitis, as a complication of sternotomy. Clinical manifestations of sternal tuberculosis and pyogenic sternal infections are different the former follows a more indolent course, the pyogenic infections will have a fulminant clinical course. In certain instances, the underlying tuberculous infection is masked by a superadded pyogenic infection.

CONCLUSION

The complications can be prevented if detected and treated early. Hence though a rare entity high index of suspicion of tuberculosis is essential in evaluation of any case of sternal swelling and prompt treatment to be initiated.

Title: TUBERCULOSIS MASTITIS PRESENTING AS BREAST ABSCESS

Name of Presenter: **DR.GOUTHAMI.KR**

Authors (or Co-authors): **DR A.MAHILMARAN, DR SUNDARARAJA PERUMAL, DR NANCY GLORY, DR ALLWIN VIJAY**

Institution/Author Organization: **Institute of thoracic medicine , Madras medical college**

INTRODUCTION

Tuberculous mastitis is a rare clinical entity, reported as 3% of mammary lesion. The incidence of tuberculous mastitis has been reported to be between 1-4.5%.

HISTORY AND PRESENTATION

A 35yrs female presented with complaints of left breast lump, pain, fever for 3 months, no history of weight loss or cough with expectoration. Examination of the breast revealed a tender, ill-defined, irregular, firm lump (8x8 cm). Not adherent to the breast tissue and skin. Inhabiting the upper outer and lower outer quadrant of left breast. Respiratory system examination was unremarkable.

DIAGNOSIS

Her routine hematological examination revealed leukocytosis. Her ESR- 50mm/1st hr. Chest radiograph was unremarkable. FNAC of the Breast lump revealed granulomatous mastitis. AFB was negative. Mantoux was positive. Pus CBNAAT detected MTB. Biopsy of the lump revealed breast parenchyma with granulomas comprising of epithelioid cells, lymphocytes and Langhans giant cells.

MANAGEMENT

Patient was treated with ATT for 9 months. After 6 months follow up, the patient was asymptomatic and no residual lump.

CONCLUSION

Diagnosis of tuberculous mastitis is finding of granulomatous lesion with Langhans giant cells and response to ATT. AFB is not seen in most cases. Prompt diagnosis and adequate treatment can avoid unnecessary operations in these patients.

Title: Treating Wegener's Granulomatosis and Tuberculosis – Double trouble

Name of Presenter: **Harsha Jain**

Authors (or Co-authors): **Rohit Kumar, Pranav Ish, Nitesh Gupta, Siddharth Raj Yadav**

Institution/Author Organization: **VMMC & Safdarjung Hospital, New Delhi**

A 60-year-old lady with type 2 diabetes mellitus for 10 years, presented with complaints of running nose, cough with mucoid expectoration and breathlessness for one year. She denied history of fever, haemoptysis, and loss of appetite, loss of weight and past history of tuberculosis. On further evaluation, serum biochemistry, complete blood profile and urine routine was unremarkable. HRCT Chest showed

multiple nodular opacities with cavitation. Sputum for AFB and CBNAAT revealed positivity for Mycobacterium tuberculosis which was Rifampicin sensitive. Histopathology of lung biopsy specimen showed granulomatous lesions with vasculitis. ANCA profile revealed C-ANCA positive by ELISA. As per American College of Rheumatology criteria, the patient met 3/5 criteria for Wegener's granulomatosis. Hence, the patient was diagnosed with Wegener's Granulomatosis (early generalized) with sputum positive Pulmonary Tuberculosis. She was started on anti-tubercular therapy with first line drugs under DOTS. After completion of intensive therapy, she was initiated on Methotrexate and glucocorticoids. We conclude that treating dual entities like tuberculosis and Wegener's Granulomatosis is challenging as immunosuppressive therapy is one of the contraindications for active infection. Such patients need to be closely observed and followed up during the course of illness for any worsening of symptoms and organ dysfunction so as to start immunosuppressive therapy.

Title: Endotracheal tuberculosis masquerading as tracheal mass

Name of Presenter: **Dr Ijas V I**

Authors (or Co-authors): **Dr Yuvarajan S, Dr Praveen R, Dr Antonious Maria Selvam**

Institution/Author Organization: **Sri Manakula Vinayagar Medical College and Hospital**

INTRODUCTION:

Endotracheal tuberculosis is defined as tuberculous infection of trachea with microbial and histopathological evidence, with/without parenchymal involvement. It is a rare and localized form that can present with acute respiratory failure due to upper airway obstruction. Only 150 cases have been reported worldwide.

HISTORY:

A 23 year old male presented with complaints of dry cough since 1 week, 1 episode of hemoptysis and weight loss. On examination vitals were stable and systemic examinations were normal.

PRESENTATION:

Chest X-ray showed heterogeneous opacity in right upper zone but sputum culture, AFB and CBNAAT were negative. CT Thorax revealed right upper lobe consolidation, multiple cavities and cystic changes with tree in bud appearance.

DIAGNOSIS:

Diagnostic Bronchoscopy done, revealed well defined friable nodule in the lower third

of trachea (Right lateral wall). Biopsy from this nodule was suggestive of caseating granulomatous inflammation. Rifampicin sensitive MTB detected by CBNAAT in both BAL and biopsy samples.

MANAGEMENT:

ATT initiated and check bronchoscopy post intensive phase revealed near complete resolution of the tracheal nodule.

CONCLUSION:

Endotracheal TB is a very rare clinical entity and can present in varied forms. This case, diagnosed promptly by FOB is presented to emphasize the variability of presentation of the lesion and importance of macroscopic recognition.

Title: A RARE CASE OF PRIMARY MULTIDRUG RESISTANT TUBERCULOSIS OF THE BREAST

Name of Presenter: **JAANAKHI V M**

Authors (or Co-authors): **DR. NARENDRA KHIPPAL, DR. MOHAMMED JAVED QURESHI**

Institution/Author Organization: **SMS Hospital, Jaipur**

INTRODUCTION:

Breast is an uncommon site for Extra Pulmonary tuberculosis having incidence of 0.64 to 3.54% in Tubercular endemic countries like India. It clinically presents as a solitary, ill-defined, unilateral hard lump in the upper outer quadrant of breast in young lactating multiparous women. It mimics pyogenic inflammatory disease and carcinoma of the breast.

CASE REPORT:

A 41-year-old married, multiparous, non-lactating woman had slowly progressive painful swelling in the right breast for 6 months. She had no other remarkable history except for contact with MDR PTB patient. Physical examination revealed a lump in the lower, inner quadrant of the right breast measuring 6*4 cms, tender and non-fluctuant. The breast skin overlying the lump was inflamed. Systemic examinations were normal. USG revealed an organized abscess in the right breast. Chest X-ray found to be normal. Pus was aspirated and pyogenic culture and sensitivity was sterile, CBNAAT and SL-LPA detected Mycobacterium tuberculosis resistant to Rifampicin and Second line Injectables. Patient was started on Bedaquiline containing regimen after which showed clinical improvement.

CONCLUSION:

Primary MDR tuberculosis should be kept as differential diagnosis of breast lump in

tubercular endemic countries. Pus should be investigated for tuberculosis and drug susceptibility pattern must be found out for better outcome and survival.

Title: AN ENDEMIC DISEASE DISGUISED AS BEHCET'S DISEASE

Name of Presenter: **DR JITENDRA KUMAR CHOUDHARY**

Authors (or Co-authors): **DR VINOD JOSHI, DR SHUBHRA JAIN, DR ASHISH SINGH**

Institution/Author Organization: **SMS MEDICAL COLLEGE JAIPUR**

INTRODUCTION

Behcet's disease is characterised by multisystem involvement including oro-oculo-genital lesions with variety of cutaneous and systemic manifestations. Here is a case of rare presentation of tuberculosis in a 23yr old female that mimics Behcet's disease.

CASE REPORT

A 23yr old female clinically diagnosed as Behcet's disease (on basis of skin lesions – folliculitis, bilateral deep vein thrombosis – on colour Doppler of lower limbs and oro-genital ulcers) on steroids and dabigatran not improved after 20 days of therapy, presented with chest heaviness, dyspnea, cough, skin lesions, oro-vaginal ulcer, leg swelling and pain. Computed tomography (CT) revealed left sided pleural effusion and pericardial effusion. Pleural fluid was lymphocytic, exudative with high adenosine-de-aminase (ADA=62U/L). Histopathological examination of pleural biopsy revealed chronic caseating granulomatous inflammation. Relevant investigations for Vasculitis (ANA, Rheumatoid Factor, lupus anticoagulant, HLA-B51&52, Anti-Cardiolipin-Antibody IgG& IgM, Beta-2 Glycoprotein 1, Anti Ds-DNA, p-ANCA, c-ANCA) were found negative. Patient has clinical and radiological improvement on Anti tubercular treatment

CONCLUSION

TB is a mischievous disease, having varied presentation. In this case, patient presented as multi-system disorder, mimicking Behcet's disease, but improved on anti-tubercular-treatment, supported by caseous granulomatous inflammation on pleural tissue. Hence, any multisystem disorder should be evaluated thoroughly.

Title: Pulmonary Tuberculosis presenting as subcutaneous emphysema and pneumomediastinum without pneumothorax

Name of Presenter: **K.SHYAMALA PRAGNYA**

Authors (or Co-authors): -

Institution/Author Organization: **ANDHRA MEDICAL COLLEGE**

Background:

Subcutaneous emphysema is seen frequently secondary to pneumothorax, pneumomediastinum, chest trauma, dental extraction etc. we report a case of extensive cavitary pulmonary tuberculosis presenting with subcutaneous emphysema and pneumomediastinum without pneumothorax.

Case Report:

A 15 year old girl presented to Pulmonary medicine department OPD, Andhra Medical College, with chief complaints of swelling over right side of chest, neck and face for 3 day. breathlessness, cough for 5 days. She has a history of low grade fever, associated with evening rise of temperature since 3 months. On Local examination crepitus was palpated over swollen area of chest and neck. CT chest showed pneumomediastinum and subcutaneous emphysema without pneumothorax. She is managed conservatively with rest, oxygen supplementation & cough suppressants. Sputum for AFB was positive and Sputum CBNAAT is Mtb detected and rifampicin sensitive. She was started on ATT under NTEP. Antinuclear antibody screening was negative. she is relieved of subcutaneous emphysema gradually over 5 days.

Conclusion:

High clinical suspicion of tuberculosis should always be kept in mind in young patients presenting with pneumothorax and pneumomediastinum without trauma.

Title: Tubercular pleural effusion in a case of COVID-19 infection

Name of Presenter: **KAMMARA VINOD ACHARI**

Authors (or Co-authors): **GUNA JEFFERSON, GIRIJA NAIR, ABHAY UPPE**

Institution/Author Organization: **DR DY PATIL HOSPITAL, NAVI MUMBAI**

INTRODUCTION

Covid-19 has a wide range of presentation including co-infection with tuberculosis. We present a case of a tubercular pleural effusion in a confirmed COVID-19 case.

CASE PRESENTAION

A 21-year- old male presented to the ER with fever, breathlessness and non-productive cough for 10 days with an opening oxygen saturation of 89%. Chest X-ray revealed a homogenous opacity in the left lower zone.

HRCT thorax confirmed the presence of moderate left sided pleural effusion with multifocal ground glass opacities and patchy areas of consolidation. RTPCR fir COVID-19 was positive and the patient was admitted for further management to the wards. Inflammatory markers for covid-`19 were deranged including CRP, D-Dimer, Ferritin, LDH and IL-6.

MANAGEMENT

Standard institutional protocol was followed for COVID-19 management that included low flow oxygen support, steroids, injectable remdesivir and anticoagulation with heparin. A total of 500ml of pleural fluid was tapped under USG guidance. Pleural fluid analysis revealed an ADA of 44 with a lymphocytic predominance that prompted the initiation of ATT under DOTS. The patient tolerated the combination of ATT and remdesivir well without any complications and was discharged for home isolation with stable vital parameters and was asked to follow up after 2 weeks.

Title: ISONIAZID INDUCED EXFOLIATIVE DERMATITIS IN A PATIENT WITH RENAL AGENESIS

Name of Presenter: **Dr.KHUSHBOO KHURANA**

Authors (or Co-authors): **Dr.JAI KISHAN, Dr.AJIT YADAV**

Institution/Author Organization: **MMIMSR,MULLANA**

CUTANEOUS DRUG REACTIONS WITH ANTI-TB DRUGS CAN OCCUR ANYTIME AFTER INSTITUTION OF DRUGS. THESE REACTIONS CAN BE IMMEDIATE HYPERSENSITIVITY REACTION, DELAYED HYPERSENSITIVITY REACTION, DUE TO CUMULATIVE EFFECT OF DRUGS, ADJUVANT EFFECT AS IN CASE OF RIFAMPICIN AND CLOFAZIMINE OR DUE TO RELEASE OF TUBERCULOPROTEINS. SKIN LESION CAN RANGE FROM MILD SELF LIMITING REACTION TO SEVERE FORMS LIKE STEVEN JOHNSON SYNDROME. SKIN LESIONS CAN BE A PRURITIC RASH, MACULOPAPULAR LESION, URTICARIAL ERUPTIONS, LICHENOID LESION OR SEVERE FORMS LIKE EXFOLIATIVE DERMATITIS AND STEVEN JOHNSON SYNDROME. HERE WE PRESENT A CASE OF ISONIAZID INDUCED SEVERE EXFOLIATIVE DERMATITIS OCCURING AFTER STARTING ANTI TUBERCULAR TREATMENT IN A PATIENT OF PULMONARY TUBERCULOSIS

CONCLUSION -

ANTI TUBERCULAR DRUGS USUALLY CAUSE MINOR SIDE EFFECTS BUT SEVERE SKIN REACTIONS CAN ALSO OCCUR AND SHOULD BE KEPT IN MIND WHEN A PATIENT OJN ATT PRESENTS WITH SKIN LESIONS OF ANY SEVERITY

Title: AN UNUSUAL PRESENTATION OF TUBERCULOSISName of Presenter: **Kovuri Venkatesh**Authors (or Co-authors): **Dr Dhruva Chaudhry, Dr Pawan kumar Singh**Institution/Author Organization: **PGIMS Rohtak****INTRODUCTION –**

IRIS is paradoxical clinical worsening of a known condition or the appearance of a new condition after initiating antiretroviral therapy (ART) therapy in HIV-infected patients resulting from restored immunity to specific infectious or non-infectious antigens. It can be rarely seen as paradoxical worsening of tuberculosis in an immuno-competent individual after introduction of ATT. Here we report one such case diagnosed by detail clinical examination and investigation

CASE REPORT –

22yr old female with no co-morbidities was diagnosed to be sputum positive pulmonary tuberculosis and started on ATT. After 3months of treatment developed fever, cough and chest pain On examination she was febrile, had inguinal lymphadenopathy, decreased air entry on right side and splenomegaly. Radiology showed pleural effusion with mediastinal, abdominal lymphadenopathy and lesions in spleen Detailed examination, blood workup, pleural fluid analysis and cytological evaluations were done which excluded other diseases and diagnosis of IRIS was made and treated with ATT and steroids to which she showed significant clinical and radiological improvement

CONCLUSION –

IRIS in immuno-competent individuals is not uncommon and is a disease of exclusion, one should be vigilant to always keep a differential of IRIS in patient of tuberculosis on ATT with recurrence of symptoms.

Title: A rare case of laryngeal tuberculosisName of Presenter: **Dr.Kunchala anand**Authors (or Co-authors): **Dr.Md Mateenuddin Saleem , Dr.tanzil rahaman, Dr.D.kavya.**Institution/Author Organization: **Department of Pulmonary Medicine, Kamineni Institute of Medical sciences, Narketpally.****INTRODUCTION:**

Laryngeal tuberculosis is rare with an incidence of <1% and develops due to direct spread of mycobacterium tuberculosis to larynx from contaminated sputum or lympho-hematogenous spread. Here we report a case

of Laryngeal tuberculosis which was being mistreated as epiglottitis.

PRESENTATION:

A 65 year old female presented with cough with sputum, hoarseness of voice, low grade fever, loss of weight & loss of appetite since 3 months. Earlier patient consulted a private practitioner, where her sputum for AFB was done which was negative, patient was misdiagnosed as epiglottitis and was being treated with antibiotics without any further examination.

DIAGNOSIS:

As she had complaints of hoarseness, direct laryngoscopy was done which revealed hyperemic, edematous left vocal cord. Biopsy revealed epithelioid granulomas with Langhan's type giant cells and caseating granulomas. we got a repeat sputum examination which was positive.

MANAGEMENT:

Patient was started on standard regimen of ATT. She is currently on follow up with good response.

CONCLUSION:

Laryngeal TB is a rare manifestation in adults. An increased awareness of its occurrence and high index of suspicion in patients with hoarseness of voice helps in clinching diagnosis and preventing further complications like subglottic stenosis, posterior glottic stenosis and vocal cord paralysis.

Title: Isoniazid Induced Alopecia: A Rare Case ReportName of Presenter: **Dr Madhulika Singh**Authors (or Co-authors): **Dr Meghna Patel, Dr Kaushal Bhavsar, Dr Kiran Ram**Institution/Author Organization: **GMERS Sola Medical College ,Ahmedabad**

Isoniazid is a first line anti tubercular drug used for treatment of tuberculosis. Alopecia is one of the rare side effects of isoniazid. Alopecia is seen as a side effect mainly in antimetabolic drugs. Other antitubercular drugs causing alopecia are ethionamide and thioacetazone. Here we present a case of isoniazid induced alopecia in a 20 year old female.

She was placed on first line anti tubercular medication for ocular tuberculosis. After 2 weeks of treatment, she presented to us with nonscarring alopecia mainly over the frontal area. She showed no signs of local inflammation or hair damage.

Local examination and laboratory

investigations were done to rule out other underlying medical conditions. As the patient was on Anti Tubercular therapy a probable diagnosis of isoniazid induced alopecia was considered and we withdrew isoniazid from the treatment. After two weeks of withdrawal of the drug from therapy, hair growth was seen over previously bald areas.

This goes on to prove that pretreatment counselling of any patient should be done in a proper manner so as to prevent non compliance to treatment. Also, awareness about the side effects can help patients to consult the physician earlier.

Title: A RARE COMPLICATION OF PLEUROPARENCHYMAL TUBERCULOSIS - A CASE REPORTName of Presenter: **MANGU DEVI PRIYANKA**

Authors (or Co-authors): -

Institution/Author Organization: **KATURI MEDICAL COLLEGE****INTRODUCTION :**

Empyema necessitans is a rare clinical entity in which an intrathoracic empyema decompresses by extending itself through the parietal pleura and weakness of chestwall,forming a collection of pus in the extrathoracic soft tissues AIM : To explain the importance of Early suspicions,detection treatment helps to prevent further complications and need for surgical interventions.

METHODOLOGY :

A 25yr male presented with two swellings over the anterior chest wall,decreased appetite and significant weightloss.On examination respiratory system examination was normal except for two soft non tender swellings measuring 3*2 2*1cm over anterior aspect of chest wall over sternum.

RESULTS :

1)ESR-raised 2)CXR- loculated collections in leftupper and bilateral lowerzones 3) USGchest- two ill defined heterogenous lesions in midline of left upper chest and connection between 2 lesions. 3)CECTchest-loculated pleural collections on leftside with extending into subcutaneous planes through intercostal muscles communicating with swellings over chestwall. 4)Induced sputum-NEGATIVE for CBNAAT, 5)Bronchoscopy-Bronchial washings for CBNAAT revealed positive for MTB and SENSITIVE to rifampicin. 6)FNAC-GRANULOMAUS INFLAMATION with necrotic background.

RESULTS & CONCLUSION :

There are few similar casereports of empyema necessitans related to PULMONARYTB as it is rare complication. This case highlights necessity to include empyema necessitans in the preliminary diagnosis in case of painless soft tissue swelling on the chestwall.

Title: Pott spine

Name of Presenter: **Dr. MANJUL KUMAR BAJPAYEE**

Authors (or Co-authors): **Dr. G. Kumar/ Dr. Abhijeet khandelwal**

Institution/Author Organization: **Index medical college and research center indore**

Introduction:

Pott disease is a TB of spine. Usually due to hematogenous spread from other sites, often the lungs. The lower thoracic and upper lumbar vertebrae of the spine most often affected. Primary form is rare.

Aim:

To diagnose pott spine

Method:

we describe case of a women with clinical sign and radiographic findings , CBC with ESR report.

Result:

a 55 year old female suman bai presented to the old with complain of mild fever since 2month and and backache since month, poor appetite since 3month, no past history of pulmonary TB. o/e- vitals are stable, Hb 13.2g/dl, montoux shows mild erythromycin and undulations seen around inoculation less then 10mm, Inv: HBsAg reactive, xray findings suggest reduced height of T11 vertebra with sclerosis of adjacent end plates of T11 and T12 vertebra and infiltration b/l lung field, mri findings suggestive of lumbar spondylitis.

Conclusion:

Pott spine can occur more commonly in lumbar spine, associated with lytic destruction of anterior portion of vertebral body, increase ant. Wedging and collapse of vertebral body. Psoas shadow enlarged. Management is ATT, analgesic, surgical drain if spinal abscess. If treatment delay Prognosis may poor may cause kyphosis, paraplegia , spinal cord compression.

Title: Turn up like a bad penny- A case of BCG induced Tuberculous abscess

Name of Presenter: **Dr A Mathivadhani II yr post graduate**

Authors (or Co-authors): **Dr Suganya MD, Dr Bharathi babu MD, Dr R Prabhakaran MD**

Institution/Author Organization: **Govt Rajaji Hospital, Madurai Medical College, Madurai. Tamilnadu**

Introduction:

Bacillus – Calmette – Guerin is a vaccine given to infants in TB endemic countries. Most commonly used strain Mycobacterium bovis.

Presentation & diagnosis:

4 months old healthy male baby had swelling and oozing of pus from bcg site left arm for 10days.No contact with known case of tuberculosis and no evidence of prior treatment. Diagnosed as abscess and a needle aspiration of the lesion was performed. On a follow up of 1month, swelling doesn't resolve and no features of adenopathy / systemic signs. So,we aspirate pus and sent for Gene Xpert it found to be MTB detected.

Management:

Initiated anti- tubercular drugs on follow up.

Title: Tubercular Mastitis A Rare Clinical Entity

Name of Presenter: **DR.NARENDRA**

Authors (or Co-authors): **Prof.Dr.Parvati Dutta, Assoc.Prof.Dr.Rekha Manjhi, Assoc.Prof.Dr.Sudarshan Pothal, Asst. Prof.Dr.Aurobindo Behera, Asst.Prof. Dr.Gourahari Pradhan**

Institution/Author Organization: **VEER SURENDRA INSTITUTE OF MEDICAL SCIENCE AND RESEARCH**

INTRODUCTION-

Breast-tuberculosis is a uncommon condition. it can easily be mistaken, clinically and radiologically, for a breast malignancy/pyogenic abscess. A thirty-year-old non-lactating and multiparous women presented with complaint of Lump in right breast and appetite loss since 3months, there was no history of fever, chest trauma, cough, with no history of tuberculosis or breast carcinoma in the family member A lump 4cmX4cm in size was palpable in inner-upper quadrant of right breast. It was firm in consistency, non-tender and not fixed with the skin or chest wall. The nipple was normal and there was no axillary lymphadenopathy. left breast was normal. Gynaecological and systemic examination revealed no abnormality. Her haematological and biochemical parameters were within normal limits. Chest radiography revealed no evidence of Koch's lesion or metastasis. USG breast showed-A 40mmX39mmX31mm hypoechoic lesion over right breast Left breast normal. Bilateral-Axilla are free. USG abdomen and pelvis-normal. FNAC of breast swelling-Impression-features

suggestive of fibroadenoma with super added tubercular mastitis. AFB smear of aspirate from lump-was positive for AFB. Treatment -She was put on a 6-month course of anti-tubercular therapy according to NTEP. The lump size was decreased within 4 weeks of initiation of treatment and patient is under follow-up. Learning Point-Breast-tuberculosis should be kept in mind before extensive investigation which is treatable and curable

Title: CHOLESTEROL PLEURISY: A RARE COMPLICATION OF TUBERCULOSIS.

Name of Presenter: **Dr. Natesh G**

Authors (or Co-authors): **Dr. V Gangadharan, Dr. Anbumaran, Dr. Prasanth**

Institution/Author Organization: **SAVEETHA MEDICAL COLLEGE**

INTRODUCTION:

Pseudochylothorax is a rare complication of long standing tuberculosis. The pathogenesis of cholesterol accumulation is due to degradation of erythrocytes and neutrophils in a fibrosed pleural cavity.

HISTORY: A 29 year old man, previously treated for TB Effusion eight years ago came with complaints of occasional shortness of breath and swelling in perianal region for three years. Respiratory system examination showed an impression of Left-sided pleural effusion.

MANAGEMENT:

Blood investigation showed elevated ESR and Sputum AFB was negative. FNAC from perianal mass showed a granulomatous picture. Xray, USG chest and CT thorax showed impressions of Left side loculated pleural effusion with pleural thickening. ICD inserted and milky fluid drained, pleural fluid analysis showed elevated WBC with lymphocyte predominance, ADA, LDH, Cholesterol and low triglycerides with a CHOL/TG ratio > 1 indicative of cholesterol pleurisy. Gene xpert of pleural fluid detected Mycobacterium tuberculosis and ATT (HRZE) was started.

COMPLICATION:

Due to long-standing effusion patient developed Bronchopleural fistula and pleural decortication was done. Post-procedure patient is on ATT, with clinical and radiological improvement.

CONCLUSION:

Treating physicians must understand the importance of quick diagnosis and complications of Pseudochylothorax such as reactivation of tuberculosis, Aspergillus infections, BPF, Pleurocutaneous fistulae.

Title: Tuberculosis masquerading as a connective tissue disorder in a 32 yr old female

Name of Presenter: **Dr omkar malandkar**

Authors (or Co-authors): **Dr Priyadarshini Behera, Dr Banana Jena**

Institution/Author Organization: **Ims and sum hospital, bhuvaneshwar**

Tuberculosis is one of the great mimickers of medicine and a high degree of clinical suspicion should be maintained due to its protean manifestations.

We present a case of 32 yr old female with disseminated TB who was referred to the rheumatology department for evaluation of ?CTD. Patient presented signs and symptoms mimicking SLE such as high grade fever a/w chills and rigors, generalised anasarca, breathlessness, weakness and vomiting and generalised joint pain. After evaluation patient was found to have proteinuria and hematuria, severe anemia along with polyserositis and mild circumferential pericardial effusion on 2d echo, ANA titre 2+; so was started on iv steroids. However patient showed no clinico-radiological improvement and so on further evaluation, multiple evidence of TB such as new onset pleural fluid suggestive of TB (microbiologically confirmed CBNAAT), strong radiological suspicion of TB on HRCT thorax+abdomen, L.N. FNAC suggestive of necrotising granulomatous lymphadenitis, repeat ANA titre negative were found. ATT along with steroids was started. On follow up patient is showing good clinico-radiological response.

In conclusion a multimodality approach along with cognizance on part of the clinician for the rare manifestations of TB mimicking CTD is needed for the prompt diagnosis and institution of anti-tubercular therapy.

Title: TUBERCULOMA EN PLAQUE-CAVERNOUS SINUS SYNDROME-A CASE OF EXTRAPULMONARY TUBERCULOSIS

Name of Presenter: **DR.S.PRIYADHARSHINI**

Authors (or Co-authors): **DR.V.ARUNBABU., DR.G.ALLWYN VIJAY., PROF. DR.A.MAHILMARAN**

Institution/Author Organization: **INSTITUTE OF THORACIC MEDICINE, MADRAS MEDICAL COLLEGE, CHENNAI, TAMILNADU**

Introduction

Tuberculosis involving Central nervous system

accounts for 1% of all cases of Tuberculosis. we are reporting a very rare case of neurological tuberculosis presenting as cavernous sinus syndrome.

Case report

A 48year old female presented with headache for 8months, drooping of left eyelid for 2 months and double vision for 1week, H/o low grade fever for 5months, loss of weight and appetite, Patient had ptosis of left eyelid, outward and downward gaze of left eye, impaired adduction with pupils reacting to light. Magnetic Resonance Imaging of Brain with contrast showed homogenous contrast enhancing soft tissue lesion in left cavernous sinus with left orbital apex thickening with narrowing of left cavernous segment of internal carotid artery, Tuberculin skin test – positive, Quantiferon gold –positive with normal chest radiograph, serum Angiotensin Converting Enzyme level normal, CerebroSpinal Fluid analysis showed normal glucose and protein. Since Tuberculosis is prevalent in India, Patient was diagnosed as left cavernous sinus tuberculosis and started on empirical Anti-tuberculosis treatment and steroid. Patient responded well and symptomatically improved.

Clinical Implication

This case highlights varied spectrum of Tuberculosis presentation responding well to Anti-tuberculosis therapy without nerve damage. High index of Tuberculosis suspicion avoids aggressive surgical management associated with high mortality

Title: An Unusual Case of Hepatitis B Masking Omental Tuberculosis

Name of Presenter: **Dr.Rishab Rampradeep**

Authors (or Co-authors): **Dr.V Gangadharan**

Institution/Author Organization: **Saveetha Medical College Hospital, Chennai**

Gastrointestinal tuberculosis often poses diagnostic challenges due to the nonspecific nature of presentation and mimicry of abdominal pathologies. The abdomen is involved in 11% of extra-pulmonary tuberculosis, the ileocaecal region being the commonest site, rarely involving the peritoneum and omentum. We report a case of a 36-year-old man, known case of Hepatitis B who presented with abdominal discomfort for 3 months associated with nausea and vomiting. There was unintentional weight loss of 6kg. There was no history of fever or jaundice. Patient's father had previously succumbed to tuberculosis. Examination revealed a protuberant abdomen with tenderness and guarding over the umbilicus. Liver and spleen were not palpable. Chest X-ray was normal.

Liver function tests were normal, while ESR was elevated. Purified protein derivative test was positive with 14mm induration. CECT Abdomen revealed diffuse omental thickening with nodules, thickened nodular bowel loops and enlarged retroperitoneal nodes. Diagnostic laparoscopy showed omental tubercles with dense adhesions. Peritoneal biopsy was taken and sent for histopathological examination and mycobacterium tuberculosis CBNAAT. Histopathology showed features consistent with tuberculosis. Biopsy smear detected Acid-Fast Bacilli. CBNAAT was positive detecting mycobacterium, sensitive to Rifampicin. Patient was consequently started on oral antituberculosis therapy and is on regular follow-up, with symptomatic improvement.

Title: Tuberculosis of the oral cavity - An uncommon presentation of common disease.

Name of Presenter: **Dr. S. Madhan**

Authors (or Co-authors): **Dr.Yuvarajan.S, Dr.Praveen.R, Dr.Antonius Maria Selvam**

Institution/Author Organization: **Sri Manakula Vinayagar Medical College and hospital**

Introduction:

Oral cavity TB is one of the rare form of Extra-Pulmonary Tuberculosis accounts for 0.1-0.5% of all TB infections. Among Oral cavity TB, tongue is the most common site followed by floor of mouth, soft palate, anterior pillars, uvula and buccal mucosa being the rarest.

History:

A 50 year old male, known smoker and tobacco chewer, came with complaints of painful lesion over the right side of the mouth for past 2 months, which was insidious in onset, rapidly progressive in nature.

Presentation:

On examination of oral cavity, there was ulcer over right buccal mucosa measuring 3*2 cm extending to angle of mouth. The ulcer was covered by slough with erythematous halo having indurated base and well defined margins. Diagnosis: A Wedge biopsy of ulcer under L.A was taken. Biopsy showed caseating granulomatous lesion with Gene-Xpert detecting Rifampicin sensitive M.Tb.

Management:

Started on ATT, After 6 months of therapy, patient reported with near normal buccal mucosa.

Conclusion:

Oral TB is uncommon entity which is difficult to diagnose and treat. Oral TB should be

considered as differentials when ulcer is persistent, non-healing and unresponsive to topical therapy. Early diagnosis and prompt treatment considered imperative in spread of this lethal disease.

Title: A RARE CASE OF ANKLE-FOOT MULTIDRUG RESISTANT TUBERCULOSIS

Name of Presenter: **SANTOSHHAMMIGI P HAMMIGI**

Authors (or Co-authors): -

Institution/Author Organization: **INSTITUTE OF RESPIRATORY MEDICINE, SMS MEDICAL COLLEGE, JAIPUR**

INTRODUCTION:

Bones and joints are involved in 1-3% of all cases of tuberculosis and 10% of these affect foot. Among these 50% patients do not show pulmonary manifestations. Here we present a rare case of Ankle-foot MDR-TB.

CASE REPORT:

A 37year male, smoker, non-diabetic, who went undiagnosed for the chronic left foot abscess for last 2years with no h/o trauma presented with pain and swelling over left foot since 2years and limping on left leg since 2months. He had taken anti-tubercular treatment(ATT) 4 years ago for tubercular lymphadenopathy. On examination, vague swelling noted over left ankle more on lateral side with ill defined margins, redness and tenderness present causing painful and restricted ankle movements. Systemic examination was normal. MRI left ankle showed infective arthritis with abscess formation. Surgical aspiration of abscess was done and pus CBNAAT came as Rifampicin resistant Mycobacterium tuberculosis. Pus pyogenic and fungal culture-sensitivity were sterile. Chest Xray appeared normal. Sputum AFB and CBNAAT were negative. Patient was put on Shorter regimen for MDR-TB and improved thereafter.

CONCLUSION:

Ankle-foot tuberculosis poses risk to diagnostic and therapeutic delay due to its uncommon site and its ability to mimic other diseases. Early diagnosis and ATT is essential in preventing joint involvement and other complications.

Title: A CASE OF PLEURAL TUBERCULOSIS MASQUERADING AS MALIGNANCY

Name of Presenter: **SHAIK UMAR PASHA**

Authors (or Co-authors): **DR.R.RAMAKRISHNA, DR.T.ARUNA**

Institution/Author Organization: **NRI MEDICAL COLLEGE AND GENERAL HOSPITAL**

INTRODUCTION:

Pleural tuberculosis can present with various radiological manifestations which often poses diagnostic dilemma . One of the manifestations being pleural based nodules and often misdiagnosed as primary or secondary malignancy particularly where sputum examination and pleural fluid analysis is negative for tuberculosis.

Case Report:

A 52 year old male patient presented with cough and shortness of breath since 3 months. He was a chronic smoker with history of significant weight loss , he denies prior history of anti tuberculosis drugs or contact with a patient of pulmonary tuberculosis and denies exposure to asbestos. His blood investigations are normal and CT chest showed left sided pleural based nodules, pleural thickening with mild pleural effusion. Pleural fluid analysis revealed exudative nature with lymphocytosis and negative for malignant cells. CT guided biopsy was done in view of inconclusive pleural fluid analysis. Though clinical and radiological presentation were suggestive of malignancy to our surprise the biopsy revealed granulomatous inflammation suggestive of tuberculosis.

CONCLUSION :

Pleural tuberculosis can masquerade as primary or secondary pleural malignancy. In cases in which tuberculosis is misdiagnosed as malignancy, it is better to go for tissue diagnosis

Title: A RARE CASE OF ORO-FACIAL TUBERCULOSIS

Name of Presenter: **DR. SHIV KUMAR PANDEY**

Authors (or Co-authors): **DR. KUMAR GIRENDRA, DR. ABHIJEET KHANDELWAL, DR. SUNIL MUKATI, DR. ROTHMAN PT, DR. KSHITIZ CHOURASIYA**

Institution/Author Organization: **INDEX MEDICAL COLLEGE HOSPITAL & RESEARCH CENTRE, INDORE**

INTRODUCTION:

Orofacial TB (OTB) is a rare manifestation of extrapulmonary TB. Can be primary/secondary. Primary form is rare & commonly found in children and adolescents. Secondary form is common & is usually seen in middle-aged and elderly patients. TB can involve any site of the oral cavity and associated structures such as tongue, palate, lips, oral mucosa, jaw bones, sinuses, temporomandibular joint etc.

AIM:

To diagnose OTB in orofacial ulcerative disease.

METHOD:

We describe case of a girl with clinical diagnosis of OTB

RESULT:

A 16 year old female, presented to the OPD with chief complaints of irregular ulcerative lesion involving inner lower lip & whole chin since 4 months, painful. loss of appetite. Her mother had pulmonary TB 1 year back (treated). On examination, the vitals were normal. Hb-9.9g/dl, mantoux test-induration above 10 mm, histopathology report- sub-acute spongiotic dermatitis, gene xpert- MTB detected Rif sensitive .

CONCLUSION:

OTB can occur anywhere in the oral cavity & its associated structure & presents a non-specific clinical picture. Doctors should be aware of the orofacial lesions of TB & consider them in the differential diagnosis to ensure early diagnosis & management of TB as delay may lead to serious consequences.

Title: Case series on peripheral neuropathy in patients on treatment for drug resistant tuberculosis

Name of Presenter: **Dr. Shraddha Tewari**

Authors (or Co-authors): **Dr Naresh Patel (Professor and HOD), Dr Tushar Patel (Associate professor), Dr Rushi Patel (Associate professor), Dr Karmay Shah**

Institution/Author Organization: **GCS Medical College, Hospital and Research centre, Ahmedabad**

INTRODUCTION

Drug resistant tuberculosis (DRTB) poses huge challenge to healthcare. Adverse drug reactions of drugs are one of first few hurdles to successful treatment. Newer drugs like linezolid and cycloserine cause peripheral neuropathy in patients which can cause further debilitation.

HISTORY

6 patients who were on different regimens of DRTB under NTEP (all oral longer, shorter) were selected. Patients after prolonged treatment (about 6 weeks) developed burning and tingling sensation in bilateral lower limbs which could not be explained by alternative reasons.

DIAGNOSIS

All the patients had following common features. • Vitamin B12, random blood glucose, serum folate levels: Normal • HIV: Non reactive • Neurological examination: Diminished reflexes. • Nerve conduction studies: Sensory neuropathy with normal motor conduction • Neuropathy had occurred after initiation of drugs (linezolid, cycloserine).

TREATMENT

Patients were treated with pyridoxine, pregabalin, gabapentin, amitriptyline. Linezolid dose was reduced in 5 out of 6 patients as per guidelines.

RESULTS

This case series showed that these patients developed peripheral neuropathy which was irreversible even on lowering doses or withdrawal.

CONCLUSION

Drugs like linezolid, cycloserine, ethambutol and isoniazid may cause irreversible peripheral neuropathy. Regular monitoring is recommended, so timely intervention could be done. If required, withdrawal may be necessary.

Title: Left Main Bronchial Stenosis: TB or not TB?

Name of Presenter: **SHRUTI NARAYAN GUDHANE**

Authors (or Co-authors): **Tarang Kulkarni, Alpa Dalal**

Institution/Author Organization: **JUPITER HOSPITAL, THANE**

History:

A 16 year old female presented with left sided dull chest pain, dyspnoea on exertion and dry cough since 6 months. Patient had a history of road traffic accident followed by left sided pneumothorax and prolonged intubation 6 months ago.

Diagnosis:

CT scan revealed left main bronchus thickening and calcification with complete collapse of left lung. Bronchoscopy showed left main bronchial stricture covered with thick fibrinous secretions. BAL CB-NAAT was positive and anti-tubercular therapy was started.

Management:

Despite clearing the left sided secretions, dyspnoea persisted. Virtual bronchoscopy showed changes suspicious of a post traumatic sequelae in posterolateral wall of left main bronchus. On this occasion, bronchoscope could not be negotiated distal to lesion because of non-complaint nature of left main bronchial stricture. Patient was referred to thoracic surgery. The stenosed segments were resected and end-to-end anastomosis was performed. Gradual weaning with BIPAP and pulmonary rehabilitation gradually led to improvement in patient's condition. The resected tissue showed a presence of traumatic scar.

Conclusion:

The clinical dilemma between endobronchial TB and post traumatic bronchial stenosis was one of the major highlights of this case. Early intervention with surgery was instrumental in preventing in complications like left lung parenchymal fibrosis.

Title: TUBERCULOSIS MASQUERADING AS POSTERIOR MEDIASTINAL MASS

Name of Presenter: **Sindhu mastila**

Authors (or Co-authors): **DR M. RAJENDRA KUMAR(HOD & PROFESSOR), DR M. KIRAN(ASSISTANT PROFESSOR), DR CHAKRAVARTHY(ASSISTANT PROFESSOR), DR RAMYA(ASSISTANT PROFESSOR)**

Institution/Author Organization: **RANGARAYA MEDICAL COLLEGE**

Introduction:

Here we are describing a case report in which tuberculosis presented radiologically as posterior mediastinal mass and diagnosis was made by FNAC and later confirmed by biopsy from the mass lesion.

Case Report:

A 25 years old male presented to us with chief complaints of fever and cough with expectoration since 1month, loss of appetite and gave history of weight loss since 2months. General examination of the patient was normal, on auscultation there were decreased breath sounds in right suprascapular area with a dull percussion note in the same area. Investigations: Sputum for AFB: Negative Sputum for CBNAAT: MTB not detected

Chest Xray:

Rounded homogenous opacity in right upper zone CT chest: Large illdefined heterogeneously enhancing hypodense mass involving posterosuperior aspect of right hemithorax with erosions of adjacent D3, D4 vertebral bodies and posterior aspect of 3rd and 4th ribs on right side. F/s/o posterior mediastinal mass. USG guided FNAC: Focal aggregates of epitheloid histiocytes along with lymphocytes s/o granulomatous lesion. CT guided Biopsy: Caseating granulomatous inflammation probably of Koch's etiology.

Conclusions:

CXR and sputum examination are the primary tools of investigation for diagnosis of tuberculosis. But CT scan and HPE may be required in cases of atypical presentation of the disease

Title: A CASE REPORT OF EXUDATIVE PLEURAL EFFUSION WITH DUAL ETIOLOGY

Name of Presenter: **SUDHA SAGAR S**

Authors (or Co-authors): -

Institution/Author Organization: **ASRAM MEDICAL COLLEGE**

INTRODUCTION:

Pleural Effusion is associated with diseases including malignancies, infections, autoimmune disease and trauma. Pleural effusions caused by tuberculous pleurisy or malignancy were difficult to distinguish in some cases, but unusual presentation of tuberculous pleurisy and malignant pleural effusion together is a rare entity.

CASE:

A 54 year old female came to OPD with complaints of left sided chest pain and progressive dyspnea since last one month, associated with occasional dry cough and loss of appetite with no other comorbidities. On evaluation left sided moderate pleural effusion was diagnosed by clinical examination and chest xray.

Diagnostic Thoracocentesis Investigations :

Suggestive of exudative lymphocytic pleural effusion. Pleural fluid cell block suggestive of granulomatous inflammation possibly Koch's etiology. Negative for malignant cells, with low ADA lung (< 30 IU/L) CECT Chest: Suggestive left lower lobe consolidation with collapse and left sided pleural effusion. Thoracoscopy Findings: Left sided multiple nodules involving parietal pleura. Pleural nodule biopsy revealed -metastatic Adenocarcinoma, IHC - Suggestive of adenocarcinoma of lung (TTF-1, NAPSIN-A, EMA-POSITIVE) Cell Block: Granulomatous Inflammation S/O Koch's Etiology HPE Report: Biopsy from Left Costal Pleura; S/O Metastatic Adenocarcinoma

CONCLUSION:

We conclude that, medical thoracoscopy is the procedure of choice for complete workup and comprehensive diagnosis in exudative pleural effusion.

Title: A RARE CASE OF CUTANEOUS MULTI-DRUG RESISTANT TUBERCULOSIS

Name of Presenter: **SUMIT KUMAR JAIN**

Authors (or Co-authors): **VINOD JOSHI, SHUBHRA JAIN**

Institution/Author Organization: **SAWAI MANSINGH MEDICAL COLLEGE, JAIPUR, RAJASTHAN**

Introduction-

Multi-drug resistant tuberculosis (MDR-TB), defined as resistance to rifampicin and isoniazid, comprises only 6-7% of total tuberculosis

burden, while cutaneous MDR tuberculosis is very rare and can present in a variety of ways.

Case report-

A 15yr old female presented with history of pain followed by two swelling formation in left foot 15months ago, which eventually turned into ulcers. There was history of low grade fever, loss of appetite and weight for 12months. Patient did not improve on antibiotics. Later, a similar swelling appeared over chest-wall that ruptured and formed sinus. There was no previous history of tuberculosis. On examination, there were sinuses discharging pus with crusting and purple discoloration, over supra-sternal area and left foot. Routine blood investigations revealed anemia and elevated ESR. Mantoux test was positive(15mm). X-ray chest and left foot appeared normal. Pus from fine needle aspiration was sterile on pyogenic culture and revealed rifampicin resistant mycobacterium tuberculosis in CBNAAT. Patient was put on shorter MDR-TB regimen for 9months and improved symptomatically.

Discussion-

As the spread of MDR-TB continues, more cases of cutaneous MDR-TB are likely to be encountered. Thus awareness about this entity is necessary for early diagnosis and treatment, especially in high prevalence countries like India.

Title: COVID-19 LOCKDOWN DELAYS DIAGNOSIS OF PRIMARY MDR-TB: A Case Report

Name of Presenter: **Dr Sushmita Vinod**

Authors (or Co-authors): **Dr V Gangadharan, Dr Gayathri G**

Institution/Author Organization: **Saveetha Medical College and Hospital**

Introduction:

Tuberculosis affects all age groups and mainly the lungs. Prevalence of primary multi drug resistant tuberculosis (MDR-TB) is around 3%.

History:

We report case of primary MDR-TB during COVID-19 pandemic. A 28 years old female presented with complaints of fever, cough, loss of appetite, weight of 3 months duration. Due to lockdown, her hospital visit was delayed. There was no history of contact or prior ATT. She was recently diagnosed with diabetes. Management: X-ray, CT chest revealed extensive lesion with cavitation. Sputum for AFB was positive. Sputum sent for GeneXpert reported MTB at high levels with Rif resistance and diagnosed as primary MDR-TB. Patient was then started on short course MDR treatment.

Complication:

She reported after 45 days with positive urine pregnancy. She was counselled for MTP, underwent the same and continued treatment. Review after 2 months revealed sputum AFB negative with x-ray chest showing improvement of lesion.

Learning Points: In endemic countries high degree of suspicion is required to diagnose primary MDR-TB. Prompt diagnosis by sending sputum and extra pulmonary specimens for GeneXpert, LPA is essential. Prompt diagnosis and treatment in primary MDR-TB should be initiated as per NTEP to achieve goal of TB free India by 2025.

Title: A rare case of non HIV CD4 lymphocytopenia leading to opportunistic infection

Name of Presenter: **Uma sharma**

Authors (or Co-authors): **Madhu kanodia, Shamim Akhtar**

Institution/Author Organization: **St stephens hospital, delhi**

Introduction

In past 10-12 years, several groups have been described as HIV negative patients with CD4+ lymphocyte depletion in conjunction with opportunistic infections (like Cryptococcal, tuberculosis) termed as Idiopathic CD4+ Lymphocytopenia(ICL)

Abstract

28 yrs Male, IT professional with no comorbidity, referred from orthopedic department with pott's spine on ATT since 15 days, now developed ATT induced hepatitis. patient was initiated on modified ATT and Gastro opinion sought ,all investigation blood investigations were unremarkable, slowly hepatitis improved on modified ATT .Patient was reintroduced HRZE,PT tolerated the treatment for approx. 2 months ,gradually showed clinical and radiological improvement .On CP phase pt developed diplopia,headache ,breathlessness and giddiness ,audiometry – unremarkable. ENT and NEURO Consultation were done. MRI revealed Granuloma and CSF revealed Cryptococcal Fungal Infection. Serological Markers for HIV were negative but CD4+ counts came out to be 55µl/dl. Genetic Exonal gene Sequencing has been sent and a Provisional diagnosis of Idiopathic CD4+ Lymphocytopenia is made.

Conclusion:

The clinicians should be aware of this rare immunologic disorder and that a decrease in

CD4+ count is not a hallmark for HIV infection but could be due to other idiopathic causes as well

Title: Secondary Pneumothorax: A rare presentation of Silicotuberculosis

Name of Presenter: **Dr. Vaishali Rohit**

Authors (or Co-authors): **Dr. Parul Vadgama, Dr. Khyati Shamaliya**

Institution/Author Organization: **Govt. Medical College, Surat**

Secondary Pneumothorax:

A rare presentation of Silicotuberculosis Introduction: The existence of silicosis and tuberculosis is called Silicotuberculosis. Prolonged exposure to silica dust, also predisposes to Tuberculosis. Undiagnosed Silicotuberculosis may present as Spontaneous Pneumothorax. Aims & Objectives: Early Diagnosis and accurate management of Secondary Pneumothorax which present as a complication of a silicotuberculosis.

Case :

A 45 year old male patient working in Ceramic industry from lower socioeconomic class came with Acute onset of breathlessness of four days associated with right sided chest pain and cough. On examination, patient's saturation was 94% on room air with Respiratory Rate of 30. Breath sounds were decreased on right side with bilateral fine creps. Chest Xray was suggestive of Right sided pneumothorax with coalescent opacities in both lungs involving mid-zone and upper zone.

Methodology or Investigation:

HRCT thorax was done which revealed numerous bilateral centrilobular nodular opacities, ground glass opacities, conglomerate massive shadowing in both the lung parenchyma with mild pneumothorax noted with right sided ICD in situ. CT guided Biopsy was done and histopathology report suggestive of fibrotic nodule with typical onion skin appearance. Sputum AFB done which detected Mycobacterium Tuberculosis with Rifampicin sensitive. Treatment: Intercostal Drainage tube insertion was done immediate after admission for Pneumothorax. High flow oxygen, chest physiotherapy were given. Anti tuberculous treatment was started for confirmed Silicotuberculosis. After one month follow up of patient was done in which according to Pulmonary Function Test finding inhaled bronchodilator was started.

Discussion: Patients of silicosis as well as silicotuberculosis should be explained regarding occupational hazards. They should be educated and advised to have precautionary

measurements. Result & Conclusion: Poor environmental and socioeconomic condition in Silicosis patients can aggravate the risk of tuberculosis. It may present as complication like Pneumothorax if not diagnosed.

Title: A RARE CASE PRESENTATION OF A COMMON DISEASE-DISSEMINATED TUBERCULOSIS AS CHYLOUS ASCITES

Name of Presenter: **VARAYURI AKHILA**

Authors (or Co-authors): -

Institution/Author Organization: **Osmania medical college**

Introduction

Chylous ascites is an uncommon presentation in the spectrum of tubercular diseases. It is the accumulation of milky white fluid in the peritoneal cavity with high triglyceride and low cholesterol levels

Case report

17 year old female patient with cough with sputum since 2 months and abdominal distension since 1 month with history of loss of weight, loss of appetite and right axillary lymphadenopathy. She had past history of tubercular lymphadenopathy 6 years back. CXR PA view - right upper lobe consolidation. Sputum was positive for AFB. GeneX-pert detected MTB with sensitivity to rifampicin. Frank pus aspirated from lymph node, GeneX-pert detected MTB with sensitivity to rifampicin. Aspirated ascitic fluid was milky white exudative with high lymphocyte count, ADA-45IU/L with high triglycerides and low cholesterol. Discussion Mycobacterial chylous ascites, although uncommon, is treatable. Therapy directed at underlying infection (ATT) and use of MCT based diet and somatostatin may help in alleviation of the symptoms.

References

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Title: COVID -19 in tuberculosis: case reports

Name of Presenter: **VEMULA VENKATA SATYA SURESH**

Authors (or Co-authors): **Dr yugandhar prof & H.O.D, pulmonology**

Institution/Author Organization: **Alluri sitaramaraju academy of medical sciences**

ABSTRACT Background :

The 2019 novel coronavirus was first notified from Wuhan City, China in December 2019 as unexplained pneumonia. TB remains the

deadliest infectious killer. TB has longer incubation period with a slower onset. Both manifest with similar symptoms like fever, cough, breathlessness, weakness with chronicity of symptoms in TB as compared to acute progression in COVID-19. People with TB and COVID-19, particularly in coinfection, may exhibit unfavorable treatment outcomes especially if TB treatment is interrupted. The situation is alarming for high-burden countries like India.

Objective :

1. To document, analyse the causes and differences in clinico-radiological presentation of COVID-19 and TB when compared to the single disease alone. 2. To evaluate response to treatment, prognosis and complications.

Conclusion:

Focusing on COVID-19 can lead to damage gains that have been achieved for the elimination of TB under END TB strategy by WHO. Strategies adopted for curbing epidemics of both TB and COVID-19 can complement each other leading to decrease in mortality. Recently built practices for COVID-19 pandemic like effective notification, promotion of active surveillance, contact tracing, and effective infection control measures may provide opportunity in future to end TB.

Title: DIFFERENT PRESENTATION OF CUTANEOUS TUBERCULOSIS -CASE SERIES

Name of Presenter: **VIGNESH A**

Authors (or Co-authors): **Rupam Kumar TA**

Institution/Author Organization: **BURDWAN MEDICAL COLLEGE**

TUBERCULOSIS VERRUCOSA CUTIS. 23 yr male presented with skin lesion over his left elbow posterior aspect after a minor trauma for last 4 months. He was treated for pulmonary TB 1 yr back. Lesion was wart like, serpiginioid with central sparing. Skin Biopsy showed hyperkeratosis features consistent with tuberculosis. Patient improved after ATT. LUPUS VULGARIS. 32 years female presented with discharging sinus from axilla and left lower abdomen. She was a known case of microbiologically confirmed pulmonary tuberculosis, was currently on ATT drug sensitive regimen last 2 months. Skin Biopsy showed Granulomatous inflammation consistent with lupus vulgaris. SCROFULODERMA. 35 yr male known case of clinically diagnosed tubercular lymphadenitis presented with discharging sinus from the cervical area last 1 month. Patient was on ATT for 3 months. Sample sent for CBNAAT MTB detected and rifampicin sensitive. ATT was continued and CP phase was given for 6 months and he improved.

TUBERCULOUS CHANCRE 18 year old male presented with cutaneous ulcer over his right ring finger after a trauma 1 yr back. The lesion was non healing and developed over his palm and medial aspect of arm. Biopsy showed basket weaver hyperkeratosis. CBNAAT from skin scrapings showed detection of MTB.

Title: A PROSPECTIVE STUDY ON EVALUATION OF EFFICACY OF BEDAQUILINE IN PATIENTS WITH PRE XDR & XDR TB

Name of Presenter: **Dr. A.Hariharan**

Authors (or Co-authors): -

Institution/Author Organization: **Osmania Medical College, Hyderabad**

INTRODUCTION :

About 6.25% of MDR-TB cases had extensively drug resistant TB (XDR-TB). Bedaquiline is a new class of drug (previously called TMC207 and R207910), diarylquinoline that specifically targets mycobacterial ATP synthase, an enzyme which is essential for the supply of energy to Mycobacterium TB.

AIM :

To evaluate the efficacy of Bedaquiline in treating Pre XDR TB & XDR TB by looking sputum culture conversion rate

METHODOLOGY : This is a prospective study done on 30 patients with Pre XDR TB & XDR TB who will be receiving Bedaquiline (400 mg once daily for 2 weeks, followed by 200 mg three times a week for 22 weeks) plus a preferred five-drug, second-line antituberculosis background regimen. The total treatment period will be 18 to 24 months, during which bedaquiline is administered for 6 months. During this period, patient will be followed up with sputum liquid culture every monthly in initial 6 months then every 3 months till the end of the treatment

RESULTS :

Among this 30 patients, sputum culture report came negative for 23.3%, 40%, 60%, 66.7%, 70%, 73.3%, 93.3%, 93.3% respectively at 1, 2, 3, 4, 5, 6, 9, 18 months after starting Bedaquiline. At the end of 18 months of course 83.3% cured, 10% were died, 6.7% were failed to respond.

CONCLUSION :

In this study, Bedaquiline is more efficacious when compared to other studies based on sputum culture conversion results in patients with Pre XDR & XDR TB

Title: TO EVALUATE EFFICACY SAFETY AND COMPLIANCE OF BDQ CONTAINING REGIMEN

IN MDR/XDR TUBERCULAR PATIENTSName of Presenter: **Dr. ACHAL SINGH**Authors (or Co-authors): **Dr(Prof.)Santosh Kumar ,Dr.Gajendra Vikram Singh,Dr.Komal Lohchab**Institution/Author Organization: **SN MEDICAL COLLEGE AGRA****INTRODUCTION:**

India is the highest DR-TB burden country. Outcomes of treatment for DR-TB are poor demanding new drug regimen for better outcome. Bedaquiline is the first antitubercular drug with new mechanism of action, developed specifically for treatment of DR-TB and has been shown to be efficacious and safe. AIM: To evaluate efficacy, safety and compliance of BDQ containing regimen.

METHOD:

An observational prospective study was conducted on 98 patients. Eligible patients were monitored for cardiac safety, AEs, clinical, microbiological and radiological improvement during the treatment.

RESULT:

98 eligible DR TB patients were started BDQ containing regimen showing Mean maximum increase of 42.29 ms in QTc interval in comparison to baseline. A significant QTc prolongation (>500ms) was observed in 3(3.06%) patients. Culture conversion was achieved in 85 patients at end of 12 months of treatment. Median time for culture conversion was 68 days. Majority of AEs (88.2%) were non serious and not preventable. 2(2.04%) mortalities were observed, cause not attributable to the drug.

CONCLUSION:

BDQ containing regimen is associated with higher, faster sputum culture conversion rate, fewer SAE and better tolerability. High BMI and better immunity improves outcomes of treatment whereas smoking and low immunity negatively affects the outcome. Although BDQ along with concomitant antitubercular medication has potential to prolong QTc interval, the benefit certainly outweighs the risk.

Title: To Evaluate RNTCP treatment services among patients, family satisfaction and social response in select tuberculosis unit in Kanpur district

Name of Presenter: **Dr. Anees Ahmad**Authors (or Co-authors): **Dr. Sudhir Chaudhri, Dr. Anand Kumar, Dr. Sanjay Verma, Dr. Avdesh Kumar, Dr. Rajkumar Mathur, Dr. Anurag Shukla**Institution/Author Organization: **Dept. of tuberculosis & respiratory diseases, GSVM medical college, Kanpur****BACKGROUND & INTRODUCTION**

Revised National TB Control Programme (RNTCP)/National Tuberculosis Elimination Program (NTEP) is an on-going Centrally Sponsored Scheme, being implemented under the umbrella of National Health Mission. India is the highest TB burden country in the world having an estimated incidence of 26.9 lakh cases in 2019 (WHO). In spite of running the program for more than 20 years there is still lack of confidence in the program in the society.

AIMS AND OBJECTIVES-

To evaluate RNTCP treatment services, social response and patients & family satisfaction in select tuberculosis unit in Kanpur district.

MATERIAL & METHODS

Patients registered on DOTS under RNTCP / NTEP at selected tuberculosis unit in a select Tuberculosis Unit of Kanpur Nagar were interviewed.

RESULTS

- 68.97% of our patients registered with RNTCP/ NTEP and investigated by us had pulmonary tuberculosis and 31.03% had extra-pulmonary tuberculosis (Ratio 2.22:1)
- 91.4% were explained about their diagnosis and treatment.
- In 67.2% cases verification was done by home visit of RNTCP staff and 32.8% were had address verification by phone. Reason for not 100% home visit confirmation novel corona 2019 pandemic.
- 65.5% patient's neighbours did not know about patient disease. 27.6% patients were avoided by society.
- 79.3% were treated completely. There were defaulter 12.1% and 1.7% died.
- Majority of patients 77.6% had good level of satisfaction with the RNTCP/NTEP services provided in the tuberculosis unit.

CONCLUSION:-

Although NTEP has achieved marked success in tuberculosis treatment in the country, there is still need of improvement in monitoring of patients who are taking treatment to improve the confidence of the society.

Title: TREATMENT OUTCOME OF MULTIDRUG RESISTANT TUBERCULOSIS (MDR-TB) IN A STUDY AT TERTIARY LEVEL

Name of Presenter: **ATAL BIHARI MEENA**

Authors (or Co-authors): -

Institution/Author Organization: **GMC KOTA****INTRODUCTION**

Treatment of multidrug resistant Tuberculosis (MDR-TB) is challenging. In India, standard treatment regimen is established by Revised National Tuberculosis Control Programme. We did retrospective analysis of patients enrolled and treated under the national programme to study the outcome. AIM To study the treatment outcome of MDR-TB and the factors affecting it.

SETTINGS AND STUDY DESIGN

Retrospective analysis of 154 patients treated with standard regimen for MDR-TB (CAT IV ATT) as per RNTCP guidelines

METHODOLOGY

A retrospective cohort study of MDR-TB cases enrolled for treatment in 2016– 2017 was done at TB and Chest department of new medical college Hospital KOTA Rajasthan. Data were obtained from cases sheet, registers and treatment cards of patients from July 2016 to June 2017. Data was compiled and analyzed for various demographic, clinical radiological profile and treatment outcome

RESULT/CONCLUSION

Sputum culture conversion rate was 59.44% at 6th month of treatment. Cure rate was 39.66%, Treatment completed 9.7%, Death rate 20.87%, Defaulter rate 25% and Failure .6%. Resistance Pattern R – 110 (72.02%) R & H – 44 (27.97%) The major hindrance in achieving a good cure-rate was a high death rate and default in treatment. Early diagnosis of MDR-TB and adequate clinical monitoring during treatment is essential.

Title: ASSOCIATION OF LOW SERUM VITAMIN D IN PULMONARY TB PATIENT

Name of Presenter: **Dr Gunjan sharma**Authors (or Co-authors): **Dr ANIL SAXENA, DR SUMAN KHANGAROAT, DR NAVEEN, DR VARSHA**Institution/Author Organization: **GMC KOTA****ABSTRACT BACKGROUND:**

Recent studies suggest that the incidence and severity of tuberculosis is associated with low levels of Vitamin D, this is especially important in developing countries like India which carries a major portion of global Tuberculosis burden. Therefore, this study aimed to determine the prevalence of Vitamin D deficiency in newly diagnosed tuberculosis patients in our institute.

AIMS&OBJECTIVES:

To study the deficiency of Vitamin D In newly diagnosed sputum positive pulmonary TB and

to compare the level of Vitamin d with that of age matched healthy control population .

MATERIALS AND METHODS:

This present study was conducted in the department of respiratory medicine, New Medical College, Kota on 70 newly diagnosed sputum AFB positive pulmonary TB patients and 70 apparently healthy control subjects over a period of one year (2016-2017).

Study design:

descriptive case control study . Study population:-Include 2 categories of patients (a) Group 1:70 sputum AFB positive newly diagnosed pulmonary TB patients (b) Group 2:70 apparently healthy people who came to the hospital with regular check up.

Title: USEFULLNESS OF FNAC IN DIAGNOSIS OF TUBERCULAR LYMPHADENITIS

Name of Presenter: **DR. JAGRUTI AHIR**

Authors (or Co-authors): -

Institution/Author Organization: **B.J.MEDICAL COLLEGE , AHMEDABAD**

INTRODUCTION :

Diagnosis of tubercular lymphadenopathy by histopathology is gold standard. However fine needle aspiration cytology and AFB staining are simple ,less time consuming ,inexpensive & can be performed as an out - door procedure , which can aid in quick diagnosis.

AIM :

TO assess the diagnostic role of FNAC in clinically suspected cases of tubercular lymphadenopathy

METHODS :

this was a retrospective study done over 3 years. All the nodes aspirated in the cytopathology department over this period were analyzed. The AFB staining and results were also recorded in cases where there was granulomatous inflammation. All the results were analyzed and correlated with clinical data available.

CONCLUSION :

Aspirates with granulomatous inflammation and AFB positivity can be definitely diagnosed & started on anti -tubercular therapy. this reduces the cost and discomfort to the patient and thus early treatment is possible.

Title: A STUDY OF ADVERSE DRUG REACTIONS OF ANTI-TUBERCULAR DRUGS, DURING THE TREATMENT OF MULTIDRUG RESISTANT TUBERCULOSIS (MDR-TB)

AND EXTENSIVELY DRUG RESISTANT TUBERCULOSIS (XDR-TB).

Name of Presenter: **DR. KRISHNA M PATEL**

Authors (or Co-authors): **Dr. ARVIND S. PANDEY(2), Dr. SIDDHARTH CHATTERJEE(3)**

Institution/Author Organization: **SURAT MUNICIPAL INSTITUTE OF MEDICAL EDUCATION AND RESEARCH, SMIMER, SURAT**

INTRODUCTION

MDR-TB REMAINS A PUBLIC HEALTH CRISIS AND HEALTH SECURITY THREAT. BY END OF 2019 SHORTER REGIMEN AND FULLY ORAL REGIMEN FOR MDR-TB AND XDR-TB WAS INTRODUCED. AFTER TAKING MEDICINE SOME OF THE PATIENT SUFFERED FROM ADVERSE DRUG REACTION WITH SHORTER REGIMEN WHICH IS NECESSARY TO IDENTIFY AND TREATED ACCORDINGLY.

AIMS

TO STUDY ADVERSE DRUG REACTION IN MDR-TB AND XDR-TB PATIENT TAKING ANTI-TUBERCULAR TREATMENT AND OUTCOME IN SUCH PATIENTS.

METHODOLOGY

LONGITUDINAL STUDY WAS DONE, WHERE 120 PATIENTS WERE RECRUITED BASED ON THEIR DIAGNOSIS OF DR-TB (ACCORDING TO CBNAAT), THEN FOLLOW UP WAS DONE FOR ADVERSE DRUG REACTION.

RESULT

IN OUR STUDY, ALL STUDY SUBJECTS EXPERIENCED ADVERSE REACTIONS. THE MOST COMMON DRUG REACTION WAS GI UPSET DUE TO UNCONTROLLED DIARRHEA, NAUSEA OR VOMITING, WHICH WAS DETECTED IN 60 PATIENTS. HEPATOTOXICITY WAS SECOND MOST COMMON ADVERSE REACTION SEEN IN 36 PATIENTS. ARTHRALGIA, PERIPHERAL NEUROPATHY, OTOTOXICITY, SKIN REACTION WERE OBSERVED IN 24, 21, 19, 13 PATIENTS RESPECTIVELY.

CONCLUSION

PREVENTION OF ADRS IS ALWAYS MORE EFFECTIVE THAN INTERVENING AFTER THE ADRS HAVE OCCURRED. HENCE, PREVENTING THE OCCURRENCE OF ADRS IN HIGH RISK PREVIOUSLY TREATED TB PATIENTS WILL GO A LONG WAY TO IMPROVE THE ADHERENCE TO THE EXTENDED TREATMENT REGIMEN.

Title: CLINICAL AND LABORATORY PROFILE OF PATIENTS WITH TB/HIV COINFECTION: A CASE SERIES OF 19 PATIENTS

Name of Presenter: **Dr. Mona Vohra**

Authors (or Co-authors): **Dr. Babaji Ghewade**

Institution/Author Organization: **Datta Meghe**

Institute of Medical Sciences, Wardha

INTRODUCTION:

Tuberculosis is one of the commonest opportunistic infection in HIV patients. Patients with CD4 counts >200 cells/cmm have disease limited to the lungs with common chest radiographic findings, such as upper lobe infiltrates with or without cavitation, similar to HIV-negative patients. Whereas , patients with advanced HIV disease (CD4 counts <200/cmm) have atypical presentation such as the lower lobe predominance, adenopathy and absence of cavities.

AIM AND OBJECTIVE:

To study clinical and laboratory profile of patients with HIV/TB coinfection.

MATERIALS AND METHODS:

19 adult TB patients having confirmed HIV positive were included in randomized manner. Detailed history, thorough examination and investigations were done.

RESULTS:

Most of the patients were farmers (36.84%) followed by laborers (26.31%). Heterosexual route was found in 100% patients. Cough was present in 68.42% fever in 84.21% and weight loss in 94.73% of patients. Out of 19 patients, 68.42% had pulmonary TB and 31.57% had EPTB. Pleural effusion was present in 15.78% and extra-thoracic lymph nodes in 21.05% of patients. AFB positivity was found in 31.57% while positive Mantoux test in 36.84% of patients.

CONCLUSION:

HIV/TB coinfection is more common in sexually active heterosexual age group. Sputum AFB and Mantoux positivity is low in HIV/TB coinfection.

Title: INCIDENCE OF ANTITUBERCULOUS DRUG INDUCED HEPATOTOXICITY IN NEWLY DETECTED CASES OF TUBERCULOSIS

Name of Presenter: **Dr.Pretty Radhakrishnan**

Authors (or Co-authors): **Dr.Pretty Radhakrishnan ,Dr Manoj D.K , Dr Rajani M**

Institution/Author Organization: **Government Medical College ,Kannur**

INTRODUCTION:

Tuberculosis is one of the ten major killer disease in the world . Antituberculous treatment may result in adverse effects involving almost all systems of the body ,Of these ,drug induced hepatotoxicity is an important and commonly encountered adverse effect. Anti TB DIH usually has a benign course but may result in serious morbidity and even mortality.

OBJECTIVES:

To study the incidence of antituberculous drug induced hepatotoxicity in newly diagnosed cases of tuberculosis and to study the correlation of age and sex with hepatotoxicity among these patients.

METHODS:

This is a single group cohort study done on newly detected tuberculosis patients attending Department of Pulmonary Medicine , GMC, Kannur and District TB centre ,Kannur over a period of 1 year.

RESULTS:

17 of 140 patients (12%) developed hepatitis during follow up ,of which , in 35 % cases the onset of symptoms was within 2 weeks after initiation of ATT . In this study neither age, sex, comorbidities nor alcoholism was seen to have any significant association with incidence of ATT induced hepatitis.

CONCLUSION:

All patients on antituberculous therapy, irrespective of age ,sex ,addictions and comorbidities needs frequent clinical and biochemical evaluation of Liver function especially during initial phase of therapy.

Title: STUDY OF SPUTUM SMEAR AND CULTURE CONVERSION IN DRUG RESISTANT TUBERCULOSIS CASES TREATED UNDER PRAGMATIC MANAGEMENT OF DRUG RESISTANT TUBERCULOSIS AT AVBRH HOSPITAL

Name of Presenter: **Dr RESHMA S BABU**

Authors (or Co-authors): **Dr ULHAS JADHAV**

Institution/Author Organization: **DATTA MEGHE INSTITUTE OF MEDICAL SCIENCES**

Introduction:

The rise of resistance to antitubercular drugs has become an important public health issue and it remains a big reason for ineffective TB control in our country. Conversion of sputum mycobacterial cultures in patients with pulmonary tuberculosis (TB) is considered the most important indicator of the efficacy of anti-TB treatment for the multidrug-resistant disease.

Aim and Objectives:

To study the maintenance of bacterial quiescence (culture negativity) during treatment and effectiveness of DOTS PLUS therapy by observing sputum smear and culture conversion.

Materials and methods:

26 diagnosed patients of Drug-Resistant Tuberculosis in the district of Wardha were followed up for 2 years. Patient's sputum culture and smear reports were followed for 3rd,4th,6th,9th, and 12th months. Results: Sputum smear and culture conversion were found out to be 57.7 % in our study after 1 year of follow up. The default rate observed was 19.23 %. The main cause of the treatment default was Adverse drug reactions, most common among them was Hepatotoxicity.

Conclusion:

The sputum conversion rate in our study dropped significantly when comparing the results from the 3rd month and 12th month of follow up respectively. This was partly due to treatment default, mainly to Adverse drug reactions.

Title: IMPACT OF SOCIOECONOMIC, EDUCATIONAL STATUS AND LIVING CONDITIONS ON TREATMENT OF TUBERCULOSIS

Name of Presenter: **Dr. SARIKA RAVULA**

Authors (or Co-authors): **Dr. L.Harsha Kiran, Dr. Somanath Dash, Dr. Kondal Rao**

Institution/Author Organization: **GSL MEDICAL COLLEGE**

INTRODUCTION –

Tuberculosis is a major global health problem. Factors like crowding, poor ventilation in houses, HIV infection ,malnutrition ,tobacco smoking, diabetes,indoor air pollution contribute to poor outcome and increased spread of disease.

AIM AND OBJECTIVES –

a.) To find out various social and economical factors those influence the therapy of tuberculosis b.)To assess outcomes of treatment in patientswith pulmonary tuberculosis started with anti-tubercular therapy.

PATIENTS AND METHODS –

All patients who are microbiologically proved as pulmonary tuberculosis were included in this study. Follow up period of 6months is taken to monitor the anti-tubercular therapy.

OBSERVATION –

Out of total 46 patients observed 32 are male,14 are female, most patients are in age group 41-60 years, cough and expectoration are most common symptoms, death rate more in patients with comorbidities.

CONCLUSION –

We can conclude that most common age group

for presentation is 40-60 years , males are more affected than females and females had better prognosis,success rate is higher among middle class people than lower class people,75% of death rates are more common in uneducated group.

Title: OUTCOME OF PATIENTS WITH LYMPHNODE TUBERCULOSIS TREATED UNDER RNTCP- AN OBSERVATIONAL STUDY

Name of Presenter: **Shabna.A**

Authors (or Co-authors): **Thomas George, Muraly.C.P, Mani.O.K, Parvathi Rajendran**

Institution/Author Organization: **Government Medical College, Thrissur**

INTRODUCTION:

Tuberculosis is a bacterial infection caused by Mycobacterium tuberculosis , commonly affecting lungs. But it may also affect other organs(extra pulmonary tuberculosis). The most common site of extrapulmonary tuberculosis is lymphnodes. Antituberculosis treatment is the mainstay in the management of extrapulmonary tuberculosis. In India ATT for EPTB is given as DOTS under RNTCP. The effectiveness of the 6 months ATT for lymphnode tuberculosis and the behavior of the tuberculous lymphnodes during and after the treatment is less studied.

OBJECTIVE:

(1)To determine the treatment outcome of lymphnode tuberculosis under RNTCP regimen
(2)To assess the effectiveness of RNTCP regimen in the treatment of lymphnode tuberculosis

METHODS:

A Prospective observational study conducted among 62 patients attending Govt. Medical College , Thrissur, diagnosed with cervical lymphnode tuberculosis and started on CAT 1 ATT , were studied for a period of 2 years with proper history taking & clinical examination and followup done on regular intervals with clinical examination (lymphnode size, number, consistency, complications) , laboratory investigations.

RESULTS:

In 62 cases observed, male (48.4%) to female (51.6%) affection was comparative. Most of the patients presented with loss of weight, loss of appetite along with enlarged cervical lymph nodes, with level 2 cervical lymphnodes being most commonly affected(67.7%). Around 90% of patients were diagnosed by FNAC and we needed excision biopsy only for 6 cases.93.5% of our patients had complete resolution with 6 month ATT and only 4 patients needed extended ATT regimen . 4 patients developed

abscess and 2 of them had sinus formation, both these patients needed extended ATT regimen for complete resolution.

CONCLUSION:

For lymphnode tuberculosis, FNAC can be used as a good tool for diagnosis and 6 month ATT is an excellent treatment modality. 93.5% of cases had excellent results with 6 month ATT. In complications like abscess or sinus formation extension of ATT for 3 more months is found to be beneficial.

Title: IMPACT OF POOR GLYCEMIC CONTROL ON TREATMENT OUTCOME OF DIABETIC PULMONARY TUBERCULOSIS PATIENTS

Name of Presenter: **DR SRIKEERTHI.S**

Authors (or Co-authors): **DR SUNDARRAJAPERUMAL, DR MAHILMARAN, DR RAJESHWARI**

Institution/Author Organization: **INSTITUTE OF THORACIC MEDICINE, MADRAS MEDICAL COLLEGE, CHENNAI, TAMILNADU, INDIA.**

BACKGROUND:

Diabetes mellitus is a known risk factor for the development of tuberculosis and an estimated 15% of patients with TB in countries with a high TB burden have DM. Pre-treatment poor glycemic control has a negative impact on tuberculosis treatment outcome. Uncontrolled DM (HbA1C \geq 7) reported as significant risk factor for persistent sputum positivity and delayed conversion.

AIM:

To determine impact of glycemic control (HbA1C) on treatment outcome in term of Sputum conversion rate among diabetics with pulmonary tuberculosis

METHODOLOGY:

Prospective cohort study was done in patients with pulmonary tuberculosis diagnosed with DM. Demographic and clinical data were obtained. After initiation of ATT, sputum smear examination was done every 2 weeks until sputum smear conversion occurs and followed further till end of treatment.

RESULTS:

Among 60 enrolled subjects, 31 had pre-treatment poor glycemic control [PGC] (HbA1C $>$ 7) and 29 had optimal glycemic control [OGC] (HbA1C $<$ 7).

Hemoptysis (p=0.03), high bacillary load (p=0.01) and cavities (p=0.02) were more pronounced among uncontrolled DM. Smear conversion rate was 82.7%, 96.5% (OGC) vs 58%, 77.4% (PGC) with statistically significant (p=0.029) delay among poor

glycemic control group.

CONCLUSION:

Hence prompt management of glycaemia is required to avoid non-conversion with better treatment outcome.

REFERENCE:

1. Hassan, M.M., Zafar, A., & Akram, S. (2018). Glycemic Control and Clinical Outcomes of Diabetic Pulmonary Tuberculosis Patients.

Title: Prevalence of PAH in treated case of PTB

Name of Presenter: **Dr UMESH PARMAR**

Authors (or Co-authors): **Dr ANIL SAXENA, DR SUMAN KHANGAROT**

Institution/Author Organization: **GMC KOTA**

Introduction:

Tuberculosis (TB) is a global health burden. Pulmonary TB (PTB) can cause important thoracic sequelae involving the lungs, airways, vessels, mediastinum, pleura, and chest wall. Pulmonary hypertension (PAH) is a serious respiratory disability occurring from structural lung damage and chronic hypoxia.

Aims and Objectives:

The aim of this study is to evaluate the clinical, radiological, and echocardiographic profile of PAH in patients treated for PTB and how they correlate with each other. Detailed clinical and radiological profile of those having PAH was noted. The usefulness of echocardiography for diagnosing cor pulmonale was studied.

Results: Cough was the most common presenting symptom. The mean time since the treatment of PTB was 7.5 years. The most common radiological abnormality, fibrocavitation was found in 25% of the patients, whereas P-pulmonale was the most common finding on ECG. No statistical association was seen between the right ventricle internal diameter at end-diastole and TR and PAH. No relationship was seen between years of treatment completed for PTB and PAH.

Conclusion:

early diagnosis, treatment, and long-term follow-up of PTB are of foremost importance to prevent posttubercular complications and respiratory disability.

Title: EVALUATION OF CLINICAL, PHYSIOLOGICAL AND RADIOLOGICAL PARAMETERS IN TREATED PULMONARY TUBERCULOSIS PATIENTS

Name of Presenter: **DR VATSAL BHUSHAN GUPTA**

Authors (or Co-authors): **PROF. B.K.MENON, DR. PARUL MRIGPURI**

Institution/Author Organization: **VALLABHBHAI PATEL CHEST INSTITUTE**

Introduction

There are limited studies on the course of pulmonary tuberculosis after successful treatment completion. Patients experience residual clinical symptoms along with deranged physiological parameters even after treatment completion. HRCT thorax shows various complications of TB. There is a need to establish a correlation between all these parameters.

Aims and objectives

- To evaluate clinical symptoms and lung function parameters in subjects of drug sensitive pulmonary tuberculosis who have completed anti-tubercular therapy only once.
- To evaluate chest x-ray and CT scan findings in above group of patients.

Material and methods

60 patients with a history of microbiologically confirmed Pulmonary Koch were reviewed within 1 month of completion of their category 1 anti-tubercular therapy. Patients underwent a detailed clinical history, clinical evaluation, PFT, 6 Minute walk test, chest X-ray and CT scan.

Results

Most common lung impairment was restrictive pattern. Statistically significant correlation was present (p \leq 0.05) between median CT fibrosis score, bronchiectasis score, Total morphological score, Total Lung Score between presence or absence of residual cough, normal and abnormal PFT, distance covered, Borg's dyspnoea and fatigue scale, lesion on chest x-ray according to Wilcoxon classification.

Conclusion

Most of the patients had residual physiological impairment or radiological abnormality or both after treatment completion.

Title: A STUDY ON SPUTUM SMEAR AND CULTURE CONVERSION, ADVERSE DRUG REACTIONS AND TOLERABILITY OF BEDAQUILINE IN PATIENTS WITH DRUG RESISTANT TUBERCULOSIS

Name of Presenter: **VIGNESH A**

Authors (or Co-authors): **Rupam kumar ta**

Institution/Author Organization: **BURDWAN MEDICAL COLLEGE**

INTRODUCTION-

Bedaquiline, diarylquinoline derivative that targets mycobacterium ATP synthase, an enzyme it supply energy to Mycobacterium tuberculosis.

AIMS AND OBJECTIVES -

To evaluate sputum smear and culture conversion and adverse drug effects in patient on bedaquiline regimen for drug resistant tuberculosis.

METHODOLOGY-

A total of 55 cases were included in the study, all patients started regimen containing bedaquiline and registered in DR-TB site were taken as cases. Daily assessment of patient for adverse reaction and ECG monitoring for two weeks. Patient were followed up for evaluation of sputum conversion (sputum AFB,LFT,ECG for every month and sputum culture at 3rd,4th,5th and 6thmonth) and any other adverse drug reactions of bedaquiline for 6 months period.

RESULTS-

Sputum smear and culture conversion rates were 92.72% and 90.90% at 3rd month, 96.36% and 94.54% at 4th month, 100% and 96.07% at 5th month, 100% and 98.03% at 6th month. Adverse events reported were nausea 60%, diarrhea 50%, joint pain 30%, anorexia 30%, itching 20%, tachycardia 30%, blackish skin discoloration 20%.4pts(7.27%) discontinued bedaquiline Permantely due to corrected qt interval increased.13 pts (23.63%) experienced qtcf prolongation >500ms.

CONCLUSION:

Bedaquiline is associated with early sputum smear and culture conversion and non-serious adverse events.

Title: Profile of cases of complications in patients of Pulmonary Tuberculosis

Name of Presenter: **Dr Vinod Pal**

Authors (or Co-authors): -

Institution/Author Organization: **TNMC and BYL NAIR CHARITABLE HOSPITAL**

INTRODUCTION:

India is a high tuberculosis burden country. PTB has been associated with complications which includes respiratory failure, hemoptysis, pneumothorax/ hydro-pneumothorax, empyema, bronchopleural fistula (BPF), pulmonary thromboembolism (PTE), miliary TB and therapy related complications. Complication culminate in high incidence of mortality and morbidities.

AIM AND OBJECTIVES:

To assess profile of cases of complication in

active and past treated PTB presenting to the outpatient department in a tertiary care hospital.

METHODS:

A prospective observational clinical study of complications of PTB was conducted at a tertiary care hospital. 100 patients were enrolled in this study. They included patients presenting with complications of PTB either active or past treated PTB. Patients were microbiologically evaluated with sputum gene-expert, sputum acid fast bacilli (AFB) smear and culture in case of active PTB . Complication were noted in form of onset, duration, progress and outcome. The data was analyzed using percentage and mean.

RESULTS:

Among the 100 patients enrolled; 50 had active PTB and 50 had past treated PTB. Out of 100 patients 38 had complications. They included 20(52.6%) men and 18(47%) women. The mean age was 34.6 years. Out of 50 active PTB 20 patient had complication . Microbiological profile of active PTB cases was 15 drug sensitive, 5 drug resistant TB. 18 patients had complications amongst the total 50 cases of past treated TB. In the 20 patients with complications in active PTB; the most common complication was hemoptysis in 10(50%) followed by pneumothorax in 5 (25%), miliary TB in 3(15%), pulmonary thromboembolism in 1 (5%), respiratory failure in 1 (5%). Out of 18 patient with complications associated with past history of treated PTB; respiratory failure in 9(50%), 3(16.6%) had hemoptysis, 3 (16.6%) had pneumothorax with BPF, 3(16.6%) patient had pulmonary thromboembolism .

CONCLUSION:

Hemoptysis was the commonest complication in active PTB and respiratory failure in past treated PTB.

TAKE HOME MESSAGE :

complication are part of spectrum of PTB , however early diagnosis and management will help in salvaging of precious life .

Title: STUDY OF DIAGNOSTIC YIELD OF BRONCHOSCOPIC SAMPLE IN SPUTUM SMEAR NEGATIVE TUBERCULOSIS

Name of Presenter: **Dr. VISHAL MALVIYA**

Authors (or Co-authors): **Dr. KUMAR GIRENDRA, Dr. ABHIJEET KHANDELWAL, Dr. SUNIL MUKATI, Dr. ROTHMAN P T ,Dr. KSHITIZ CHAURASIA**

Institution/Author Organization: **INDEX MEDICAL COLLEGE HOSPITAL & RESEARCH CENTRE INDORE(MADHYAPRADESH)**

INTRODUCTION- Pulmonary tuberculosis(PTB) is one of the most-common infectious-disease worldwide and also one of the top-10 causes of death,especially in developing-countries.Early-diagnosis is the most effective PTB- control-strategy because the early appropriate treatment renders these patients noninfectious and interrupts the chain of disease transmission.Acid-fast-bacilli(AFB) in sputum is recommended as the preliminary diagnostic method by the World-Health-Organization(WHO).However,the sensitivity of this method is low and the value in patients who cannot produce sputum spontaneously is very little. bronchoscopy are commonly used for the diagnosis in patients with suspected tuberculosis who don't produce sputum(OR) negative-AFB-smear from spontaneous sputum.so to diagnosis sputum-negative-PTB,Bronchoscopic-lavage is very useful.

MATERIAL & METHODS-

Chest x-ray,sputum(Routine-microscopy,AFB) Bronchoscope,Bronchial-wash,Bronchoscopy-biopsy-needle. sample size-40 patient(sputum-smear-negative)were referred for bronchoscopy according to international standard.

RESULTS-

Bronchial-washing-smear for AFB was positive in16-patient while culture of bronchial-washing was positive in 24-patients.post-bronchoscopic sputum-smear was positive for 7-patients.in remaining 16 patients(3-was found to be having malignancy,5-were fungal pneumonia,8-were bacterial pneumonias)

DISCUSSION-

Reasons for doing bronchoscopy: • Identification of a lung-infection • Broncho-Alveolar-lavage (BAL) • Biopsy of lungs-tissue Our study suggest that Bronchoscopy can provide excellent material for diagnosis of suspected cases of PTB in whom smears of expectorant-sputum do not reveal mycobacteria.

Title: The role of initial and follow up CT chest imaging in the management of COVID 19 pneumonia

Name of Presenter: **Dr. A. S. Adaikkalavan**

Authors (or Co-authors): **Dr. A. Mahilmaran, Dr. A. Sundararajaperumal, Dr. D. Nancy Glory, Dr. G. Allwyn Vijay**

Institution/Author Organization: : **Institute of Thoracic medicine, Madras Medical College**

Introduction:

Chest CT imaging was the most important diagnostic tool in COVID 19 pneumonia, because it helps to assess the extent of lung involvement and severity of the disease.

Aims and objectives:

To study the role of initial and follow up CT Chest imaging characteristics in management of COVID 19 pneumonia.

Methodology:

Prospective study conducted on 141 COVID 19 pneumonia patients. Initial CT Chest done at the time of admission and follow up CT chest done in discharged patients after one month. CT chest imaging characteristics were compared.

Results: Among 141 patients, 23 were deceased (16.3%). Patients with CT chest severity grading 3 and grading 4 were more in the deceased population ($p=0.01$). In the initial CT of discharged patients, multiple GGO (63.8%), interstitial thickening (31.9%) and consolidation (28.7%), bronchiectasis (17.02%), focal GGO (14.8%), diffuse GGO (4.2%) were present. Follow up CT chest after 1 month revealed significant reduction in consolidation, GGOs, bronchiectasis but interstitial thickening shows lesser reduction.

Conclusion:

Increased CT severity grading (Grade 3 & 4) associated with poor disease outcome. Follow up CT chest after 1 month in discharged population reveals lesser reduction in interstitial thickening than other CT characteristics.

Title: A RETROSPECTIVE STUDY OF RESPONSE OF TOCILIZUMAB IN THE TREATMENT OF SEVERE COVID-19 PATIENTS IN A DEDICATED COVID HOSPITAL

Name of Presenter: **Dr Ajeet Singh Thakur**

Authors (or Co-authors): **Dr Arti Julka, Dr Bhavya Atul Shah, Dr Sunil Yadav, Dr Ashutosh Singh**

Institution/Author Organization: **R.D.Gardi Medical College, Ujjain, M.P., India**

INTRODUCTION-

Patients with Covid-19 may develop severe respiratory distress, thought to be mediated by cytokine release. Tocilizumab an experimental drug an IL-6 receptor antagonist, may be beneficial for severe Covid-19, when cytokine storm is suspected.

OBJECTIVES-

To assess the response of tocilizumab in severe Covid-19 patient.

METHODOLOGY-

This is a retrospective single center cohort study of patients diagnosed with Covid-19 who received tocilizumab. Patients were evaluated by changes in oxygenation status and proinflammatory markers pre and post-tocilizumab use.

RESULTS-

40 patients received tocilizumab at a dose of 8mg/kg. At baseline all patients were on high flow oxygen or on non invasive/invasive ventilation support and all had elevated proinflammatory markers, including c-reactive protein(CRP). Most of the patients had clinical improvement along with significant reduction in proinflammatory markers and oxygen demands within 24 hours of administration compared to other therapeutic agents which are being used. Ultimately, 72.5%(29) of all patients that received tocilizumab improved and got discharged and 27.5%(11) expired.

CONCLUSION- We were able to administer tocilizumab to a limited number of patients having severe Covid-19 due to the high cost of drug and low socioeconomic status of patients. This study found significant clinical improvement in patients that received tocilizumab in the setting of severe Covid-19.

Title: Pneumothorax in COVID 19 patients: A retrospective study at tertiary care center

Name of Presenter: **AMARNATH P PRASAD**

Authors (or Co-authors): -

Institution/Author Organization: **BHARATI HOSPITAL AND RESEARCH CENTER, PUNE**

Introduction:

Pneumothorax and pneumomediastinum have been noted to complicate COVID-19 pneumonia. Herein we review the incidence and outcomes of pneumothorax in about 3000 Covid-19 patients admitted to our institution.

Aim and Objective:

To identify the incidence and clinical outcome of pneumothorax in covid-19 patients.

Methods:

We performed a retrospective review of COVID-19 cases in our hospital. Patients with a spontaneous pneumothorax were identified, clinical characteristics, risk factors and outcome were noted. Results: 2996 COVID -19 positive patients were admitted to our institution between April 1st- October 31st, 2020, out of which 1746 patients had moderate to severe disease. Twenty-three cases of COVID-19 patients who developed spontaneous pneumothorax (two pneumomediastinum) were identified. They were males predominant age group of 40-60 and 70 % non-smoker. 18/23 cases were associated with mechanical ventilation. All cases had severe bilateral GGOs with P:F less than 100. 2 cases (one case of bilateral pneumothorax) occurred while patient was on HFNC. 20 cases required chest tubes and had large air leaks. In this series only 4 cases (1 with prolonged ICD > 45 days) survived.

Conclusion:

These cases suggest that pneumothorax (incidence of about 1%) is a complication in severe Covid-19 with poor overall disease related outcome.

Title: Commonly associated comorbidity with increased risk of developing Covid 19 disease: A Retrospective study.

Name of Presenter: **Dr Anchal Jain**

Authors (or Co-authors): **Dr Arti D Shah, Dr Kusum V Shah, Dr Yash rana**

Institution/Author Organization: **S B K S M I & R C**

INTRODUCTION: -

SARS -COV 2 has caused a worldwide pandemic that began with an outbreak of pneumonia cases in the Hubei province of China and in India it started on 30th January 2020. Morbidity and mortality associated with it is very high. Hence, it is crucial to determine possible factors associated with the disease.

AIM & OBJECTIVE: -

1)To analyze most common comorbidity associated with COVID19 disease. 2) To analyze most common age group presenting with Covid 19 infection with comorbidities.

MATERIAL & METHOD'S: -

Retrospective data of 150 RT PCR confirmed COVID 19 patients will be evaluated to know

the most common comorbidity and age group in which they present.

RESULT:

Statistical analysis and result in progress. Comorbidities like hypertension, diabetes, lung cancer etc will be evaluated.

CONCLUSION: - In progress.

Title: Knowledge, Attitude and Practices about COVID 19 among resident doctors of Government Medical College and Sir. T Hospital, Bhavnagar

Name of Presenter: **Aneri Parekh**

Authors (or Co-authors): **Dr. Jigna Dave**

Institution/Author Organization: **Government Medical College and Sit. T Hospital, Bhavnagar**

Background:

The COVID-19 pandemic has become a great threat to public health, which has greatly impacted the study and life of postgraduate students in India. Hence it is essential to assess their knowledge, attitude and practices regarding COVID-19.

Aims And Objectives:

To assess knowledge, attitude, and practice of postgraduate medical students of Government Hospital, Bhavnagar towards coronavirus disease 2019 (COVID-19).

Methodology:

An observational study of 220 resident doctors was performed through the use of a specifically designed and validated knowledge, attitude and practice questionnaire, prepared using Ministry of Health and Family Welfare (MoHFW) guidelines. 197 doctors had taken COVID-19 training. The responses were analyzed to calculate mean knowledge, attitude and practices.

Results and Conclusion:

Among 220 participants, 72.27% students had good knowledge while 27.72% had poor knowledge; 75.91% students had positive and 23.18% had neutral attitude; 89.09% students had good and 10.91% had poor practices. There was no significant difference in mean knowledge, attitude and practice scores among First year, Second year and Third year resident doctors. Keywords: COVID-19, KAP, Postgraduate students.

Title: IMPACT AND HEALTH OUTCOMES IN HEALTH CARE WORKERS POST COVID 19 IN A TERTIARY HEALTH CARE CENTRE.

Name of Presenter: **ARUN PANDIYAN.S**

Authors (or Co-authors): **DR.KOUSHIK MUTHU RAJA, DR.T.DHANASEKAR, DR.C.CHANDRASEKAR**

Institution/Author Organization: **SRI RAMACHANDRA INSTITUTE OF HIGHER EDUCATION AND RESEARCH**

BACKGROUND:

The COVID-19 pandemic has had a dramatic impact on HCWs all over the world. In this study we have investigated the workers of our tertiary health care centre to assess health impacts of COVID19.

OBJECTIVES:

To explore the infection risk, symptomatology, epidemiological, demographic information and to discuss health impacts among HCWs.

METHODOLOGY:

This is a single centered retrospective study, which recruited HCWs who were tested positive for COVID19 between June 2020 to October 2020 through a structured questionnaire.

RESULTS:

In this study 151 of institution who were tested positive for COVID 19 through RT-PCR assay were asked to complete a questionnaire. The demographic data showed incidence was highest in the Nurses 33% followed by doctors 24.5%. The predominant symptomatology being fever in 74.2% followed by loss of smell and taste in 51%. Around 91.3% turned positive within 1-3 days of onset of symptoms. Majority 94.7% had a mask throughout the exposure. Around 84.4% were hospitalized, 15.2% remained in home quarantine and one required ICU. Around 53% said to have anxiety during the illness. At present only 6.6% reported to have symptoms.

CONCLUSION:

Our findings indicate that the nurses followed by the doctors whose exposure is related to direct contact with patients were mainly affected. The contact tracing revealed no significant transmission from the HCWs.

Title: CLINICO-RADIOLOGICAL PROFILE OF MODERATE AND SEVERE COVID 19 CASES

Name of Presenter: **ARYA RAMACHANDRAN**

Authors (or Co-authors): **VIJAYAKUMAR MD, SURYAKUMARI MD**

Institution/Author Organization: **ANDHRA MEDICAL COLLEGE**

INTRODUCTION

Since December 2019, we have been facing the worst pandemic of human history. AIMS To

study the clinical, radiological and laboratory profiles, course and final outcomes of Covid19 patients.

METHODOLOGY

Hospital based observational cross sectional study of 270 covid19 patients admitted with saturation less than 94% from July to October 2020.

RESULTS

We observed male predominance and mean age of 54 years. Most common symptom is breathlessness (98.1%) followed by cough (71.8%) and fever (70.3%). 26.3% of patients have both diabetes and hypertension, 13.7% have hypertension and diabetes in 12.2%. Two MDRTB and one R/S PTB detected. Chest x ray abnormality in 98.1% with air space opacity as common finding. In CT chest major finding is GGOs with peripheral distribution. 51.4% patients required ventilator support. Blood group A and lymphopenia is common. 28.5% have raised inflammatory markers. 90 patients died during the course accounts for 33.3% mortality.

CONCLUSION

Almost all patients have radiological abnormalities, reducing the requirement of CT scans. Patients with older age and associated comorbid conditions seem to have greater risk for lung injury thereby requiring oxygen support and these patients also had greater derangement in their biochemical profile.

Title: A STUDY OF CORRELATION BETWEEN CLINICAL PRESENTATION AND INFLAMMATORY BIO-MARKER LEVELS IN SARS COV2 PATIENTS Presented to GGH, Vijayawada.

Name of Presenter: **Dr. Audipudi Swetha, 2nd year post graduate,**

Authors (or Co-authors):

DR.N.GOPICHAND, DR.V.ARUNA

Institution/Author Organization: **Siddhartha Medical College**

Introduction :

Coronaviruses are large family of viruses that cause illness ranging from the common cold to more severe diseases such as MERS and SARS. Novel coronavirus (nCoV) is a new strain that has been named as "SARS-CoV-2" and is an emerging pandemic today. Cases present from mild common cold to pneumonia and ARDS. Various inflammatory markers like Serum Ferritin, C-reactive protein, IL-6 and d-dimers are measured to access the severity and progress of covid-19 patients. A high D-Dimer values at admission is an independent predictor for mortality in covid-19 patients.

Aim:

To compare the clinical presentation and biomarker level at admission time in covid patient.

Methology :

100 RT-PCR positive and radiological positive for covid 19 cases whose blood samples are examined for ferritin ,CRP, D-dimer levels. Results: Many cases presenting with spo2 below 90% with elevated ferritin and D-dimer values and are in need for high oxygen requirement including NIV support. High mortality is with patients with increased D-dimer values.

Conclusion:

There is high association of inflamatory biomarkers with severity of covid 19 disease. Measuring these markers help in managing and assessing the severity of patients. Early antiaogulation therapy helps in reducing the mortality of patients.

Title: Clinico-pathological correlation in fatal Covid-19 Infection using Post-mortem Minimally Invasive Tissue Sampling: The First Case series from India

Name of Presenter: **AYUSH GOEL**

Authors (or Co-authors): **All India Institute of Medical Sciences, New Delhi**

Institution/Author Organization: **Animesh Ray, Deepali Jain , Shubham Agarwal, Shekhar Swaroop, Prasenjit Das, Sudheer Kumar Arava, Asit Ranjan Mridha, Aruna Nambirajan, Geetika Singh, S. Arulselvi, Purva Mathur, Sanchit K**

Background:

The spectrum of Covid-19 infection varies from influenza-like-illness to acute respiratory distress syndrome. Histopathological studies would help to understand the mechanism of organ damage and provide treatment options.

Design:

Single-center observational study conducted at AIIMS. Methods: 37 patients who died of Covid-19 were enrolled. Post-mortem percutaneous biopsies, taken from lung, heart, liver, kidney etc were subjected to detailed histopathological examination. Immunohistochemistry was performed using CD61, CD163, and SARS-CoV-2 virus detected using primary antibodies.

Results:

The mean age of subjects was 48.7years with male predominance (59.5%). Respiratory failure was seen in 97.3%. Lung histopathology showed diffuse alveolar damage in 78% of

patients with associated bronchopneumonia in 37.5% and scattered microthrombi in 21% of patients. Type II pneumocytes showed immunopositivity for SARS-CoV-2 and immunostaining revealed increased macrophages. Acute tubular injury was seen in 46% of renal biopsies. 71% of liver biopsies showed Kupfer cell hyperplasia and 27.5% showed submassive hepatic necrosis. No evidence of myocarditis was seen.

Conclusions

The predominant finding was diffuse alveolar damage with demonstration of SARS-CoV-2 protein in the acute phase. Microvascular thrombi were rarely identified. Substantial hepatocyte necrosis, Kupffer cell hypertrophy, micro/macrovessicular steatosis unrelated to microvascular thrombi suggested that liver might be a primary target of Covid-19.

Title: Impact of N95/FFP2 on health care professionals during COVID 19 pandemic by the assessment of ABG, ESR, ECG and Spirometry

Name of Presenter: **Dr Frank Mohan**

Authors (or Co-authors): **Dr P. Chakradhar Reddy**

Institution/Author Organization: **Santhiram Medical College, Nandhyal**

Introduction:

SARS-COV2 causing COVID-19 was officially declared as an infectious disease pandemic on Jan 30,2020.On Nov30,2020 almost 63&9.4 million are infected and 1.46&0.13 million deaths in World and India respectively. COVID-19 is spread by respiratory droplets and due to prolonged use of PPE which includes N95 causes side effects like headaches, impaired cognition, rash, acne etc.

Aims and Objectives:

Study the physiological impact of Pre and Post use of N95 in health care professionals by the assessment of ABG, ESR,ECG and Spirometry. Methodology: Prospective study done over 6 months in 50 NIOSH N95 used health care professionals for about 84hrs/month within 18-35yr age group who are completely normal in ABG,ESR,ECG and Spirometry with no respiratory illness including Asthma, COPD and other Comorbidities. Results: Mean age 24.9yrs, mean BMI 23.9kg/m2. Mean levels of Pao2 decreased by 6.3mmhg, Paco2 increased by 5.5mmhg, HCO3 increased by 2.4meq/L, ESR raised by 13mm/hr, ECG showed sinus Tachycardia (108/mt), and FEV1 & FVC decreased by 133ml&189ml respectively.

Conclusion:

Adverse effects of N95 due to hypoxia, hypercapnea are confirmed with the

derangement levels in above parameters. We suggest not to use unnecessarily due to their long term effects physiologically especially on Cardiopulmonary,Neurological and other issues.

Title: Impact of COVID-19 outbreak on Non-COVID-19 chronic respiratory diseases diagnostic practice in India : a survey report (2020)

Name of Presenter: **HIMANSHU MITTAL**

Authors (or Co-authors): **NEERAJ GUPTA**

Institution/Author Organization: **JLN Medical college,Ajmer**

Introduction:

this study aim to determine the impact of COVID -19 pandemic on other common non covid respiratory diseases like COPD, Bronchial Asthma in view of the diagnostic and therapeutic approach followed by the pulmonologist across the country.

Method:

An online survey was conducted among the 314 pulmonologists across th country using a structured questionnaire including 30 questions pertaining to impact on diagnostic practices (spirometry, polysomnography) and questions pertaining to attitude of pulmonologist towards present and future preventive practices.

Observation:

Majority of the respondents suspended spirometry , polysomnography services during covid-19 period and opted for cautious selection of candidates for the same. Similarly majority of pulmonologist favoured the use of preventive measures like ppe kit, N-95 mask, compulsory RT-PCR testing in all patients before performing any procedures (bronchoscopy, thoracoscopy, spirometry, EBUS etc) during this COVID-19 outbreak duration and even after that.

Conclusion:

Infectious pandemic diseases like COVID-19 outbreaks significantly affects the existing methods of diagnosis and treatment of other more common chronic diseases.

Title: A PILOT STUDY ON THE ASSESSMENT OF SERUM SEROTONIN LEVELS IN PREDICTING DISEASE SEVERITY AND ITS' ROLE AS A NOVEL BIOMARKER IN COVID-19 PATIENTS AT A TERTIARY CARE HOSPITAL IN SOUTH INDIA

Name of Presenter: **DR.INDRANIL BANERJEE**

Authors (or Co-authors): **DR.CH.RADHIKA, DR.P.MUNINATHAN**

Institution/Author Organization: **MEENAKSHI MEDICAL COLLEGE HOSPITAL AND RESEARCH INSTITUTE**

INTRODUCTION:

Serotonin is a neurotransmitter that plays important roles in lung functions. The ability of the endothelial cells of the lungs to metabolize mono-amine substrates may be reduced in disease states, and this could explain the increased levels of Serotonin in circulation. Covid-19 has shown to increase the levels of pro-inflammatory cytokines which has shown to increase the rate of Serotonin metabolism and thereafter increasing its levels in circulation.

AIMS & OBJECTIVES:

To assess the relationship between Serum Serotonin levels with Radiological Indices and other inflammatory markers predicting disease severity.

METHODOLOGY:

This is a 3 month ongoing cross-sectional pilot study on 50 patients who are RT PCR +ve and -ve with definite radiological findings, where Serum Serotonin levels are assessed and correlated with CT severity scores and other parameters.

PRELIMINARY RESULTS:

The study got delayed due to the ongoing pandemic hence complete analysis could not be obtained yet. Out of 35/50 samples, serum serotonin has shown a positive correlation with CT Severity score and the association was found to be statistically significant ($p=0.031$). D-Dimer, Ferritin and C-RP were all found to be elevated. The Mean Serotonin level was 215ng/ml (elevated).

PRELIMINARY CONCLUSIONS:

Serum Serotonin has shown a promising role as biomarker in predicting disease severity and warrants future studies and clinical trials in Covid-19.

Title: A observational study between inflammatory markers and symptomatology in COVID 19 patients

Name of Presenter: **Irgam Srinivas Reddy**
 Authors (or Co-authors): **Dr.MD.Badusha MD**
 Institution/Author Organization: **NRI institute of medical sciences**

INTRODUCTION

Coronavirus disease 2019 (COVID-19) is a newly emerging infectious disease and a rapidly escalating pandemic caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It has been shown

that inflammation plays a key role in the pathogenesis of COVID-19 and hence there is a pivotal role of inflammatory markers.

AIMS & OBJECTIVES

To study the association between various inflammatory markers and symptomatology in COVID-19 patients during the course of hospital stay. METHODOLOGY A retrospective study in which baseline biochemical inflammatory markers(CRP, D-Dimer, serum ferritin) were noted at the time of admission into the hospital and their changes in association with exacerbation of symptoms(fever, dry cough, breathlessness) were correlated.

RESULTS

Out of 150 patients:- 84 had an exacerbation of fever- 92.8% of them had a concomitant rise in CRP, serum ferritin 77 had an exacerbation of dry cough - 81.8% of them had a rise in CRP, D-Dimer 92 had an exacerbation of breathlessness - 64.1% of them had a rise in CRP, D-Dimer.

CONCLUSION

In resource-limited settings, these 3 inflammatory markers(CRP, D-Dimer, serum ferritin), especially CRP is very useful to evaluate patients in case of exacerbation of symptoms to give a possible opinion about prognosis.

Title: OUTCOME OF REMOTE VIRTUAL TELEMONITORING AND TREATMENT OF MILD – MODERATE COVID-19 PATIENTS IN HOME CARE SETUP

Name of Presenter: **DR.JAYAVIGNESH J**
 Authors (or Co-authors): **DR.KOUSHIK MUTHU RAJA,DR.DHANASEKAR.T,DR. CHANDRASEKAR.C**

Institution/Author Organization: **SRI RAMACHANDRA INSTITUTE OF HIGHER EDUCATION AND RESEARCH**

BACKGROUND-

Approximately 80% of the patients with Covid-19 have mild-moderate clinical course usually requiring only symptomatic treatment. The use of telemedicine and telemonitoring would allow the clinical evaluation of the patients who present with a mild clinical course and who are in home isolation avoiding risk exposure to health care professional.

OBJECTIVES:

To assess if telemedicine with telemonitoring is a clinically useful and secure tool in the monitoring and treating of patients with mild-moderate COVID-19 in a home care setup

METHODOLOGY:

This study included all RT-PCR confirmed mild-moderate Covid-19 patients who were virtually telemonitored and treated by video and audio calls through "WHATSAPP" in a home care setup from August-2020-November 2020

RESULTS:

In this study around 200 patients with age group ranging between 16-63 years were assessed.(Males -112) and (Females- 88).194 were mild and 6 were moderate cases.5 (2.5%) out of 200 patients were discontinued from home care monitoring and were hospitalised due to persisting symptoms.The remaining 195(97.5%) patients were successfully managed through telemonitoring in a home care setup.

CONCLUSION:

Our study suggests that telemedicine with telemonitoring,used proactively, allows for monitoring and treating patients with mild-moderate COVID-19 in a clinically useful and a secure way,thereby significantly reducing the financial burden on the patient.

Title: COVID –when the public become fighters

Name of Presenter: **Dr.Jyothi Geetha Mohankumar**

Authors (or Co-authors): **Dr Thomas George ,Dr Murali Cp ,Dr Ok Mani,Dr Elizabeth ,Dr Parvathy**

Institution/Author Organization: **Government medical college ,thirissur**

INTRODUCTION

Coronavirus disease (COVID-19) an infectious disease ,a pandemic above all, have left us all in great dilemma . COVID-19 spreads primarily by contacting infected individual through coughing or sneezing or from contaminated surfaces. In the light of the absence of any effective treatment and with the clearly identified mode of transmission, awareness of essential information of the disease is the most powerful tool that individuals can have against the virus.

AIMS AND OBJECTIVES

The aim of this study is to analyze and evaluate the knowledge and awareness of general public attending outpatient department in a tertiary care centre.

MATERIALS AND METHODS

A cross-sectional study was conducted among 500 people attending in outpatient department in a tertiary care centre from 1st September to 1st November 2020. .The self administered structured questionnaire was

used as tool to record responses of participants

OBSERVATIONS

Data collected from 500 consecutive patients attending OPD based on structured questionnaire responses were analysed. 50% were aware of all symptoms of corona, only 25% know about the complications, 33% are aware about sequelae of the disease. 40% participants know about the available treatment. 60% believed it is a preventable disease. 48% knows all about mask etiquettes, and 34% knows about correct hand washing and sanitising techniques. The importance of physical distancing is as low as 22%. Also the knowledge about tests, high risk population and spread of disease was assessed

CONCLUSION

Control of a pandemic is influenced considerably by practices followed by the general public which in turn is supposed to be influenced by the knowledge and its attitude. Some lack of knowledge, negativity in attitude, and inappropriate practices followed by a section of the public may impart in a continuous rise in the number of COVID-19 cases.

Title: Seroprevalence of anti-SARS-CoV-2 IgG antibody in hospitalized patients: Results of the first hospital-based serosurvey from India

Name of Presenter: **KOMAL SINGH**

Authors (or Co-authors): **Dr Animesh Ray, Dr Gaurav Batra, Dr Ayush Agarwal, Dr Aakansha**

Institution/Author Organization: **All India Institute of Medical Sciences**

Background:

Seroprevalence of IgG antibodies against SARS-CoV-2 is an important tool to estimate the true extent of infection in a population. However, seroprevalence studies have been scarce in South East Asia including India, which, as of now, carries the second largest burden of confirmed cases in the world. The present study aimed to estimate the seroprevalence of anti-SARS-CoV-2 IgG antibody among hospitalized patients.

Method:

This cross-sectional study, conducted at a tertiary care hospital in North India, recruited consecutive patients who were negative for SARS-CoV-2 by RT-PCR and had no past history of COVID-19. Anti-SARS-CoV-2 IgG antibody levels were estimated in serum samples by the ELISA method. Results: A total of 563 hospitalized patients were recruited in the study with a mean age (\pm SD) of 40.8 (\pm 15.1) years, and 57% male population. Positive

serology against SARS-CoV-2 was detected in 23.3% of patients. Residency in Delhi conferred a higher frequency of seropositivity (27.3%) as compared to other states (17.7%) with a p-value of 0.007. A positive correlation was obtained between SARS-CoV-2 seropositivity and BCG vaccination (p-value of 0.03).

Conclusion:

A significant and gradually increasing proportion of hospitalized patients, who were not diagnosed with COVID-19 before, demonstrated seropositivity against SARS-CoV-2.

Title: Study of inflammatory markers in relation to radiological findings in COVID-19 patients

Name of Presenter: **KOMMAVARAPU KALYANI MADHURI**

Authors (or Co-authors): **DR.B.BHANU REKHA, DR.V.M.KIRAN. OGIRALA**

Institution/Author Organization:

Dr.pinnamaneni sidhardha institute of medical sciences & research foundation

INTRODUCTION:

Currently, Coronavirus disease 2019 (COVID-19) become pandemic globally. Elevated inflammatory markers are observed and common pathophysiological response to acute illness. Chest X ray (CXR) changes are also commonly seen in COVID-19 patients. The present study was undertaken to determine the relationship between inflammatory markers to CXR findings in COVID-19 patients.

METHODS & MATERIALS:

This is a prospective observational study of 424 hospitalized confirmed COVID-19 patients at tertiary care from May 2020-November 2020. Patients comorbidities results of inflammatory markers and CXR were collected and analyzed. Correlations between radiological and inflammatory markers were compared statistically.

RESULTS:

Of the 424 patients, at the final follow-up, 409 (96.5%) patients were discharged and 15 (3.5%) death. By comparing mean and standard deviation (SD) of inflammatory markers ESR, CRP (C-reactive protein), D dimer, Serum Ferritin with CXR findings which are classified as mild, moderate, severe at the time of presentation there is statistically high significant relation of CRP, ESR and Sr. ferritin to CXR with P-value of $<0.001, 0.02$ & 0.002 respectively.

CONCLUSION:

Higher the level of CRP, ESR & Sr. ferritin, more

severe the CXR changes in COVID-19 patients. Longitudinal changes of inflammatory markers and CXR changes indicate the advancement of the disease and may be helpful in predicting the progression of severe patients.

KEYWORDS:

Coronavirus disease 2019; severity; inflammatory markers;

Title: VIEW SCORE: an early warning score to detect possible complications among Covid-19 patients.

Name of Presenter: - **Dr Meenakshi Bhakare**

Authors (or Co-authors): **Dr Rajkumar Nikalje, Dr Reshma Patil, Dr Urvi Shukla, Dr Rupesh Bokade, Dr Gajanan Sakhare, Shardul Joshi, Aditi Pais**

Institution/Author Organization: **Symbiosis Medical College for Women & Symbiosis University Hospital & Research Centre, SIU.**

Introduction:

COVID-19 complications are generally co-related with adverse lung condition. However, this correlation was derived from clinical examination, CT scan and X-rays. For understanding accurate pathophysiological mechanism of COVID-19, understanding lung functions across various stages of the disease is a key. We chose spirometry to evaluate physiology of disease. Based on the outcome of this pilot study an appropriate large scale study could be planned.

Objectives:

1. To assess FVC, FEV1 & ratio FEV1/FVC in COVID-19 patients.
2. To study correlation between FVC, FEV1, FEV1/FVC with oxygen saturation & clinical findings.
3. To evaluate Patient's Adherence to self-health monitoring by using spirometry.

Materials and methods:

Prospective observational study was adopted with study duration of 8 weeks. Total 30 COVID-19 positive asymptomatic or mild symptomatic patients were enrolled. Briota's handheld connected SpiroPRO™ device, pulse oximeter, thermometer was provided. Patients and healthcare staff were provided with necessary training and access to mobile applications.

Result:

Spirometry Interpretation shows Normal in 49.88%, Obstructive in 23.67% & Restrictive in 26.43%. About 77.67% of the patients adhered to the spirometry daily testing. Based on the initial data analysis, participants were categorized into 5 VIEW zones – A, B, C, D, E. 7.2% Patients (D and E) were recommended for

follow-ups and physical examination, 19.02% patients (C) were encouraged to continue daily breathing exercises and do a regular check on their vital.

Conclusion:

Daily monitoring of VIEW Score helps early detection of possible lung complications enabling appropriate medical intervention.

Title: Study of relationship between blood groups and clinical outcome in COVID 19 infection

Name of Presenter: **MERIN THOMAS**

Authors (or Co-authors): **Dr Deepak Kumar R**

Institution/Author Organization:

KEMPEGOWDA INSTITUTE OF MEDICAL SCIENCE

BACKGROUND:

In December 2019, COVID-19 emerged in Wuhan, China. It has been reported that a variety of indicators can predict the progression of COVID-19 disease.

AIM:

The aim of this study is to establish a relationship between the blood groups and the clinical outcomes in COVID-19 patients.

METHOD:

A retrospective study conducted on 120 RT-PCR confirmed COVID-19 patients from KIMS hospital and research centre, Bengaluru from June to September. Patient's history, vitals and Blood groups were collected, clinical outcomes like need for intubation, admission to intensive care unit and need for mechanical ventilation were analyzed. The cases were categorized into non-severe- WHO category A and B, severe- WHO category C. Chi square test was used for statistical analysis.

RESULT:

Blood type A, AB, B was at increased risk of both intubation and need for ICU compared to type O. CONCLUSION: Increased severity of COVID 19 infection is seen among non-O blood types. Intubation risk was increased among AB and B types, than among A.

Title: PROGNOSTIC VALUE OF LEUCOCYTOSIS, LYMPHOPENIA AND NLR IN COVID-19 DISEASE SEVERITY

Name of Presenter: **MOHANABALAMURUGAN V**

Authors (or Co-authors): **Government hospital for chest and communicable diseases, Andhra medical college**

Institution/Author Organization:

**K.V.V.VIJAYAKUMAR
,V.SURYAKUMARI,PREETHI**

INTRODUCTION:

In December 2019, coronavirus 2019 (COVID-19) emerged in Wuhan and rapidly spread throughout the world in spite of stringent measures. The aim of this study is early identification of COVID patients who are in need of critical care management.

AIMS AND OBJECTIVES:

To study the comparison of leucocytosis, lymphopenia and NLR in severe and non-severe COVID patients for the early decision of critical care management.

METHODOLOGY:

It is a Hospital based prospective study conducted at our hospital. 300 patients were taken into the study based on inclusion and exclusion criteria.

RESULTS:

Of the 300 patients with COVID-19 recruited, 130 were diagnosed as having severe infection. The median age was 45 years and 180 were male. The most common symptoms were fever (92%), cough (78%), fatigue (75%), shortness of breath (57%). Severe cases tend to have lower lymphocyte counts, higher leukocyte counts and higher neutrophil-lymphocyte ratio (NLR).

CONCLUSION:

The novel coronavirus might mainly act on lymphocytes. Surveillance of NLR and lymphocyte count is helpful in the early screening of critical illness, diagnosis and treatment of COVID-19 and to decide ICU admission.

Title: UTILITY OF VARIOUS INFLAMMATORY MARKERS IN PREDICTING OUTCOMES OF HOSPITALIZED PATIENTS WITH COVID-19 PNEUMONIA: A SINGLE CENTRE EXPERIENCE.

Name of Presenter: **DR MONISHA ANANDAN**

Authors (or Co-authors): -

Institution/Author Organization: **APOLLO MAIN HOSPITAL, CHENNAI**

AIM:

To study the utility of various inflammatory markers in predicting outcomes of hospitalized patients with COVID-19 Pneumonia.

Primary objective:

To analyse the correlation between various inflammatory markers and in-hospital mortality.

Secondary objectives:

To assess the correlation between the inflammatory markers and clinical category of patients, and other outcomes such as length of hospital stay and need for invasive ventilation.

BACKGROUND AND METHODS:

Retrospective cross-sectional observational study was done in 221 hospitalized patients who were diagnosed with COVID-19 Pneumonia in a tertiary care hospital in South India from May 2020 to July 2020. Clinical and laboratory data of patients diagnosed with COVID-19 Pneumonia were collected. This included epidemiological data, clinical data, laboratory parameters (N:L ratio, CRP, Ferritin, IL-6, LDH, D-dimer and Procalcitonin), treatment details and outcomes.

RESULTS:

IL-6 levels more than 60.5 pg/mL and D-Dimer levels more than 0.5 mcg/mL predicted in hospital mortality with sensitivities of 80% and 76.7% respectively. N/L Ratio and CRP levels had good correlation with the need for oxygen supplementation and/or invasive ventilation.

CONCLUSION:

Judicious use of COVID-19 biomarkers could help in disease prognostication and thereby provide guidance to devise appropriate management strategies.

KEY WORDS:

COVID-19 Pneumonia, COVID-19 Biomarkers, CRP, N:L ratio, Ferritin, IL-6, LDH, D-dimer, Procalcitonin.

Title: Serum Ferritin and IL-6 levels in COVID-19 patients: A prognostic biomarker and Early predictor of Disease Severity

Name of Presenter: **Dr Mythri G**

Authors (or Co-authors): **Dr Anil Kumar H, Dr Prashanth Kumar M**

Institution/Author Organization: **Dr Chandramma Dayananda Sagar Institute of Medical Education and Research, DSU, Ramanagara**

Introduction:

The clinical spectrum of the disease ranges from being asymptomatic to full blown acute respiratory distress syndrome. Therefore, full monitoring of the severity of COVID-19 and effective early intervention are the fundamental measures for reducing mortality. Accumulating evidence has suggested that inflammatory responses play a critical role in the progression of COVID-19. Increased levels of inflammatory markers including

Serum Ferritin and IL-6 involved in COVID-19 pathogenesis may serve as a potential biomarker for monitoring disease progression.

Objective:

To assess the role of inflammatory biomarkers with special reference to Serum Ferritin and IL-6 in COVID-19 patients.

Methodology:

Around 200 COVID-19 patients were categorised into Mild, moderate, Severe and Critical based on clinical and X-Ray features. Inflammatory markers especially Serum Ferritin and IL-6 measured were compared among the different categories. Statistical analysis was done using SPSS 21.

Results:

A significant increase in Serum Ferritin and IL-6 levels were observed in severe cases of COVID 19 ($p < 0.05$). Conclusion: As increased levels of inflammatory markers specially Serum Ferritin and IL-6 levels were observed in severe COVID-19 cases, it can be used as a prognostic marker as well as early predictor of disease severity which is beneficial to treating physicians.

Title: Chest radiographic patterns and its outcome in assessing severity of covid19

Name of Presenter: **Dr.N.Namratha**

Authors (or Co-authors): **Dr.M.D.badusha**

Institution/Author Organization: **NRI institute of medical sciences**

Background :

The purpose of study is to describe chest radiographic findings and correlate them with clinical outcome.

Materials and methods:

This is a retrospective study involving patients with microbiologically confirmed COVID-19 infection in whom chest x ray was performed at emergency department during the initial days of hospital stay and at the time of discharge in our hospital. Chest x-ray for 100 individual patients were reviewed along with RT-PCR test. The patients clinical outcome was expressed as - recovered, expired, rehabilitated on home oxygen.

Results:

In our study of 100 patients, most affected patients are of age group above 40 yrs. Most common finding in chest X-rays during initial stage of admission is consolidation which is followed by ground glass opacities(ggo) and nodules. Most of the patients showed peripheral plus basal distribution(48%) followed by diffuse(

35%),basal(10%),peripheral (7%) distribution in descending order. Hospital stay and mortality rate was higher in patients with age greater than 40yrs, patients presenting with diffuse pattern on chest X-ray and RALES score > 15 Conclusion: Chest X-ray distribution patterns helps in triaging the patients and also determines their future outcome. Hence more vigilance and care can be established to the patient based on their chest X-ray patterns. Chest X-ray findings in covid -19 frequently showed consolidation followed by GGOs with peripheral and basal predominance. RALES score can be used in emergency setting as a quantitative method to know who are at increased risk of icu admission.

Title: The study of presentation of covid positive CKD patients presented to GGH Vijayawada during pandemic

Name of Presenter: **Oruganti sindhuja**

Authors (or Co-authors): **Dr.Aruna**

Institution/Author Organization: **Siddhartha government medical college**

INTRODUCTION

The clinical spectrum of corona virus disease 2019(COVID 19)infection ranges from asymptomatic to severe pneumonia and multi organ dysfunction. High mortality was reported in comorbid . A marked altered immunity leading to immunosuppression may predispose CKD patients to infections. In the present study the various modes of presentations and their outcomes is CKD with COVID has been dealt.

OBJECTIVES

To study the profile of CKD in COVID To study their presentation clinically To assess their lab and radiological findings To assess their progression and outcome with treatment

METHODOLOGY

It is a prospective study based on 50 known CKD cases of different age groups with RT PCR positive presented to GGH,Vijayawada during the pandemic.

RESULTS

Male predominant (male :female-39:11) with most of them being diabetic(31)and hypertensive(35).Dyspnea is the most common presentation (19)followed by fever(8).chest x ray showed predominantly b/l lower lobe pneumonia(26)followed by normal study(14). Most of them are on oxygen supply(17) predominantly NRBM followed by Non invasive ventilation(15).24 patients underwent dialysis and the outcome was death in 18 patients ,29 got discharged and 3 LAMA.

CONCLUSION

From my study,I conclude that CKD patients are at increased risk of developing severer COVID-19 and mortality rate appears to be high.CKD patients should be considered as high risk groups and at suspicion of infection ,testing must be done and prompt intervention is needed.

Title: FOLLOW UP STUDY OF CLINICAL AND RADIOLOGICAL PROFILE OF COVID-19 SURVIVORS 2 MONTHS AFTER RECOVERY

Name of Presenter: **POPAVATH POOJITHA BAI**

Authors (or Co-authors): -

Institution/Author Organization: **Andhra Medical College**

Introduction:

The most frequent symptoms of COVID-19 are cough, fever, myalgia, dyspnea and anosmia.

OBJECTIVE:

To describe the clinical evolution, symptom persistence and lung radiographic findings during 2 months follow-up in Covid 19 survivors.

METHODOLOGY:

We performed descriptive clinical follow-up (day7,D30 and D60) of 50 patients with COVID-19 confirmed by RT PCR at GHCCD, visakhapatnam from August to October 2020 .screening of persisting symptoms and Chest xray was performed at day30 and day60. If any abnormality in chestxray HRCT was planned.

Results:

At D30, 76%(38/50) of patients had at least one symptom; and at D60, 68%(25/50) had symptoms, mainly dyspnoea:56%(28/50) at admission, 36%(18/50) at D30 and 24%(12/50) at D60. Fever:86%(43/50)at admission, 16%(8/50) patients at D30 and 10%(5/50) at D60. Residual abnormalities found in chest xray .out of 50 ,48% had no abnormality, 34% had improvement in lung abnormality at day30, whereas 18% patients had an unchanged abnormality at day60.

Conclusion: up to 2 months after recovery 68% had complaints and 18% had lung fibrotic changes .A prolonged follow up is essential to alert risk of longer symptom duration.

Title: CLINICAL USEFULNESS OF EOSINOPENIA IN DIFFERENTIATING COVID-19 SUSPECT VERSUS OTHER FLU LIKE ILLNESSES IN OUTPATIENT SETUP.

Name of Presenter: **DR.R.ANAND**

Authors (or Co-authors): **DR.KOUSHIK MUTHU RAJA.M, DR.C.CHANDRASEKAR**

Institution/Author Organization: **SRI RAMACHANDRA MEDICAL COLLEGE , DEPARTMENT OF RESPIRATORY MEDICINE – CHENNAI**

OBJECTIVES:

Role of Eosinopenia in Differentiating COVID 19 Suspect from other flu like illnesses in an Outpatient setting.

METHODS:

It is a retrospective case control study in which data of 1252 Suspected COVID 19 patients who visited the fever clinic were enrolled. Among this, 701 Patients were found have COVID 19 pneumonia and 552 had other Flu like illnesses. CBC and CRP were taken in all patients along with chest x ray as Routine protocol.

RESULTS:

Among the 701 Positive patients, Eosinopenia is seen in 527 patients and has a Sensitivity of 75.2 % and Specificity of 68.6 %. When combined with other lab parameters such as the Increased CRP and Lymphopenia, the Specificity rises up to 78.6 % which is statistically significant.

CONCLUSION:

Our Study Shows that Eosinopenia as an independent variable, is a reliable marker to differentiate COVID 19 Suspect Patients from other FLU like illnesses on OPD basis, however when combined with other parameters like Lymphopenia and CRP the specificity increases.

Title: PREVALENCE OF ACUTE KIDNEY INJURY IN COVID-19: A HOSPITAL BASED OBSERVATIONAL STUDY

Name of Presenter: **Dr.R.Nikhilesh**

Authors (or Co-authors): **Dr. Gajanan S. Gaude, Dr. Bhagyashri B. Patil, Dr. Jyothi Hattiholi, Dr. Gautam S., Dr. Kiran Kumar Pujar**

Institution/Author Organization: **Jawaharlal Nehru Medical College, KAHER, Belagavi**

BACKGROUND

Although, diffuse alveolar damage and respiratory failure are the key features of SARS CoV-2 infection, the involvement of other organs such as the kidney has also been reported. In this study, we have observed the prevalence of kidney injury in patients with COVID-19 admitted in a tertiary care hospital.

Materials and Methods

In this retrospective study, we analysed the data of 200 in-patients admitted to a tertiary care centre over a period of 2 months.

Information regarding demographics, treatment, co-morbidities, clinical and laboratory data were collected from medical records and analysed.

Results

In this analysis, we have studied the age and sex distribution, co-morbidities, symptomatology, CT severity scoring on admission, patients requiring oxygen support, laboratory parameters and duration of hospital stay. The prevalence was 11% in patients with COVID-19 infection with no previous history of CKD, and overall prevalence is 18%.

Conclusion

Kidney dysfunction is common among patients with COVID-19, and patients who develop AKI have inferior outcomes. Additional research into management and potential mechanisms of this association is needed .

Title: Clinical characteristics and outcome of patients with severe acute respiratory infection (SARI) during COVID

Name of Presenter: **Dr Roshan Kumar.M**

Authors (or Co-authors): **M, Dr Vengada Krishnaraj, Dr Vinod Kumar, Dr Reetu Singh**

Institution/Author Organization: **Stanley Medical College & Hospital**

Background

SARI is one of the clinical manifestations of COVID-19 disease. As per WHO SARI is defined as an acute respiratory infection with history of fever or measured fever of $\geq 38\text{ }^{\circ}\text{C}$; and cough with onset within the last 10 days and requires hospitalization. The first confirmed patient with covid-19 in the India was reported on 30th January 2020 and in Tamilnadu was on 7th March 2020.

Objectives

To describe clinical characteristics and factor associated with clinical outcome of patients presenting with SARI at our hospital

Methodology

This is a record based cross sectional study included all cases admitted in SARI ward in Government Stanley Hospital, a tertiary referral hospital in Chennai designated for the management of COVID-19, The study enrolled all patients between 15th March 2020 and 15th May 2020 . Demographical and clinical symptoms or signs, and laboratory findings were recorded on admission. Radiological assessments included chest radiography, computer tomography (CT), and all laboratory testing was performed according to the clinical care needs of the patient. All admitted patient underwent nasopharyngeal/ oral swab test for

COVID19 RT-PCR.

Results.

A total of 246 patients were included in the study period from 15th March to 15th May 2020. The median age was 49.4 years and 56.9% were males. History of smoking were seen in 20 % of study . The most common symptom was fever (69.1%) followed by cough (62.6%), Breathlessness (62.6%) and sore throat (52.8%) in our study. In our study 27 % had co morbid condition and diabetes (7.3%) were most common comorbid found in our study. Eight patients required Intensive care support .Swab for COVID-19 were positive in 4(1.8%). Mortality was seen in 5 (2.1 %) patients.

Conclusion.

In our single centre tertiary the incidence of COVID-19 among the SARI patients done between March - May 2020 showed an incidence rate of 1.8%

Title: ASSESSING THE EFFECTIVENESS OF VIRTUAL BREATHING THERAPY IN SARS-COV2 POSITIVE PATIENTS UNDER TELE HOME CARE TREATMENT

Name of Presenter: **Dr. S.GOKULAKRISHNAN**

Authors (or Co-authors): **Dr. M. Koushik Muthu Raja, Dr.C.Chandrasekar**

Institution/Author Organization: **Sri Ramachandra Medical College , Chennai**

OBJECTIVES -

To assess the prevalence of anxiety levels in patients with newly diagnosed COVID, post anxiety levels after 2-week of therapeutic breathing exercises and the effectiveness of breathing exercises on physiological variables like SpO₂ & HR.

METHODOLOGY –

COVID Positive patients with mild and moderate disease enrolled in home isolation care were assessed using CAS (COVID anxiety scale) on admission. HR & SpO₂ were also recorded. Patients were taught breathing exercises and monitored using video conferencing and reassessed after end of 1st and 2nd week using CAS. HR and SpO₂ were also recorded after 2 weeks.

RESULTS –

A Total of 45 COVID 19 patients in home isolation care were enrolled in study. There was significant decline in anxiety score after regular breathing exercises for fourteen days with mean change of -3.7 ± 2.4 . There was also significant improvement in SpO₂ levels and decline in heart rate with mean change of 0.8 ± 0.9 and -1.4 ± 9.7 each respectively.

CONCLUSION –

Our study showed increased prevalence of anxiety in COVID positive patients on diagnosis. The levels of anxiety was found to decrease after breathing exercises for 14 days. There was also significant improvement in SpO₂ and decrease in heart rate from baseline.

Title: Comparative Effectiveness of Favipiravir in COVID-19 patients with Multiple (≥ 2) or Less Comorbidities

Name of Presenter: **Dr Sagar Bhagat**

Authors (or Co-authors): **Dr. Agam vora, Dr. Pramod Dadhich, Dr. Sagar Panchal, Dr. Saiprasad Patil, Dr. Hanmant Barkate**

Institution/Author Organization: **Global Medical Affairs, Glenmark pharmaceuticals Ltd, Mumbai, India**

Background:

Multiple (≥ 2) comorbidities is a strong predictor of mortality in COVID-19 patients. Aims and Objective: To compare effectiveness of favipiravir in patients with multiple (≥ 2) or less (<2) comorbidities in real world.

Methods:

Retrospectively analysed medical records of favipiravir treated COVID-19 cases from 2 centres to capture key details of patients with comorbidities. Study was approved by Independent Ethics Committee.

Results:

Of 126 medical records, 64 patients had ≥ 2 & 62 patients had < 2 comorbidities with mean age of 60.2 ± 12.5 yrs. & 50.9 ± 14.9 yrs. ($p=0.002$) & SpO₂ of 92.9 ± 3.3 & 95.7 ± 1.9 ($p<0.001$) respectively. Most common symptoms were fever, cough & myalgia across. Dyspnoea was significantly higher (40.6% & 14.5%, $p=0.02$) in ≥ 2 comorbidities group. Median duration of favipiravir treatment was 14 d (2-14 d) across. Fever ($p=1.00$), cough ($p=1.00$), myalgia ($p=0.25$) and dyspnoea ($p=1.00$) subsided in $>95\%$ patients by day 7 in both the groups. Rate of oxygen requirement decreased gradually till day 10 in both groups ($p=0.59$). Steroid requirement was lesser in ≥ 2 comorbidities group ($p=0.01$). No difference in mortality ($p=1.00$) & disease progression ($p=0.48$) between groups.

Conclusion:

Our analysis shows promising trend of clinical improvement with favipiravir in COVID-19 patients irrespective of comorbidity status.

Title: Real-world Experience with Favipiravir for Treatment of mild – moderate

COVID-19 in India

Name of Presenter: **Dr. Sagar Panchal**

Authors (or Co-authors): **Dr. Agam Vora, Dr. Pramod Dadhich, Dr. Sagar Bhagat, Dr. Saiprasad Patil, Dr. Hanmant Barkate**

Institution/Author Organization: **Global Medical Affairs, Glenmark pharmaceuticals Ltd, Mumbai, India**

Background:

Favipiravir is oral antiviral drug approved in India for treatment of mild/moderate COVID-19.

Objective:

To observe effect of favipiravir in COVID-19 in real world setting. Methods: Retrospectively analysed medical records of favipiravir treated COVID-19 cases from 2 centres to capture details including medical history, symptoms, concomitant treatment, clinical outcome. Study was approved by Independent Ethics Committee. Results: Of 126 medical records, 57.9% were mild & 42.1% were moderate severity. Mean age 55.6 ± 14.5 yrs with 57.1% male. 75.4% had co-morbidities; most common being hypertension (62.7%) & diabetes (46.8%). Most common symptoms were fever 88.1%, cough 72.2%, myalgia 45.2%, dyspnea 27.8%. Median duration of favipiravir treatment was 14d(2-14 d). Rate of clinical improvement at days 3, 5, 7, 10 were 36.45%, 80.5%, 94.4% & 99.2% respectively. Fever resolution observed in 99.2% by day 6. Rate of oxygen requirement at days 3, 5, 7 and 10 were 54%, 36.5%, 15.1% & 5.6% respectively. 11.9% patients showed disease progression including mortality in 3 patients. No specific adverse events recorded. Global assessment of effectiveness by physicians rated favipiravir as very good/good in 89.7%.

Conclusion:

Favipiravir treatment in clinical practice was found to be effective and safe in majority of mild to moderate COVID-19 patients.

Title: HIV and COVID19 coinfection -Clinical characteristics and outcome during this pandemic

Name of Presenter: **Sangavi R**

Authors (or Co-authors): **Dr.V.Vinod kumar**

Institution/Author Organization: **Govt Stanley Medical college**

INTRODUCTION:

COVID19 due to SARS-COV2 has become global pandemic. However whether people living with hiv are at increased risk of covid19 and severity of disease is not completely understood. The aim is study the clinical characteristics and outcome of hiv and covid19

coinfection

MATERIALS&METHODS:

To study the clinical characteristics and outcome in hiv and covid19 coinfection, we collected data of patients with hiv and covid19 coinfection from March2020 to Nov2020 at Govt hospital of thoracic medicine and Govt Stanley medical college retrospectively.

RESULTS:

Out of 25 patients studied, 16 were males (64%), 8 were females (32%), 1 transgender (4%). Most common symptom being fever followed by shortness of breath and cough. CD4 count <750 is seen in 17 patients (68%) and >750 in 8 patients (32%). 11 patients had history of prior ATT, including one MDR-TB. 22 cases were mild-moderate. 3 cases were severe to critical out of which 2 patients died. Out of these 2 patients, 1 patient had diabetes as comorbidity.

DISCUSSION:

It is necessary to know whether hiv infected individuals are at high risk of getting covid19 and severity of disease as earlier studies hypothesised that ART could confer protection against covid19 in plhiv and immunosuppression in hiv may prevent cytokine storm thereby protecting against severe covid19. This is interim analysis and results are yet to be concluded.

Title: Study of comparison between Lymphocyte to neutrophil ratio and neutrophil to monocyte ratio as predictor of mortality in COVID19 infection.

Name of Presenter: **Dr Santhosh Kumari K R**

Authors (or Co-authors): **Dr Deepak Kumar, Dr Huliraj N**

Institution/Author Organization: **Kempegowda Institute of Medical Sciences, Bengaluru**

Introduction:

SARS CoV 2, which causes COVID 19, is an airborne viral infection, which causes infection ranging from mild self limiting illness to severe case of ARDS with MODS. In India mortality as of Nov 2020 stands at 1.45%. Thus there is need of mortality predictors that help us to estimate mortality risk during admission for Patients with covid-19, to triage them into ICUs. The study aims to assess the efficacy of LNR and NMR as predictors of mortality in patients with severe covid 19 infection.

Aim:

Study of comparison between Lymphocyte to neutrophil ratio and neutrophil to Monocyte ratio as predictor of mortality in COVID19

infection.

Methodology:

This is a retrospective study where RT/PCR confirmed COVID 19 patients >18 years of age , who were admitted in our hospital from June to August 2020 were included. ANOVA test was used to assess and compare the efficacy between LNR and NMR in predicting risk of mortality. Statistical significance was set at $p < 0.05$.

Results:

Of 120 COVID patients, 65 were male and 55 were female and 102 survivors and 18 non survivors.

Conclusion:

NMR is significantly more sensitive in predicting mortality than LNR for deaths related to severe covid-19

Title: BLOOD UREA AND SERUM CREATININE LEVEL IN PREDICTING IN-HOSPITAL MORTALITY OF COVID -19 PATIENTS

Name of Presenter: **Dr Shama B Sharma**

Authors (or Co-authors): **Dr Deepak Kumar R**

Institution/Author Organization:

Kempegowda Institute Of Medical Sciences Bengaluru

Introduction:

Data on the global COVID19 pandemic suggests the presence of reciprocal relationship between COVID19 severity and renal functions.

Aim:

We aimed to investigate the independent predictive factors for the severity and survival of COVID19 disease from routine blood parameters, especially the blood urea nitrogen (BUN), creatinine(Cr) and BUN/Cr ratio Methodology: Ours was a hospital record based, retrospective observational study which included a total of 120 cases admitted at Kempegowda Institute of Medical Sciences Bengaluru. The cases were categorized into non-severe which included WHO category A and B and severe which included WHO category C. Demographic and laboratory parameters were analysed. Statistical analysis was done. Mann Whitney test was used . Results: Blood urea nitrogen and creatinine was raised in non-survivors compared to survivors in our study.

Conclusion:

BUN , S.Cr and NLR(Neutrophil lymphocyte ratio) are independent predictors for COVID19 severity and survival. Routine evaluation of

BUN, Cr and BUN/Cr can help identify high risk cases with COVID 19. Financial disclosure- NIL

Title: IMPACT OF COVID 19 PANDEMIC ON MENTAL HEALTH AND WELL BEING OF SCHOOL STUDENTS

Name of Presenter: **Dr Shilpa K V**

Authors (or Co-authors): **Dr Thomas George, Dr Mani O K ,Dr Muraly C P,Dr Parvathi Rajendran**

Institution/Author Organization: **Government Medical College Thrissur**

INTRODUCTION

Covid 19 pandemic have created enormous psychological distress and negative academic consequences in school going students in last 1 year. Students may experience reduced motivation towards their studies increased pressure to learn independently abandonment of daily routine and high rate of dropouts as school routines are important coping mechanism for students with mental health and personality issues.This study is to evaluate those concerns in a sample of school going students

AIM

To evaluate the impact of covid 19 pandemic on mental health of school going students To assess the academic concerns raised by students during lockdown

To evaluate covid pandemic impact on interpersonal relationships among students

METHODOLOGY

Cross-sectional study conducted among 150 school going students of higher secondary classes using selfadministered questionnaire given online.

RESULTS

Out of 150 students attended 128 indicated increased stress and anxiety during pandemic time.Multiple stressors were reported which induce stress among students -fear about self health and family health(91%),illness and demise of loved ones,difficulty in concentrating 60%,decreased social interactions due to physical distancing(68%),increased concern on academic performances 90%,online class effectiveness concern 60%,sleep disruptions 33%,decreased support for both studies and personal development from peer group,lack of physical activity and extracurricular activities 80%,decreased support and direct motivation to disabled students.

CONCLUSION

Due to long lasting pandemic situation and onerous measures of lockdown and stay

at home orders,COVID 19 brings negative impact on higher education.The findings of study highlight the urgent need to develop interventions and preventive strategies to address mental health and well being of students-future talents.

Title: Study of Baricitinib 4mg for critically ill ICU patients with COVID-19 infection

Name of Presenter: **1)DR.RAVI DOSI**

Authors (or Co-authors): **2)DR. R.K JHA 3) DR. SHOBHIT GUPTA 4)DR. RAVINDRA K. PATIDAR**

Institution/Author Organization: **Sri Aurobindo Medical College & PG Institute , Indore**

INTRODUCTION:

An inflammatory response to SARS-CoV-2 infection, due to cytokine release syndrome, has been implicated in the pathology of acute respiratory distress syndrome in patients with COVID-19. . Baricitinib is a reversible JAK-inhibitor that interrupts the multiple inflammatory cytokines in COVID-19 immunopathology.

AIMS:

Our aim to study the overall outcome of Baricitinib on critically patient with covid-19.

METHODOLOGY:

a cross sectional study of 10 cases, infected with covid-19 severe pneumonia and were critically ill. Patient's average ICU stay, CBC, changes in HRCT scans, clinical improvement, Cytokine storm markers before and after Baricitinib doses were taken into account. Due consent was taken from all patients.

RESULTS:

70 % patients showed reduction in CRP values In 70% patient D-dimer values either decreased or were kept within normal limits 90% patient were shifted from NIV support to NRBM within 7 days of Baricitinib 50 % patients showed rising trend in platelet counts. 70 % patients were shifted to ward from ICU 30 % patients were discharged within 7 days of Baricitinib.

CONCLUSION

In our study, Baricitinib has shown promising results.

It is incumbent on researchers to develop and validate reliable tools to monitor the overall outcome of patients with BARICITINIB in COVID-19

Title: PULMONARY SEQUELAE IN DISCHARGED PATIENTS OF COVID19Name of Presenter: **Dr.K.SOWMYA**Authors (or Co-authors): **Dr.D.S.S.SRI DEVI, Dr.S.RAGHU, Dr.S.LAKSHMI KUMARI, Dr.RANJITH BASHA**Institution/Author Organization: **GUNTUR MEDICAL COLLEGE, GUNTUR****INTRODUCTION:**

COVID19 leads to wide spectrum of respiratory disease with high incidence of ARDS. Chest CT scanning may be used for diagnosis of COVID 19 in several settings. Residual pulmonary lesions like GGOs, intralobar and interlobar septal thickening could be persistently observed years after recovery after recovery from SARS. It has remained a concern whether similar sequelae also exists for COVID 19.

AIMS and OBJECTIVES:

To study the pulmonary sequelae in discharged patients with COVID19.

METHODS :

Prospective study involving 50 patients of SARS CoV2 attending wards of Dept of pulmonary medicine, Govt Fever hospital, Guntur. Study period - 8 months(March 2020 - October 2020).

INCLUSION CRITERIA :

Confirmed case of COVID 19 by RTPCR/ TRUNAT/RAT/CT CHEST. Age between 18-60years.

Exclusion criteria :

All outpatients, Past history of pulmonary TB, interstitial lung disease and any fibrotic lung disease.

RESULTS :

50 cases of COVID 19 were seen during study period of which 70% with GGOs, 60% with consolidation, 60% with interlobular septal thickening at time of admission, but one month later complete resolution seen in 54% and pulmonary sequelae seen in 46% of which predominant pattern is GGOs(45%), fibrous bands (10%) are also present. Three months later 38% of study group had pulmonary sequale with predominant pattern being fibrous bands.

CONCLUSION:

Pulmonary sequelae is not uncommon with COVID 19 pandemic and needs to be addressed.

Title: Correlation between inflammatory**markers and radiological presentation in COVID-19 patients positive patients.**Name of Presenter: **Sunaina kharb**Authors (or Co-authors): **Anand Agarwal, Kamaljeet Singh, Rishi Rana**Institution/Author Organization: **BPS GMC(W) Khanpur Kalan , Sonapat Haryana****INTRODUCTION**

Coronavirus Disease-2019 (COVID-19) is a disease detected first time in December 2019 in china with mortality of about 2%. It has no specific symptoms to diagnose coronavirus infection and accurate diagnosis depends on RT-PCR analysis Inflammatory markers and radiological presentation depict severity of disease. In present study we aimed to analyse correlation between radiological markers and radiological presentation.

AIMS AND OBJECTIVE-

To evaluate correlation of Inflammatory markers and radiological presentation in COVID-19 positive patients.

MATERIAL AND METHODS

The study was conducted in the department of Respiratory medicine BPS GMC Khanpur kalan, sonapat. 70 patients who were detected positive on RT-PCR for COVID-19 were included in this study. Inflammatory markers like CRP, IL 6, D-dimer, LDH and HRCT thorax of all patients were done at the time of admission.

RESULT

The study was done in 70 patients with age group (20-85 yrs). Patients were divided into five categories as per CT severity score and their average inflammatory markers levels. 0-5 CT Score category was having 08 patients with average LDH levels 625mg/ml, average IL6 07.6pg/ml, average D-dimer 258ng/ml, average CRP 2.3mg.ml. 6-10 CT Score category was having 12 patients with average LDH levels 745mg/ml, average IL6 09.8pg/ml, average D-dimer 421ng/ml, average CRP 6mg.ml. 11-15 CT Score category was having 25 patients with average LDH levels 1126mg/ml, average IL6 16.9pg/ml, average D-dimer 926.88ng/ml, average CRP 12.6mg.ml. 16-20 CT Score category was having 20 patients with average LDH levels 1678.4mg/ml, average IL6 28.8pg/ml, average D-dimer 1156.8ng/ml, average CRP 28.9mg.ml. 21-25 CT Score category was having 05 patients with average LDH levels 1256mg/ml, average IL6 35.4pg/ml, average D-dimer 926.88ng/ml, average CRP 28.7mg.ml.

CONCLUSION

There is significant positive correlation between CT severity score and inflammatory markers, as the CT score increases inflammatory markers have higher values.

Title: MY EXPERIENCE AS BUDDING PULMONOLOGIST IN COVID ICU TO OBSERVE DIABETES MELLITUS IN COVID 19 PATIENTName of Presenter: **DR SUNIL YADAV**Authors (or Co-authors): **Dr Arti julka, Dr Bhavya shah , Dr Ravendra singh**Institution/Author Organization: **RD GARDI MEDICAL COLLEGE****Introduction -**

The pandemic of coronavirus disease (covid-19), a disease caused by severe acute respiratory syndrome coronavirus 2 (sars-cov-2), is causing morbidity and mortality. Elderly and presence of diabetes mellitus, significantly increases risk for hospitalization and death in covid-19 patients.

Material & methods-

I observed a retrospective study in covid icu of R D Gardi medical college in order to investigate the association between covid19 pneumonia and diabetes mellitus and its poor outcomes in 184 covid positive patients.

Results- By analysing a retrospective observational case of covid19 pneumonia in R D Gardi medical college , ujjain in 184 patients. In the study of last 3 months ,i.e. august 2020 to october 2020 , out of 184 , 54(29%) patients had diabetes mellitus, 13(7.34%) were newly diagnosed type 2 diabetes mellitus. In total 67 diabetes patients 19(28.9%) patients required to put on bipap, 10 (15.7%)patients required to give niv support and 12(18.4%) patients were intubated , out of 67 diabetes patients death occurs in 18 (26.8%) .

Discussion -

Diabetes is associated with increased incidence and severity of covid-19. There is experimental evidence of the effect of diabetes on viral entry into cell and inflammatory response to the infection.

Title: Randomized controlled trial of Ivermectin in patients with mild and moderate COVID-19Name of Presenter: **Tejas M Suri**Authors (or Co-authors): **Anant Mohan, Pawan Tiwari, Saurabh Mittal, Ankit Patel, Avinash Jain, Velpandian Thirumurthy, Ujjalkumar Subhash Das, Tarun Krishna Boppana, Ravindra Mohan Pandey, Sushil Suresh Shelke, Angel Rajan Singh, Sushma Bhatnagar, Shet Masih, Shelly Mahajan, Tanima Dwivedi, Biswajeet Sahoo, Anuja Pandit, Shweta Bhopale, Saurabh Vig, Ritu Gupta, Karan Madan, Vijay Hadda, Nishkarsh Gupta, Rakesh Garg, Ved Prakash**

Meena, Randeep Guleria

Institution/Author Organization: **All India Institute of Medical Sciences, New Delhi**

Introduction:

Ivermectin is an antiparasitic drug which has in-vitro efficacy against severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). Hence, its role as a repurposed therapeutic agent in COVID-19 is under investigation.

Aims/Objectives:

To study if a single oral administration of Ivermectin at two dosage strength (24 mg and 12 mg) to patients with mild and moderate COVID-19 is superior to placebo in reducing SARS-COV-2 viral load.

Methodology:

In this double-blind, randomized controlled trial, patients were randomized to Ivermectin 24 mg, 12 mg or placebo in 1:1:1 ratio. The co-primary outcomes were conversion of SARS-COV-2 RT-PCR to negative result and the decline of viral load at day 5 of enrolment. Safety outcomes included total and serious adverse events.

Results:

Among the 157 patients randomized, 125 had positive RT-PCR on the day of intervention and were included in modified intention-to-treat analysis. 40 patients each were assigned to Ivermectin 24 mg and 12 mg, and 45 patients to placebo. The RT-PCR negativity at day 5 was higher in the two Ivermectin arms but failed to attain statistical significance (Ivermectin 24 mg, 47.5%; 12 mg arm, 35.0%; and placebo arm, 31.1%; p-value = 0.30). There was no difference in the decline of viral load at day 5 between the three arms. No serious adverse events were encountered.

Conclusions:

In patients with mild and moderate COVID-19, a single oral administration of Ivermectin did not significantly alter viral load decline compared with placebo. There was a trend towards higher RT-PCR negativity at day 5 of enrolment in the Ivermectin arm.

Title: A study of De Ritis ratio and biochemical parameters in COVID 19 patient

Name of Presenter: **Dr.YASHASHWINI.A**

Authors (or Co-authors): **Dr.VEDAVATHI.R**

Institution/Author Organization:

KEMPEGOWDA INSTITUTE OF MEDICAL SCIENCES

Background-

The study aimed to determine the DeRitis

ratio and other biochemical parameters and correlate it with respect to age, gender and severity of CoVID 19 infection in in-hospital patient. Rationale- The liver injury in patients with SARS COVID 19 infection may be directly due to virus, it has been demonstrated that SARS COVID 19 use ACE 2 receptors to enter the host cell, and the CoVID 19 virus enters cholangiocytes and cause liver cells and cause liver dysfunction as they abundantly express ACE 2 receptors. Moreover AST is mainly present in liver cells but also present in cardiac tissues, skeletal muscles.

Method-

Biochemical parameters like LDH, CKMB, AST, ALT, D, Dimer, De Ritis ratio was analysed in COVID 19 RT-PCR positive patients. Difference between gender and severity of COVID infection was compared.

Result-

The De Ritis ratio was significantly higher in females. De Ritis ratio had positive association with CKMB in both gender. De Ritis ratio was used as an indicator for mortality in hospital COVID 19 patients.

Title: IF NOT COVID ; THEN WHAT ????

Name of Presenter: **ABHIJEET LONSANE**

Authors (or Co-authors): **SNEHA TIRPUDE MD/ DNB PULMONARY MEDICINE, CONSULTANT**

Institution/Author Organization: **RUBY HALL CLINIC, PUNE**

INTRODUCTION

Covid-19 Pneumonia, a new infectious disease in 2019 caused by SARS-CoV 2. HRCT features are always variable with most common being diffuse ground glass haziness. We present a case series of 3 cases which were initially treated as covid but after turned out to be different diagnosis.

CASE-1

37 year old male, front line worker was admitted with breathlessness and cough with HRCT thorax showing severity score of 20/20. Initially he required oxygen of 4L/min and treated as covid 19 pneumonia with antivirals and steroids. His RT-PCR for covid came thrice negative and he was diagnosed with eosinophilic pneumonia with eosinophil count of 25%.

CASE 2

65 year old male, admitted with breathlessness, Grade 4 MMRC. HRCT showed score of 10/20, he was treated initially as covid-19 pneumonia, and on detailed work up he was diagnosed with interstitial lung disease, UIP pattern.

CASE 3

63 year old male, diagnosed and treated as covid 19 pneumonia, came with breathlessness and cough, suspecting Post covid fibrosis. On detailed work up, patient had occupational exposure and diagnosed as Occupational interstitial lung disease.

CONCLUSION

Covid-19 infection was declared as pandemic by WHO in March 2020. Since then all patients with respiratory complaints are almost always undergoing screening HRCT in well equipped center where they are categorized as HRCT suggestive of covid and starting immediate treatment. Many times RT-PCR turns negative repeatedly and then start searching for other causes of lung shadows.

Title: A RARE CASE OF BILATERAL HYDROPNEUMOTHORAX POST COVID 19 PNEUMONIA

Name of Presenter: **Dr.A.Alekya**

Authors (or Co-authors): **Dr.Md.Mateenuddin Saleem , Dr.Tanzil Rahaman , Dr.D.Kavya**

Institution/Author Organization: **Kamineni Institute of Medical Sciences**

INTRODUCTION

COVID-19 disease is caused by SARS-COV-2 single stranded RNA virus and spreads through close contact and respiratory droplets. There are case reports of spontaneous pneumothorax in patients of covid-19 with incidence of <1%. Here we are presenting a case of bilateral hydropneumothorax 10 days post discharge in a patient with no history of pre-existing lung disease or usage of positive airway pressure.

PRESENTATION

A 23 year old male patient with history of hospitalization for covid-19 illness, presented to us ten days post discharge with history of cough, chest pain and breathlessness since 4 days. His Oxygen saturation was 82% on room air which improved to 90% with oxygen support of 10L/min. Imaging studies revealed bilateral loculated hydropneumothorax for which intercoastal drainage was placed. Post icd patient had very poor lung expansion and he was given the option of thoracoscopy for clearance of adhesions. But patient refused any further intervention, went on lama and lost follow up after that.

CONCLUSION

This case highlights a rare clinical scenario of spontaneous bilateral hydropneumothorax as a late complication of COVID-19 and the need for regular monitoring of these patients even

after discharge.

Title: A Case of covid-19 cystic air space, Sequelae

Name of Presenter: **Dr KAIRI ANIL**

Authors (or Co-authors): **Dr Bhasker**

Institution/Author Organization: **NIZAM'S INSTITUTE OF MEDICAL SCIENCES**

A 43 year old male patient came with Breathlessness of 3 weeks duration, On and off Cough of 2 weeks duration associated with scanty mucoid sputum, came to outpatient Department of Pulmonary Medicine. He had no history of Chest pain, Haemoptysis, Fever, Loss of appetite and Loss of weight. He had history of Covid 19 One and half month back diagnosed by Covid-19 RT-PCR. He received Doxycycline, Ivermectin and other supportive treatment for the same. He improved clinically after 10 days and off medication since then. He was not Diabetic, Hypertensive, Asthmatic. On further evaluation he was clinically stable. Haemodynamics were normal. His TLC was elevated. RFT, LFT were normal. Chest x ray showed Right mid zone haziness with cystic air space. CT chest revealed Large Cystic Air Space with Air Fluid level.

CONCLUSION:

This Case highlights possibility of the Pneumatocele like Cystic Air Space as a Sequelae of Covid 19. Keywords : covid 19 cystic air space , sequelae

Title: Spontaneous Pneumomediastinum in a COVID pneumonia patient

Name of Presenter: **ANIRUDH KUMARAN V**

Authors (or Co-authors): **Dr.N.Nalini Jayanthi (Professor and HOD), Dr.S.Subramanian (Professor)**

Institution/Author Organization: **Department of Respiratory Medicine, SRM Medical College Hospital and Research Centre**

Introduction :

Pneumomediastinum is the presence of air or gas in the mediastinum . Pneumomediastinum due to barotrauma by mechanical ventilation is the most common cause in severe acute respiratory syndrome. Here is a case of spontaneous pneumomediastinum as initial presentation in a patient with COVID 19 pneumonia.

History :

69 year old male patient with multiple comorbidities presented with complaints of dry cough, breathlessness for 4 days and fever for 2 days. Presentation : Patient presented in acute respiratory distress with room air

saturation of 70% and respiratory rate of 30 and was intubated subsequently.

On Examination:

Tactile crepitus was felt over the anterior chest wall and bilateral upperlimbs.

Investigations : ABG: Type II respiratory failure.

PaO2 Fio2 ratio -200 Preintubation chest xray showed bilateral lower zone heterogenous opacities with continuous diaphragm sign. CT chest: Ground glass opacities in Bilateral lungs Consolidation in right middle lobe Extensive pneumomediastinum with air around the mediastinal vessels, cardiac borders and extending to lower neck and visualised upper abdomen Diagnosis : Spontaneous pneumomediastinum with pneumothorax in COVID 19 pneumonia.

Management : Patient intubated in view of respiratory distress USG guided ICD was placed Routine COVID 19 treatment was given Learning points: Though uncommon in viral pneumonias, pneumomediastinum has been described in COVID-19 patients, despite no history of mechanical ventilation.

Title: PNEUMOMEDIASTINUM IN COVID 19

Name of Presenter: **ARAVIND RAJ K**

Authors (or Co-authors): **Ketaki Utpat, Unnati Desai**

Institution/Author Organization: **Dept. of Pulmonary Medicine, TNMC& BYL Nair Hospital, Mumbai**

Introduction

Covid-19 disease is associated with pneumonia in severe forms and complications like thromboembolism. Pneumomediastinum is rarely reported. We report one such rare case 2 Clinical Summary A 78 year old man, known case of hypertension and IHD was hospitalised with fever for four days. Oropharyngeal swab RT-PCR detected SARs-Cov2. His blood tests were normal. After one week, he started complaining of breathlessness, had desaturation and the HRCT thorax showed ARDS. The patient was shifted to ICU and managed with NIV and supportive care. On 22nd day; we observed neck swelling and crepitus. The patient was stable. The CXR and HRCT confirmed pneumomediastinum with mild subcutaneous emphysema.[Fig 1,2] Clinical implications Pneumomediastinum is a condition in which air is present in the mediastinum. It can result from trauma. Spontaneous pneumomediastinum is a rare. The symptoms include chest pain, laboured breathing, voice distortion and subcutaneous emphysema, affecting the face, neck, and chest. It is often recognized on auscultation by a "crunching" sound timed with the cardiac

cycle (Hamman's crunch) or mimicking cardiac tamponade. The diagnosis can be confirmed via chest X-ray or HRCT of the thorax. The tissues in the mediastinum slowly resorb the air so most pneumomediastinum are treated conservatively³.

Title: The Perplexing Covid-19 RT-PCR Result In The Covid Pandemic

Name of Presenter: **Dr Ashish kumar Prakash**

Authors (or Co-authors): **dr Anand jaiswal, Dr Pinky goyal, Dr Sandeep mittal, Dr Roopanshi Jain, Dr sonam singhla**

Institution/Author Organization: **MEDANTA-THE MEDICITY**

RT-PCR on samples obtained through nasopharyngeal or throat swab is being considered as the diagnostic modality of choice worldwide. But like each investigation, it has its own limitations. Studies have shown that lower respiratory tract sample has a better sensitivity and specificity. Bronchoscopy is an excellent tool for obtaining lower respiratory tract sample. Bronchoscopy is an aerosol generating procedure and therefore most of the guidelines do not recommend it as a routine diagnostic tool in the current pandemic. This is a case series of four patients where the results of nasopharyngeal swab based RT-PCR baffled us. All the cases had a negative Covid RT-PCR on nasopharyngeal swab specimens . Bronchoscopy was done in these cases to rule out other infectious cause. To our surprise we found varied results on BAL samples . One patient in whom acute exacerbation of ILD was suspected came COVID positive. The patient who was post renal transplant with high CORADS grade came out to be PCJ positive and COVID negative. The third case had presented with diplopia and ataxia and his BAL report was positive for Nocardia, Covid, CMV and a bacterial infection. In fourth case BAL was not done and as CORADS was high inspite on negative RT-PCR, IgG antibody was found positive.

Title: COVID-19 in a patient with thrombocytopenia

Name of Presenter: **Baljeet Singh Virk**

Authors (or Co-authors): **Baljeet Singh Virk, Rohit Kumar, Siddharth Raj Yadav, Sumita Chaudhry, Pranav Ish, Nitesh Gupta**

Institution/Author Organization: **VMMC & Safdarjung Hospital, New Delhi**

A 40-year-old lady presented to our hospital with complaints of generalized weakness of one-week duration. She denied any fever or respiratory symptoms. She was diagnosed with chronic ITP 2 years ago for which she was treated with corticosteroids. She

was off corticosteroids, and her ITP was in remission prior to the current presentation. Investigations revealed haemoglobin- 11.9 g/dL, white cell count- 6.6 x 10⁹/L and platelet count- 20 x 10⁹/L. Peripheral blood smear showed normocytic normochromic red cells, and few giant platelets. Serum biochemistry was unremarkable. She was diagnosed as having acute exacerbation of chronic ITP. Our patient experienced continued worsening of thrombocytopenia despite the resolution of COVID-19, high dose steroids, IVIG and eventually required romiplostim. We conclude that COVID-19 can cause acute exacerbation of chronic ITP even in the absence of well-known COVID-19 symptoms. Thrombocytopenia in such cases could be severe, protracted, and might persist even after the microbiological resolution of COVID-19. Although steroids and IVIG remain the preferred and effective drugs for most COVID-19 related ITP cases, cautious use of TRA may be considered for carefully selected cases

Title: A CASE OF COVID-19 WITH ACUTE HEPATITIS AND PNEUMOMEDIASTINUM

Name of Presenter: **Dr CHANDRAGIRI PRANAY SAI**

Authors (or Co-authors): **Dr K Rajendra kumar, Dr M Kiran, Dr K Chakravarthi, Dr K Nagalakshmi, Dr Ramya Gadam**

Institution/Author Organization: **Rangaraya medical college**

In face of many presentations, COVID-19 can also present as acute, non icteric hepatitis with no other symptoms relevant to hepatic dysfunction but only as elevation in liver enzymes. Pneumothorax and pneumomediastinum can be a complication of COVID-19 and is most likely to be encountered in ICU setups. A 55 year old COVID-19 patient presented with sudden onset shortness of breath with no other symptoms and no significant medical history. On further evaluation he was diagnosed with acute hepatitis and during inpatient follow up was found to have developed pneumomediastinum in due course and was managed with supplemental oxygen, Corticosteroids and Remdesivir. COVID-19 patients should be evaluated in a multidisciplinary aspect and a watch-full eye for complications like pneumothorax and pneumomediastinum.

Title: PNEUMOTHORAX AND PNEUMOMEDIASTINUM IN COVID-19

Name of Presenter: **CHINTALAPATI NAGA SRIVANI**

Authors (or Co-authors): **Dr.Rajendra Kumar Professor & HOD**

Institution/Author Organization: **Rangaraya medical college**

As the COVID-19 became a pandemic situation by its rapid spread to more than 200 countries and territories, knowledge on uncommon presentations of the disease has been increasing day by day by doing detailed studies on these patients. Pneumonia is the most common manifestation of COVID-19 and is associated with high morbidity and considerable mortality. Pneumothorax and Pneumomediastinum can be a complication of COVID-19. Recent evidence suggested that these can occur in the context of COVID-19 pneumonia, even in the absence of mechanical ventilation- related barotrauma. Here, we present three patients with COVID-19 pneumonia out of which two patients are complicated by pneumothorax and one with pneumomediastinum. The first patient was a 58-year-old male who developed COVID-19 pneumonia and his clinical course was complicated by pneumothorax, unfortunately, he died after 2 months following the admission. Second patient was a 50-year-old woman who developed pneumothorax and was managed by inserting chest tube. Third patient was a 55-year-old male with COVID-19 complicated by pneumomediastinum in the due course of disease and was treated conservatively and recovered after 17 days. We performed a literature review of COVID-19 pneumonia cases that developed pneumothorax, pneumomediastinum, or both. The analysis showed that the latter had high mortality (60%). Mortality in pneumothorax and pneumomediastinum was increased in patients with pre-existing comorbidities like chronic respiratory diseases. Thus, it is necessary to pay attention to these complications as early identification and management can reduce the associated morbidity and mortality.

Title: CASE SERIES ON COVID MIMICKERS

Name of Presenter: **Dr.Dinakaran Umashankar**

Authors (or Co-authors): **Dr.K.Anupama Murthy**

Institution/Author Organization: **PSG Institute of Medical Science and Research**

INTRODUCTION:

The novel coronavirus SARS-CoV-2, first appeared in December 2019 in Wuhan, China. During COVID pandemic most of the infected patients presented with Severe Acute Respiratory Infection, so it's easy for clinicians to overlook other probable diagnosis. In this series we present three cases in which COVID pneumonia was initially suspected but during work-up an alternate diagnosis was obtained.

CASE DISCUSSION:

30 years old female, antenatal, 20 weeks of gestation presented with complaints of cough and breathlessness for 20 days, oxygen saturation (SpO₂)- 82% at room air. LDCT had CORADS-3, COVID-PCR done twice- negative. BAL CBNAAT detected Mycobacterium tuberculosis (MTb), ATT initiated and patient improved.

51 years old male, known CKD post renal transplant, presented with breathlessness and fever for 20 days, SpO₂- 90% at room air. HRCT had CORADS-5, COVID-PCR twice done- negative. Serum CMV IgM turned positive, patient was initiated on Ganciclovir and patient condition improved.

32 years old female, presented with fever and breathlessness for one week, SpO₂- 98% at RA. HRCT had CORADS-4. COVID-PCR twice done- negative. BAL CBNAAT detected MTb, patient improved with ATT.

CONCLUSION:

We have presented three cases, two cases with pulmonary tuberculosis and one with CMV infection which actually presented like COVID pneumonia but an alternate diagnosis was obtained. During this period of COVID, there is a high probability that other diagnosis can be overlooked.

Title: MAL-AERATION WITH RUINING CORONA

Name of Presenter: **DR.E.SUJI**

Authors (or Co-authors): **DR. K. KRISHNA MOORTHY, DR. S. MUTHUKUMAR, DR. E. MATHAN, DR. O. M. RAHMAN SHAHUL HAMEED.**

Institution/Author Organization: **Tirunelveli Medical College and Hospital**

INTRODUCTION

Covid-19 may be atypically present or complicated by pneumothorax. The common complication following post covid-19 infection is interstitial lung disease with fibrotic changes. Here the patient presents with pneumothorax after 35 days of initial symptoms of covid-19, without underlying risk factors for pneumothorax

HISTORY

A 38 years old male, non-smoker presented with history of breathlessness and dry cough for 3 days. He was diagnosed with covid positive pneumonia about 35 days back, got admitted and treated with HFNO, IV Methylprednisolone, Remdesivir, Tocilizumab, anticoagulants and antibiotics. CT chest during

hospital stay showed multifocal GGO. Since the condition improved, he was discharged after 10 days of hospitalization. Presentation On examination, he was dyspneic and tachypneic with spo₂-84% at RA. Auscultation revealed absent air entry in right hemithorax. CT Chest showed right massive pneumothorax with underlying collapsed lung. Diagnosis Right secondary spontaneous pneumothorax/post Covid pneumonia. Management Emergency ICD insertion was done. Patient condition improved and ICD was removed on the 8th day after pleurodesis.

CLINICAL IMPLICATION:

One of the rare presentation of covid-19 is pneumothorax. It can also occur as a complication of Covid 19 pneumonia other than fibrotic interstitial lung disease.

Title: Pneumothorax in COVID-19 positive patients: a retrospective case series

Name of Presenter: **Dr. Karmay Himanshu Shah**

Authors (or Co-authors): **Dr Naresh Patel (Professor and HOD), Dr Tushar Patel (Associate professor), Dr Rushi Patel (Associate professor), Dr Shraddha Tewari**

Institution/Author Organization: **GCS Medical College, Hospital and Research centre, Ahmedabad**

Introduction

Pneumothorax has been reported in a small number of patients COVID-19 due to multiple plausible mechanisms. This study aims to study 7 such cases and their radiological findings, clinical progress, and survival; and to find out possible correlations of survival.

Methods

The patients were selected retrospectively from COVID-19 positive patients with the presence of pneumothorax admitted at a tertiary hospital in Ahmedabad from July to November 2020. Result All patients (n=7) were males. 6 (86%) had no history of pneumothorax and underlying lung pathology and were managed by Intercostal Chest Drainage (ICD) tube insertion. 5 (72%) were classified as secondary spontaneous pneumothorax. 50% cases in whom ICD was inserted were resolved. 4 (57%) survived while rest 3 (43%) expired. Survival rate in patients who had COVID related fibrosis on imaging was 33% while in those who did not have fibrosis was 75%. These 7 were from a total of 3197 patients admitted during the study period making the overall incidence 0.21%. Conclusion Pneumothorax is an associated complication of Covid-19. Clinicians should be aware that an acute deterioration with a rapid oxygen desaturation in a Covid-19 patient

could indicate a pneumothorax and it may lead to an increase in mortality or morbidity.

Title: MULTISYSTEM INVOLVEMENT IN SEVERE COVID 19 PATIENTS WITH PREVIOUS COMORBIDITIES

Name of Presenter: **Dr. Koustav Kumar Roy, PostGraduate Trainee**

Authors (or Co-authors): **Dr. Trinath Dash, Guide & Joint Director**

Institution/Author Organization: **Jawaharlal Nehru Hospital & Research Centre, Bhilai**

In view of the ongoing Covid19 Pandemic, patients are having multi-organ involvement in which no specific data have been available regarding its effects and severity in known thyroid abnormalities and other comorbidities. We report a case of known hypothyroid patient with diabetes melitus and hypertension later presented with multiorgan involvement which was identified and managed accordingly. A 61yr. old known diabetic patient with hypertension and hypothyroidism, who was on regular medications, presented with chief complaints of: • Dry cough since 5days • Fever since 3days • SOB (grade-4 MMRC) since day1 • Weakness of right upper and lower limb since day1 evening Patient presented with SPO₂ of 72% at room-air, BP 160/100 with diffuse bilateral crepts (on auscultation). Patient was diagnosed to be Covid-Positive by Rapid-Antigen-Test (on 26.10.2020) and was admitted to Covid-ICU on 28.10.2020 after 2days of home-isolation. Patient was started on broad-spectrum IV-Antibiotics, Antiviral (remdesivir) and high-dose IV-Steroids in appropriate dosages. She was also given anti-coagulants (low-molecular-weight heparin) and its dosages were escalated due to drastically elevated D-dimer values of the patient. Entire details of the case and relevant images will be provided on acceptance of the presentation.

Title: Pandemic Pandemonium: Infrequent radiological presentations with COVID-19

Name of Presenter: **Gangakhedkar Mihir Raman**

Authors (or Co-authors): **Ajeesh KP, Akhilesh, Vipul Prakash, Mishra Mayank, Saini Sandeep, Dua Ruchi, Sharma Prakhar**

Institution/Author Organization: **AIIMS Rishikesh**

Introduction:

The COVID-19 pandemic has required physicians to learn about a new illness at an unprecedented pace in medical history. We learn more about the disease, its presentation and management almost on a daily basis. The radiological presentation of the disease has been invaluable in evaluation given the

non-invasive and minimal contact nature of the investigation. With myriad severity indices and the new CO-RADS classification multifocal consolidations and ground glass opacities on CT scan are viewed with sufficient suspicion for ruling out infectivity. Aims: To discuss the presentation and course of four patients with COVID-19 with their radiology suggestive of diffuse alveolar haemorrhage, cystic lung lesions, spontaneous pneumomediastinum and a late spontaneous pneumothorax respectively.

Methodology:

Each case in the series is discussed from the perspective of case history, the radiological presentation, differential diagnosis considered, treatment strategy followed, outcome at the time of this submission and a brief literature review of each presentation with and without COVID-19.

Conclusion:

Awareness regarding the various radiological and concordant clinical presentations of COVID-19 is essential for physicians engaged in active care of these patients as crucial treatment policy changes may be necessitated by the same.

Key words:

COVID-19, radiology, diffuse alveolar hemorrhage, pneumomediastinum, cystic lung disease

Title: POST COVID-19 PNEUMONIA COMPLICATED WITH GUILLIAN-BARRE SYNDROME

Name of Presenter: **Dr.S.Muthulakshmi**

Authors (or Co-authors): **Dr. K.Anupama murthy**

Institution/Author Organization: **PSG INSTITUTE OF MEDICAL SCIENCE & RESEARCH**

INTRODUCTION:

COVID-19 outbreak started at the end of 2019 in Wuhan, China. It commonly manifests with fever, dyspnea and respiratory failure; however, a wide range of symptoms have also been described. Post covid complications can involve any organs, among which the neurological sequelae remain poorly understood. Here we present a post covid -19 patient complicated by GBS.

CASE REPORT:

A 64 yrs old female who was treated for covid pneumonia in october 2020 presented to us with complaints of breathlessness for 1 month and bilateral lower limb weakness, right upper limb weakness for 1 week. On

presentation patient was tachypneic , SpO₂- 78% @ RA, improved to 96% with 15L via NRM, Respiratory system - B/L NVBS, diffuse end inspiratory crepts. Higher mental function - normal, Limb examination - reduced tone with symmetrical weakness of 2/5 in bilateral lower limbs, 3/5 in right upper limb, diminished knee and ankle reflexes, pinprick sensation impaired in right foot with diminished vibration sense. Cranial nerves were intact. Repeat covid RT PCR- negative. Chestxray - Bilateral non homogenous opacity. CTPA showed CT severity score 25/25 and no PTE. Nerve conduction study was done and diagnosed to be GBS - post covid sequelae. CSF analysis showed glucose - 112, protein- 17.7, total count- 2, cytology- occasional lymphocytes. Serum CPK- normal. Thus it revealed cytoalbuminologic dissociation. Hence patient was initiated on IV Immunoglobulin infusion ,following which patient respiratory failure improved and oxygen requirement was gradually decreased. Her lower limb power improved to 3/5 and upper limb power to 4/5. She was discharged with home oxygen and advised to continue physiotherapy.

CONCLUSION:

Links between GBS and influenza , tropical viral infections such as dengue, zika has been reported. Covid 19 can also be a potential trigger for GBS. The critically-ill nature of covid 19 patients is a challenge to distinguish GBS from critical illness such as polyneuropathy and myopathy. In our case due to proper neurological examination , GBS was diagnosed and responded to management , which improved the clinical outcome

Title: A case of spontaneous secondary pneumothorax following COVID 19 infection

Name of Presenter: **Dr Om Padarabinda Dash**

Authors (or Co-authors): **Dr. Aurobindo Behera**

Institution/Author Organization: **VIMSAR, Burla**

INTRODUCTION:

Pneumothorax is an abnormal presence of air in pleural cavity separating visceral from parietal pleura, with subsequent collapse of adjacent lungs. When it occurs as a consequence of underlying lung disease its called SSP (spontaneous secondary pneumothorax). In COVID-19 there can be lung fibrosis as a sequelae which can lead to pneumothorax.

CASE HISTORY:

A 50 year old male, non-diabetic, non-hypertensive, non-smoker, non-alcoholic, farmer, attended emergency with MMRC Grade-IV

dyspnoea, dry cough, diffuse chest pain for 4 days. There was associated low grade fever for 2 days. Not associated with orthopnea/PND/ pedal or facial edema/hemoptysis. Previously patient had been diagnosed COVID-19 RAT positive 2 weeks back for which he was admitted to COVID-19 hospital and treated and discharged after 7 days.

EXAMINATION:

Patient tachypnoeic, SpO₂ 81% @ room air, HR: 110 Bpm, Resp. Rate 28/min Other vitals normal. Trachea and apex beat shifted to left. Absent breath sound on right all areas VF and VR reduced on right Percussion on right hyper-resonant

INVESTIGATION:

Chest X-ray: hyperlucency right hemithorax, & airfluid level lower zone obliterating right CP angle, on left side heterogenous reticular opacity predominantly on the periphery. HRCT Thorax: Areas of interlobular septal thickening involving all lobes with predominantly peripheral subpleural location. Few areas of GGO in both lungs f/s/o COVID 19, CORADS 3 USG thorax: stratosphere sign signifying pneumothorax.

CONCLUSION:

A secondary pneumothorax can be one of the sequelae of post COVID fibrosis.

Title: MYOCARDIAL INJURY IN SEVERE COVID 19 INFECTION

Name of Presenter: **PASUMARTHI CHINMAI SAI APARNA**

Authors (or Co-authors): **DESAI RIJU SANJAY**

Institution/Author Organization: **J.L.N H & RC, BHILAI, CHHATTISGARH**

GLOBAL PANDEMIC COVID 19 THOUGH PRIMARILY PRESENTS AS A LOWER RESPIRATORY TRACT INFECTION , INCREASING DATA SUGGEST MULTIORGAN INVOLVEMENT. THERE IS LIMITED DATA SUGGESTING ITS MYOCARDIAL INVOLVEMENT. HERE BY WE REPORT TWO CASES OF SEVERE COVID 19 DISEASE WITHOUT ANY PREVIOUS HISTORY OF CARDIAC DISEASE WHICH PRESENTED AS ACUTE CORONARY SYNDROME DESPITE ANTICOAGULATION THERAPY

Title: An Asymptomatic Anterior mediastinal mass: A systemic approach to diagnosis

Name of Presenter: **Dr. Prasant Kunwar**

Authors (or Co-authors): **Dr. Mihir Gangakhedkar, Dr. Avishek Layak, Dr. Suyash Singh Rathore, Dr. Vipul Prakash, Dr. Mayank Mishra, Dr. Ruchi Dua, Dr. Prakhar**

Institution/Author Organization: **AIIMS**

RISHIKESH

Introduction:

Anterior mediastinal masses or “pre-vascular space” masses often present in an unexpected manner. The etiology of the mass lesion dictates whether the patient has a predominant systemic presentation or local compressive systems.

Case:

In this report we present an interesting case of a previously healthy, young male who presented to the hospital for symptoms of COVID-19 pneumonia and was incidentally detected to have a para-cardiac opacity on routine radiology. Further investigation revealed an anterior mediastinal mass lesion with heterogenous contrast enhancement. We illustrate the approach to making a non-invasive diagnosis and the eventual unusual turn of events for the patient.

Conclusion:

Anterior mediastinal masses can pose a significant challenge to the unprepared physician and a pre-test list of differential diagnoses is essential to decide the modality of choice for definitive diagnosis. Key words: Anterior mediastinal mass, thymoma, asymptomatic mass, pre-vascular masses

Title: ATRIAL FIBRILLATION AND COVID-19 : A SERIOUS YET NOT UNCOMMON ASSOCIATION

Name of Presenter: **Dr RAMEES NAJEEB**

Authors (or Co-authors): **Dr Pranav Ish, Dr Sourabh Agstham**

Institution/Author Organization: **VMMC and Safdarjung Hospital, New Delhi**

Introduction

COVID-19 is caused by SARS-CoV-2 virus with predominant pulmonary manifestation. However, the extra pulmonary manifestations like arrhythmias often contribute significantly to the morbidity and mortality. Initially the focus was on the QT prolongation and arrhythmias associated with hydroxychloroquine; subsequently the malignant arrhythmias associated with COVID-19 were recognized. Case presentation A 43-year-old male hypertensive patient presented with complaints of fever, cough and shortness of breath for 3 days. At presentation, the vitals were : heart rate 100 beats/minute, blood pressure 138/88 mmHg, respiratory rate 24/ minute and saturation 91% on room air. RT-PCR for SARS-CoV-2 was positive and chest X-ray showed bilateral lower lobe pneumonia. Laboratory examination showed normal hemogram , normal electrolytes, liver and renal function tests. His IL-6 levels and CRP levels

were significantly raised. He was managed as moderate COVID-19 in the ICU and was started on hydroxychloroquine, steroids, low molecular weight heparin, and oxygen. On the second day, patient had sudden onset palpitations. 12-lead-ECG showed atrial fibrillation (AF) with fast ventricular rate of 140/minute. He was hemodynamically stable and cardiac biomarkers were normal. He was managed with intravenous diltiazem for rate control and oral amiodarone. His heart rate reduced to 93/minute along with reduction of symptoms. Day 7 ECG showed normal sinus rhythm with heart rate 100/minute. Patient was discharged on metoprolol and amiodarone. Discussion The mechanism of AF in Covid-19 patients may be multifactorial. The most common factors being hypoxia and arrhythmogenic drugs, especially hydroxychloroquine. Both the factors were present in this case. However, these factors are not seen in many cases, hence a direct viral activity is also suspected. An online survey from Heart Rhythm Society among 915 hospitalized COVID-19 positive patients showed that AF was the commonest sinus tachyarrhythmia, followed by PSVT. There are no evidence-based guidelines to treat a case of AF in presence of COVID-19. However, the European society of cardiology proposes that for patients with AF/atrial flutter without hemodynamic instability, discontinuation of arrhythmogenic drugs and initiation of rate control therapy is a reasonable therapeutic option.

Title: COVID-19 INFECTION AND TUBERCULOSIS- A VICE VERSA SCENARIO: A REPORT OF THREE CASES

Name of Presenter: **Dr Ramya Priya**

Authors (or Co-authors): **Dr Saka Vinod Kumar, Dr Manju Rajaram, Dr Madhusmita Mohapatra, Dr Dharm Prakash Dwivedi, Dr Vishnukanth, Dr Pratap Upadhyay, Dr Lakshmi S**

Institution/Author Organization: **Jawaharlal Institute of Postgraduate Medical Education & Research, Pondicherry, India**

INTRODUCTION:

People ill with COVID-19 and TB show similar symptoms such as cough, fever and difficulty in breathing, making it difficult to look for other infection when a primary diagnosis is made. In this case series, if clinical worsening is observed while on treatment for the primarily diagnosed disease, evaluation of other infection is emphasized.

CASE DETAILS:

1.32 year-old male with no known comorbidities with CORADS-6 was shifted to general ward as he continued to have hypoxia. He

developed left pneumothorax for which tube thoracostomy was done and reactive pleural fluid analysis detected MTB by CBNAAT.

2. Another patient, 21-year-old female (RT-PCR proven Covid infection) was admitted in Covid ward when she developed increased breathlessness 96 hours post-admission, chest radiograph showed left-sided pneumothorax for which ICD was placed. Pleural fluid sent for analysis detected MTB by CBNAAT.

3. Third patient, 50-year-old male with microbiologically confirmed sputum positive pulmonary tuberculosis. His admission SARS-CoV2 report was negative. He had clinical worsening of saturation 10 days after admission. He had not been in contact with proven Covid patients. In view of hospitalized SARI, SARS-CoV2 RT-PCR was sent and was reported positive.

CONCLUSION:

It is proposed that immunosuppressants for Covid infection may lead to development of active tuberculosis infection. Also, diagnostic algorithm should be made to address both the situations in a timely manner for better prognosis of patients.

Title: A STUDY OF PATHOLOGICAL FEATURES OF LUNG IN COVID-19

Name of Presenter: **Dr. Revanth Kumar Nakka**

Authors (or Co-authors): **Dr. Bhanu Rekha Bokam, Dr. Chetana Gondi**

Institution/Author Organization:

Pinnamaneni Sidhartha Institute of Medical Sciences, Gannavaram, Vijayawada, Andhra Pradesh

INTRODUCTION:

Coronavirus disease 2019 (COVID-19) has been declared a pandemic by the World Health Organization (W.H.O) which caused more than 1.62 million deaths. Acute respiratory failure is leading cause of death in COVID-19 followed by sepsis, cardiac failure, hemorrhage.

AIM:

To obtain knowledge regarding pathological changes of the lung in COVID-19 that may contribute to death.

MATERIALS AND METHODS:

This study included seven patients who died of COVID-19 pneumonia in Dr. PSIMS & RF, Vijayawada. All the clinical data were collected. After taking informed and written consent from first degree relatives of the patient, with proper COVID-19 precautions, percutaneous core needle lung biopsy was taken within 2 hours after death, sample was collected in formalin solution, sent for histopathological

examination.

RESULTS:

The patients' age ranged from 37 to 74, including four males and three females. All the patients were on ventilatory support at the time of death. Out of 7 patients, 6 showed Acute Lung Injury with organizing pneumonia with histological findings like injury to the alveolar epithelial cells, inflammatory exudates, hyaline membrane and one patient showed diffuse Alveolar Damage with Squamous Metaplasia.

CONCLUSION:

The most common pathology observed in our study is acute lung injury. As the sample size is limited, it is not statistically relevant. To gain broad information, comprehensive studies with a large sample size are necessary.

KEYWORDS:

NEEDLE BIOPSY, COVID-19, ACUTE LUNG INJURY

Title: Treatment plan in RTPCR negative but clinically-radiologically suspicious case of covid-19 (CASE REPORT)

Name of Presenter: **Dr. SAURABH TYAGI**

Authors (or Co-authors): **Dr. Frank P, Dr trinath dash**

Institution/Author Organization: **JLNHRC BHILAI**

IN VIEW OF CURRENT PANDEMIC OF COVID-19, THERE ARE MANY CASES WHICH ARE CLINICALLY AND RADIOLOGICALLY SUSPECTED OF HAVING COVID-19 BUT IN EARLY STAGES ARE RTPCR NEGATIVE. THIS POSES A CHALLENGE TO THE PULMONOLOGISTS. IN THESE CASES, DIFFERENT DIAGNOSTIC MODALITIES HAVE TO BE USED FOR DIAGNOSING COVID-19 AND EARLY TREATMENT AS PER COVID PROTOCOLS WITH NON-INVASIVE VENTILATORY SUPPORT CAN SIGNIFICANTLY ALTER THE OUTCOME IN FAVOUR OF PATIENT. THIS POSTER IS ABOUT A CASE OF SEVERE ACUTE RESPIRATORY ILLNESS DUE TO COVID-19 WHO WAS RTPCR NEGATIVE INITIALLY. HE WAS MANAGED WITH STANDARD COVID TREATMENT PROTOCOLS FROM VERY BEGINNING ALONG WITH VARIOUS MODES OF NON-INVASIVE VENTILATORY SUPPORTS AND EARLY INITIATION OF FIBRINOLYTIC THERAPY FOR POST COVID FIBROSIS. AFTER 10 DAYS OF HOSPITALISATION THIS CASE CAME POSITIVE FOR COVID-19 THROUGH TRUENAT. DESPITE OF HAVING SEVERE RADIOLOGICAL ABNORMALITIES AND LONG HOSPITAL STAY THIS PATIENT RECOVERED WELL AND DOES NOT REQUIRE OXYGEN SUPPORT AT THE TIME OF DISCHARGE.

Title: Spontaneous pneumothorax in a patient with covid 19 pneumoniaName of Presenter: **shaik abdul waseem**

Authors (or Co-authors): -

Institution/Author Organization: **NRI medical college and general hospital****Background:**

As the number of COVID-19 cases emerge, new complications associated with the disease are recognized. This is a case report of spontaneous pneumothorax in a patient with COVID19. Pneumothorax may occur at any stage of the disease with or without any previous pulmonary disease.

Case:

A 36 year old male came with complaints of fever associated with body pains since 5days and throat irritation since 2days. He was suspected to have been infected with SARS-Cov-2, both rapid antigen test and RT-PCR were negative but HRCT chest revealed bilateral consolidations. All inflammatory markers of covid19 were within normal range. However, on the hospital day5, patient presented with sudden onset chestpain. Chest X-ray showed pneumothorax. He was treated with an ICD tube. Resolution was seen after 7days and thoracic tube was removed followed by discharged from hospital.

Conclusion: The presented case suggests that some patients with COVID-19 are possibly at risk for pneumothorax, possibly due to bullae formation in formerly healthy lungs i.e; not necessarily related to the initial severity of COVID-19 and can occur during any stage of the disease.

Title: ISOLATED PLEURAL EFFUSION IN COVID 19Name of Presenter: **SUBHAPRADA MISHRA**Authors (or Co-authors): **Prof Dr Pravati Dutta, Dr Rekha Manjhi, Dr Sudarsan Pothal, Dr Aurobindo Behera, Dr Gourahari Pradhan**Institution/Author Organization: **VIMSAR Burla****A RARE CASE INTRODUCTION:**

Isolated pleural diseases are rarely encountered in COVID 19 in clinical practice. The common pleural abnormality detected in COVID 19 patient is pleural thickening (15%) followed by pleural effusion (4%). (Hameed M, et al.)

CASE REPORT: A 35 year old housewife presented with chest pain and breathlessness since 2 days and fever for one day. She has no addiction and no comorbidity.

EXAMINATION: Patient was conscious oriented, tachypnoeic (RR=30/min), SpO₂ 79% with room air. Temperature=101.4°F. Rest of the vitals are normal. General examination findings are unremarkable. Respiratory system examination revealed diminished breathsounds over left mammary, left infra axillary & left infrascapular area & no added sounds.

INVESTIGATIONS:

Rt-PCR of nasopharyngeal swab for COVID 19 was positive. Chest x-ray & HRCT thorax at the time of admission showed left pleural effusion without any parenchymal lesion. USG abdomen, pelvis & ECG were normal. Pleural fluid analysis: exudative, low ADA, lymphocytic on cytology, high LDH, pleural fluid CBNAAT was negative for MTB. Inflammatory markers: elevated D-dimer, CRP & serum LDH & serum ferritin. CBC, LFT, RFT: Normal. Repeat chest x-ray & USG thorax after 15 days were normal.

TREATMENT:

Oral Favipiravir, Azithromycin, vitamin C, Zinc, injectable Enoxaparin, piperacillin tazobactam, methylprednisolone.

CONCLUSION:

COVID 19 is a multisystem disease with diverse manifestations. Though isolated pleural effusion due to COVID 19 is an atypical presentation, it should be considered as a differential diagnosis in evaluation of pleural effusion in COVID era.

Title: ROLE OF IV IMMUNOGLOBIN IN A PATIENT WITH COVID-19 WITH BILATERAL LOWER LIMB DVT WITH IVC FILTER PLACED WITH APLA SYNDROME WITH THROMBOCYTOPENIA WITH OSA WITH PRE-DIABETIC STATUS WITH BMI-54.6Name of Presenter: **TAMISHI SHARMA**Authors (or Co-authors): **Eema Chaudhary, Sukhbir Singh, Shubham Tiwari**Institution/Author Organization: **Subharti Hospital****INTRODUCTION:**

Severe Acute Respiratory Syndrome-CoV-2 (SARS-CoV-2) is in charge of the current outbreak of pneumonia that began at the beginning of Dec 2019 near Wuhan City, China. Patients with the underlying chronic conditions are more likely to suffer from complications when infected with the virus. Although no drug has been approved by FDA for the treatment of Covid-19, many drugs are being experimented.

AIMS AND OBJECTIVES:

To study the role of IVIG in a patient with COVID-19 with B/L Lower Limb DVT with APLA Syndrome

METHODOLOGY:

IVIG was given for 5 days and patient's clinical and radiological status was monitored.

RESULTS:

Improvement in lower limb oedema, SPO₂ on RA (from 87% to 94%), radiological changes and platelet count was observed.

CONCLUSION:

IVIG has become an important therapy in clinical medicine. It is a product derived from the plasma of thousands of donors. The original use of these immunoglobulin preparations was in antibody replacement therapy, however, a number of other clinical benefits of IVIG have been demonstrated which result from its anti-inflammatory and immunomodulatory effects.

Title: COVID 19 AND PNEUMOTHORAX -RARE BUT NOT SELDOM

Name of Presenter:

DR.VAIBHAV.C.PADASHETTIAuthors (or Co-authors): **DR.MAHESH P A, DR. JAYARAJ BS, DR.CHAYA SK, DR.LOKESH K S, DR.NANDAKISHORE**

Institution/Author Organization:

JSSH, MYSURU**Introduction-**

patients with covid 19 present with various symptoms and signs and one of the rare presentation and complication is pneumothorax

Aims-

we try to study covid 19 and pneumothorax.

Methods-

this study was done among patients with current or prior illness of covid 19 with pneumothorax. we have at total of 5 patients of covid 19 with pneumothorax. out of 5 patients of covid 19, 3 patients had pneumothorax during the illness and 2 patients had pneumothorax in post covid

Results-

Case 1 -45 yr male pt with no comorbidities, non smoker came to emd with sudden onset breathlessness xray showed right side tension pneumothorax managed by right side icd, and patient was tested covid 19 rt-pcr which came positive

Case 2 -40 yr old male non smoker came to emd with fever, breathlessness with s/c

emphysema since 2 days, patient tested positive for covid 19. xray showed mild right pneumothorax with s/c emphysema patient was managed conservatively with HFNC

Case 3-5 year old male, smoker came with SARI, tested positive for covid 19 was admitted to covid icu patient was on oxygen and on day 5 of illness patient developed sudden desaturation and was intubated and usg showed absent lung sliding and M point on both side, xray showed b/l pneumothorax (right > left) and icd was inserted on right side

Case 4 - post covid - day 5 of discharge came with sudden onset breathlessness, xray showed right pneumothorax managed by icd.

Case 5-post covid - day 9 of discharge came with right side chest pain xray showed right sided pneumothorax, managed by icd

Conclusion-

As the number of COVID-19 cases emerge, new complications associated with the disease are recognized and pneumothorax is one of them

Title: Knowledge Attitude And Practises Of Healthcare Workers Towards COVID-19

Name of Presenter: **Aiswarya Thambi**

Authors (or Co-authors): **Thomas George P, Muraly C. P, Mani O. K, Elizabeth, Parvathi Rajendran**

Institution/Author Organization:

GOVERNMENT MEDICAL COLLEGE, THRISSUR

Images

Title: POST COVID PULMONARY COMPLICATIONS – A CROSS SECTIONAL STUDY

Name of Presenter: **DR.ALEENA ROSHNI MATHEW**

Authors (or Co-authors): **DR.SUHAIL.N (HOD), DR.S.UNAIS, DR.DHWANI GOPINATH (ASSIST.PROFFESORS)**

Institution/Author Organization:

MES MEDICAL COLLEGE. PERINTHALMANNA, KERALA

BACKGROUND

Coronavirus disease caused by nCoV-19, has rapidly spread with ≈3 million confirmed infections & 200,000 deaths within initial 4

months.

INTRODUCTION

Post covid pulmonary complications include post viral bronchial hyper-reactivity, fibrotic lung disease, bronchiectasis, pulmonary vascular disease, pleural thickening, pneumatocele, pneumothorax.

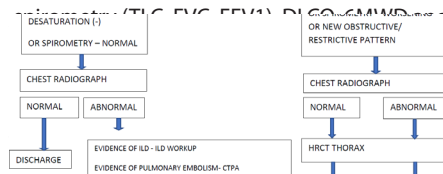
AIMS AND OBJECTIVES

1.To identify Pulmonary Complications & Persistent Respiratory Symptoms faced by COVID survivors.

METHODOLOGY

OP based cross sectional study.

Assessed clinical history ,examination



RESULTS

Out of 50 post-COVID category B&C cases ,45(90%) had pulmonary complications. Post covid pulmonary complications identified were post viral bronchial hyper-reactivity(10%), fibrotic lung disease(50.5%), persisting groundglassing(30.5%), bronchiectasis(9%).

CONCLUSION

Severity of long term respiratory complications of COVID remain to be seen in coming years. As survival is only a new start for COVID recoverers, identification and treatment of complications is always crucial for a better quality of life.

Title: MORBIDITY AND MORTALITY INDICATORS IN COVID 19 PATIENTS ADMITTED IN TERTIARY CARE CENTRE, ANDHRA PRADESH

Name of Presenter: **ARYA RAMACHANDRAN**

Authors (or Co-authors): **VIJAYAKUMAR MD, SURYAKUMARI MD**

Institution/Author Organization: **ANDHRA MEDICAL COLLEGE**

INTRODUCTION

Since December 2019, we have been facing the worst pandemic of human history.

AIMS

To study the morbidity and mortality indicators ,course and final outcomes of Covid-19 patients.

METHODOLOGY Hospital based observational cross sectional study of 270 covid19 patients admitted with saturation less than 94% from

July to October 2020.

RESULTS

We observed male predominance and mean age of 54 years. Most common symptom is breathlessness(98.1%) followed by cough(71.8%) and fever(70.3%). 26.3% of patients have both diabetes and hypertension, 13.7% have hypertension and diabetes in 12.2%. Two MDRTB and one R/S PTB detected. Chest x ray abnormality in 98.1% with air space opacity as common finding. In CT chest major finding is GGOs with peripheral distribution. 51.4% patients required ventilator support. Blood group A and lymphopenia is common. 28.5% have raised inflammatory markers. 90 patients died during the course accounts for 33.3% mortality.

CONCLUSION

Almost all patients have radiological abnormalities, reducing the requirement of CT scans. Patients with older age and associated comorbid conditions seem to have greater risk for lung injury thereby requiring oxygen support and these patients also had greater derangement in their biochemical profile.

Title: LYMPHOPENIA AND NEUTROPHILIA AS A MARKER OF SEVERITY IN PATIENTS WITH COVID 19

Name of Presenter: **Bharatkumar M Goyani**

Authors (or Co-authors): -

Institution/Author Organization:

GMCH, Udaipur

Background & Objective:

In the current pandemic of coronavirus disease 2019, there is a requirement to identify clinical and laboratory predictors for early staging i.e mild, moderate and severe infection and also early diagnosis and for treatment. Early study has shown that an increase in neutrophils count and a decrease number of lymphocytes could be associated with both severity and mortality in COVID-19. Method: This is retrospective study done in 100 Covid 19 patients admitted in GMCH Udaipur from June 2020 to September 2020. Their lymphocytes and neutrophils count was analyzed. Results: Out of 100 patients 88 patients recovered and discharged whereas 12 patients died. Lymphopenia was observed in 82% of symptomatic patients and 12% in asymptomatic patients. Among 12 patients who died, lymphopenia was seen in 10(83.33%) in which moderate lymphopenia seen in 7(58.33%) patients and severe lymphopenia seen in 3(25%) patients. Neutrophilia was seen in all patients of Covid 19 including symptomatic and asymptomatic.

Conclusion:

Lymphopenia and neutrophilia were found to be associated with prognosis in patients with COVID-19. Patients with severe lymphopenia ($0.5 \times 10^9 / L$) have a high risk of mortality. Continuous watch on lymphocyte and neutrophil helps in selecting the treatment modalities available for management of COVID-19.

Title: Correlation of S.LDH in prognostication of COVID 19.

Name of Presenter: **DR. BHAVANA SHANKAR NADONI**

Authors (or Co-authors): -

Institution/Author Organization:

KEMPEGOWDA INSTITUTE OF MEDICAL SCIENCES , BANGALORE .

Introduction:

SARS-CoV 2 is the seventh identified coronavirus first identified in Wuhan, China leading to a global pandemic from December 2019. The glycoprotein of the protein spikes covering the protein of its ssRNA binds with cell membrane protein angiotensin converting enzyme 2 (ACE2) on its surface that facilitates cell membrane entry and fusion activating both innate and adaptive immune pathways. There is parenchymal involvement of tissue leading to release of pro-inflammatory cytokines as IL-8, TNF, IL6 activating the innate immune system and leading to recruitment of neutrophils and macrophages at the site of infection. Further in COVID-19 systemic inflammation and coagulation system play crucial role in mortality. Elevated LDH levels have been associated with worse outcomes in patients with other viral infections in the past. Abnormal LDH value can result from multiple organ injury and decreased oxygenation with upregulation of the glycolytic pathway. LDH is present in lung tissue (isozyme3). Also LDH is elevated in thrombotic microangiopathy.

Aim :

We would like to correlate if LDH can act as a marker for risk stratification and prognostication in COVID-19.

Results :

In 50 patients of COVID-19 admitted at our institute, Serum LDH was elevated at baseline in almost 90% of cases. In COVID-19 Category C the LDH level rose by four fold from the baseline value. Serum levels correlated with the progression of the severity of the clinical condition of patients during their course of admission.

Title: ASSOCIATION OF THROMBOCYTOPENIA WITH SEVERITY AND

OUTCOME OF COVID-19

Name of Presenter: **Dr CAROL HANNAH BABU**

Authors (or Co-authors): **DR DEEPAK KUMAR R**

Institution/Author Organization: **KIMS HOSPITAL & RESEARCH CENTRE, BENGALURU, KARNATAKA**

Introduction:

Coronavirus disease 2019 (COVID-19) caused by Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has become a global pandemic, affecting all age groups with majority being adults. The role of thrombocytopenia in assessing the disease severity and adverse outcome in patients with COVID-19 is not clearly established. Aim: To find the association of thrombocytopenia with the severity and outcome of COVID-19.

Methodology:

This is a retrospective study conducted in Department of Respiratory Medicine, KIMS Hospital and Research Centre, Bengaluru, Karnataka. RT-PCR confirmed COVID-19 patients >18 years of age, admitted in our hospital from July-September 2020 were included in the study. ANOVA test was used to compare the platelet count in 3 categories of COVID patients based on the severity of the disease. Statistical significance was set at $P < 0.05$.

Results: Of 120 COVID-19 patients, 74 were males (61.67%) and 46 were females (38.33%); 87 were survivors (72.5%) and 33 were non survivors (27.5%). Statistically significant association was found between low platelet count and the disease severity and mortality in patients with COVID-19. Conclusion: The degree of thrombocytopenia was more in patients with severe disease and in survivors than in non survivors of COVID-19.

Keywords:

Thrombocytopenia, COVID-19, RT-PCR. Authors have no financial assistance to disclose.

Title: DIAGNOSTIC AND PROGNOSTIC SIGNIFICANCE OF EOSINOPHIL COUNTS TO CRP LEVELS AND IN ASSESSING SEVERITY OF ILLNESS IN COVID 19 CASES.

Name of Presenter: **Dr.DIANA DAVID**

Authors (or Co-authors): **Dr RAJEEV H**

Institution/Author Organization: **KEMPEGOWDA INSTITUTE OF MEDICAL SCIENCE, BANGLORE**

INTRODUCTION-

The gold standard for COVID-19 diagnosis based on real-time reverse-transcriptase-polymerase chain reaction from

nasopharyngeal swab specimens or in severe cases from bronchoalveolar lavage.

AIM-

Study of diagnostic and prognostic significance of eosinophil counts to CRP levels and in assessing severity of illness in COVID 19 cases.

METHODOLOGY-

Retrospective study in COVID-19 patients in KIMS Bangalore

CONCLUSION-

Eosinopenia is common at admission of COVID 19 positive cases and accuracy increase with increasing CRP levels and is associated with increased severity of illness.

Title: CLINICODEMOGRAPHIC PROFILE OF PATIENTS RECOVERED FROM COVID 19 IN A TERTIARY CARE CENTRE

Name of Presenter: **Dr. FIFI FRANCIS**

Authors (or Co-authors): **DR.MANOJ D.K, DR.RAJANI.M**

Institution/Author Organization:

GOVERNMENT MEDICAL COLLEGE , KANNUR

INTRODUCTION -

In December 2019, a novel coronavirus (SARS-CoV-2) emerged in China and rapidly spread globally including India. There are many studies which documented damage to many organs or systems in patients infected with SARS-CoV-2. There is slow pace of recovery which explains the so called the "post-COVID syndrome."

OBJECTIVES -

To study the symptomatology in people recovered from COVID-19 disease.

METHODS -

This is an ongoing hospital based observational study conducted in department of respiratory medicine where patients recovered from COVID 19 and having symptoms were enrolled. The sociodemographic variables were assessed.

RESULTS -

Out of 75 patients 41 were females & 34 were males. 40 patients were asymptomatic 16 patients had mild symptoms, 10 had moderate and 9 had severe symptoms during COVID 19 disease period. 39 patients had home isolation .14 patient required ICU care .15 admitted in COVID first line centre & 7 admitted in the COVID hospital ward .Most common post COVID symptom was dyspnea on exertion (n=38)

followed by cough (n=37).

CONCLUSION:

The extent and severity of the long term complications of covid-19 infection remain to be seen, but emerging data indicate that many patients experience persistent symptoms months after their initial illness.

Title: Role of Favipiravir in Covid-19 patients, an emerging option in COVID.

Name of Presenter: **Imrana Masood**

Authors (or Co-authors): **Mansoor Ahmad Khan, Nader A.R., Nivedita**

Institution/Author Organization: **JNMCH,AMU,Aligarh**

INTRODUCTION:

The world is currently witnessing the Covid-19 pandemic, caused by the novel corona virus (SARS COV-2), which causes the corona virus disease (COVID-19). Favipiravir is approved in India for the treatment of mild-moderate cases of Covid-19, as it has shown rapid viral clearance and early clinical improvement. In the absence of any definite drug or vaccine to prevent the progress of Covid-19, many repurposed drugs are now being considered for their potential role in the treatment of Covid-19. Favipiravir was first approved for use in Japan in 2014 for influenza pandemic, it is found to have in vitro efficacy against Covid-19 and a wide safety margin. In this article, we aim to evaluate the role of favipiravir in the management of Covid-19 patients.

BACKGROUND :

SARS-COV-2 is a single stranded RNA virus. Its incubation period is from 10-14 days and the infectivity rate varies from 1.5-6 times. The viral shedding may continue for more than 2 weeks. Favipiravir is shown to shorten the duration of the disease by targeting the key enzymes of SARS-COV 2 and its early initiation interferes with the viral cycle in the host cell, reduces the viral load and viral shedding.

Title: Platelet to lymphocyte ratio (PLR) to predict severity of COVID-19

Name of Presenter: **INDU PRIYA CHERUKURI**

Authors (or Co-authors): -

Institution/Author Organization: **Andhra medical college**

INTRODUCTION:-

Platelet to lymphocyte ratio (PLR) is a novel marker of inflammation. The purpose of this marker is to determine the prognosis of COVID-19 patients especially in resource limiting setting

OBJECTIVE:-

To evaluate the association between PLR levels on admission and the severity of COVID-19 patients

METHODOLOGY:-

It is a cross sectional study of 42 patients of COVID-19 confirmed by TRUENAT at GHCCD, Visakhapatnam from August 2020 to October 2020

RESULTS :-

out of 42 patients included in the study 19 were in the non severe group and 23 were in the severe group. Those in the severe group were generally older than non severe group. PLR is high in severe group than in the non severe group

CONCLUSION:-

PLR is a novel, cost effective and readily available biomarker in determining the severity of COVID-19 patients. It may help to divert attention to patients with poorer prognosis

Title: Prediction of progression risk in patients with covid -19 pneumonia – THE CALL SCORE

Name of Presenter: **Dr J Soundhariyan**

Authors (or Co-authors): **Dr V.NookaRaju M.D., , Dr. GayathriDevi M.D., Dr B.Padmaja M.D.**

Institution/Author Organization: **Andhra medical college**

Background :

Covid-19 is a deadly infectious disease and various factors are involved in progression of disease in the patient. This study is done to predict the progression of covid disease using various clinical and biochemical parameters.

Aims :

1. To identify various high risk factors for covid -19
2. To develop a score to predict progression of disease.
Methodology : All patients who are admitted to our COVID hospital between May to November 2020 are enrolled and clinical data are retrospectively collected and analysed to identify the various risk factors associated with progression of disease which were then used to develop a scoring model.

Results :

Overall 100 patients were analysed during their hospital stay which showed that Comorbidity, Age, Lymphopenia, higher Ldh levels were independent high-risk factors for covid19 progression. So incorporating these 4 factors, a scoring model called CALL was developed of which the positive and negative predictive

values were 58.5 % and 96.7 %.

Conclusion :

Call score helps the clinicians to predict the progression of covid19 disease and thereby reduce the mortality.

Title: MORTALITY PREDICTORS FOR PATIENTS WITH COVID-19 PNEUMONIA CAUSED BY SARS-CoV-2

Name of Presenter: **JANNELA**

BHAVANARAYANA

Authors (or Co-authors): **Dr. R.Ramakrishna, Dr T. ARUNA**

Institution/Author Organization: **Nri medical college and general hospital**

INTRODUCTION:

Coronavirus disease 2019 (COVID-19) caused by a novel coronavirus (SARS-CoV-2) emerged in December 2019, and spread across international borders. Its emergence has resulted in a pandemic and has produced a huge number of cases worldwide. The clinical spectrum of COVID-19 disease appears to be wide, ranging from asymptomatic infection, mild upper respiratory tract illness, severe viral pneumonia with respiratory failure or death. The evaluation of risk factors for the severity of the disease and the possibility of death is a very important issue for the prediction of the possible outcome.

AIM& OBJECTIVES:

The study aims to identify the factors associated with the patients with COVID 19 pneumonia.

METHODOLOGY:

A total of 190 patients died among 8348 positive cases who were admitted in hospital were selected. All clinical, laboratory and radiological parameters were collected prospectively from the patients with COVID-19 pneumonia who were hospitalized between APRIL 2, 2020, and SEPTEMBER 30, 2020. The relationship between each variable and the risk for death of COVID-19 pneumonia patients were analyzed.

RESULTS:

The study revealed an increased death rate with comorbidities, and a positive correlation is seen with increased levels of procalcitonin, D dimer, Hs-trop I, initial clinical presentation, time to first visit.

Title: LOW VITAMIN-D LEVELS: IS IT A RISK FACTOR FOR COVID-19 INFECTION?

Name of Presenter: **Dr.Jaya Sravani Donepudi**

Authors (or Co-authors): **Dr. Mukesh Kumar**

M, Dr. Prem Sagar N, Dr. Sathya Prasad A,

Institution/Author Organization: **Mamata medical college**

INTRODUCTION

COVID-19 caused by SARS-CoV-2 has become one of the most important epidemiological events within the last 100 years. Infection with SARS-CoV-2 can lead to a mild or highly acute respiratory syndrome fuelled by altered secretion of inflammatory cytokines that can be fatal. While viral spreading and severity indexes are growing, clinical trials for several vaccine prospects are being performed. It is imperative to develop quick, and cost-effective therapeutic strategies to protect vulnerable populations. A potential alternative is vitamin D, natural immunoregulator that has been demonstrated to enhance antimicrobial activity. Mechanisms reported to support the antiviral effects are based on the ability of vitamin D to upregulate antimicrobial peptides and induce antiviral cytokines to interfere the viral replicative cycle.

AIM

To assess the role of vitamin-D levels in covid-19 infected patients.

MATERIALS AND METHODS

This is an ongoing prospective study being conducted in the Department of Respiratory Medicine, Mamata medical college. The study includes about 100 covid-19 patients (RT-PCR POSITIVE). These patients will be assessed for their vitamin-D levels.

RESULTS AND CONCLUSION:

As this is an ongoing study, Results and observations will be presented at NAPCON - 2020.

Title: Study of Likelihood of infection with Covid 19 based on source of exposure to infection among hospital staff

Name of Presenter: **Dr Jayalakshmi T.K**

Authors (or Co-authors): **Dr Narendra Patil ,Dr Dipti Dhanwate, Dr Bhumika Madhav**

Institution/Author Organization: **Apollo hospitals Navi mumbai**

Objectives:

To study the different sources and types of exposure of hospital staff to Covid 19 infection and determine the common sources which increase the likelihood of acquiring infection in order to identify likely sources and prevent episodes of infection among the hospital staff.

Methodology:

Primary survey of 200 Covid positive staff at a tertiary hospital was done by telephonic

interview and their potential sources of infection were documented. Sources of infection could be other staff in hospital, roommates, patients, patient relatives or others at home or family or during travel. It could also be due to PPE donning and doffing errors or inadequate PPE use. Types of interaction could be clinical encounters, interactions with patients or relatives during billing or other contact areas with staff and could be in Covid or non Covid areas of the hospital. Conclusion Staff acquisition of Covid was found to be higher in nonCovid than in Covid areas and higher with social interactions among staff than patient to staff spread. Hence better social distancing measures would help in significant drop in new Covid infections in hospital staff.

Title: STUDY OF CLINICO RADIOLOGICAL PROFILE IN COVID-19 PATIENTS

Name of Presenter: **K.CHARAN LAKSHMI**

Authors (or Co-authors): **B. BHANU REKHA**

Institution/Author Organization: **Dr pinnamaneni siddhartha institute of medical sciences**

INTRODUCTION:

Coronavirus disease 2019 (COVID-19) is a pandemic infectious disease caused by a novel coronavirus, known as (SARS-CoV-2).

AIMS & OBJECTIVES:

Study of clinical and radiological profile in covid -19 patients, and correlation to outcome of patients.

METHODS & MATERIALS:

This is prospective study included 425 patients with ICOVID-19 admitted in tertiary care hospital from May 2020 to Nov 2020. The patients were examined clinically and were assessed for signs& symptoms, comorbid conditions, and severity of pneumonia. All patients underwent a digital CXR examination.

RESULTS:

Most of patients were young adults with mean age of 47.53 years. 57% male and 43% female. Out of total analyzed patients. 261 patients were symptomatic, fever (32.5%), cough (11.1%), shortness of breath (35%) and sore throat (7%) were common presenting clinical manifestations. The clinical status of patients correlated with chest x ray with mild changes in (16.3%) and moderate (13.4%) and severe (6.8%).

CONCLUSION: In conclusion, symptomatic patients with COVID-19 have abnormal lung findings in CXR. Older age, presence of comorbidities are more commonly associated

with clinicoradiological progression of disease. Further HRCT and inflammatory markers play an important role in COVID-19

Title: SIGNIFICANCE OF INFLAMMATORY MARKERS ON SEVERITY AND MORTALITY IN COVID-19

Name of Presenter: **Dr. Kakumanu Divya Sravani**

Authors (or Co-authors): **Dr.MD.Badusha**

Institution/Author Organization: **NRI Institute of Medical Sciences**

Background:

Systemic inflammation elicited by a cytokine storm is considered a hallmark of COVID-19 and the associated biomarkers may be beneficial for risk stratification.

Aims:

To assess the clinical utility of the C-reactive protein (CRP), D-Dimer and Serum Ferritin levels for predicting in-hospital severity in COVID-19.

Methodology:

A retrospective cohort study was done to determine the association of CRP, D-Dimer and Sr.Ferritin with need for ICU admission and Mortality. Results: There is significant association between age ($p < 0.001$), CRP ($p < 0.001$), D Dimer ($p < 0.001$), serum ferritin ($p = 0.001$) and ICU admission ($p < 0.001$) with mortality associated with Covid19. Further in the study as there is increase in age ($r = -0.451$, $p < 0.001$), CRP ($r = -0.527$, $p < 0.001$), D- dimer ($r = -0.567$, $p < 0.001$), serum ferritin ($r = -0.394$, $p < 0.001$) there are more chances of mortality.

Conclusion:

CRP values > 100 mg/dl, D-Dimer levels > 500 ng/ml and Sr.Ferritin levels > 400 ng/ml during hospitalization might predict higher odds of in-hospital mortality.

Title: POST-COVID PULMONARY COMPLICATIONS IN PATIENTS WITH MODERATE AND SEVERE COVID PNEUMONIA

Name of Presenter: **KALAGIRI SAI SAMRAT**

Authors (or Co-authors): **PRIYA.R, KAVITHA.V, CHITRA.V, UMA MAHESHWARI K, UMA DEVARAJ, GEORGE D`SOUZA**

Institution/Author Organization: **ST.JOHN`S NATIONAL ACADEMY OF HEALTH SCIENCES, BANGALORE**

INTRODUCTION :

Patients recovered from pandemic viruses (SARS&MERS) had residual functional and

radiological abnormalities during follow up.

AIMS&OBJECTIVES:

To evaluate pulmonary complications in patients recovering from moderate and severe COVID pneumonia.

METHODOLOGY:

Patients recovering from moderate/severe COVID and presenting to Pulmonary medicine over a 12 week period were included. Clinical, radiological and functional assessment was performed in all patients.

RESULTS:

Thirty post-COVID patients (24 Males, 6 Females), with a mean (SD) age of 53.2 (12.24) years were included. The mean post-COVID duration at follow up was 5.4(3.5) weeks. Diabetes (60%) was the most common comorbidity followed by hypertension (46.6%). Dyspnea (80%) and cough (30%) were the predominant presenting symptoms at follow up. Resting hypoxia was present in 9(30%) patients mandating re-admission. Six minute walk test was performed in the remaining 21 patients, of whom 10 (47.6%) had significant desaturation. Radiological improvement was seen in 16 (53%) patients. 2 patients had new onset pulmonary thromboembolism. Of the re-admitted patients (n=9), 5 (50.5%) had radiological worsening. Two patients expired after re-admission due to superadded fungal infection and worsening hypoxia, respectively.

CONCLUSION:

Significant residual abnormalities persist in moderate and severe COVID pneumonia, emphasizing the need for long term follow-up of these patients.

Title: Clinical profile of SARS-CoV-2 Patients in a tertiary health care centre

Name of Presenter: **Dr Kaushani Patel**

Authors (or Co-authors): **Dr Kusum V Shah , Dr Arti D Shah, Dr Yash Rana**

Institution/Author Organization: **Smt. B. K. Shah Medical Institute & Research Centre , Piparia , Waghodiya , Vadodara , Gujarat**

AIM AND OBJECTIVE-

To evaluate the most common presenting symptoms of SARS-COV-2 patients. • To evaluate the relationship of presenting symptoms with age and gender.

INTRODUCTION-

Coronavirus is an enveloped, positive sense single strand RNA virus. Human-to-human transmission via droplets and contact with fomites seems like critical route of viral spread. Common clinical features include

breathlessness, fever, cough, sore-throat, headache, fatigue, ageusia and anosmia.

MATERIAL AND METHOD-

Retrospective data of 50 RT-PCR confirmed SARS-COV-2 patients was analysed.

RESULT-

Out of 50 patients, the mean age of participants was 44.5years with male preponderance(54%). 78% of patients were symptomatic. Most common presentation was fever(36%) followed by cough(24%), sore-throat(14%), fatigue(14%), breathlessness (12%), headache(10%), ageusia(10%), anosmia(10%) and nausea(4%). Patients above 50 years had severe presenting symptoms like breathlessness, fever and cough. Patients with age between 20 to 50 years presented with the milder symptoms of fever, cough, tiredness, anosmia, ageusia and nausea. Patients below 20 years presented with mildest symptoms in form of ageusia, anosmia and headache.

CONCLUSION- Most common presenting symptom is fever predominantly affecting young males. There is an increased risk of severity with increased age.

Title: EOSINOPHIL COUNTS- A NOVEL MARKER TO DETERMINE THE SEVERITY OF COVID 19 INFECTION

Name of Presenter: **MERIN THOMAS**

Authors (or Co-authors): **Dr Deepak Kumar R**

Institution/Author Organization:

KEMPEGOWDA INSTITUTE OF MEDICAL SCIENCE

Background:

COVID 19 has emerged as a global pandemic. Various parameter have been proved helpful in diagnosis and prognostication. Key question concerning eosinophils is whether they alter the course of COVID-19 infection

Aim:

To investigate the role of peripheral blood eosinophil as a marker of severity of COVID 19 infection Method : In this retrospective study, data on 120 RT-PCR confirmed COVID-19 patients from KIMS, Bengaluru were collected from June to August 2020. The trend of eosinophil count in COVID-19 patients were analyzed. The cases were categorized into non severe which included WHO category A and B, severe which included WHO category C . Demographic and laboratory parameters were analyzed .One way ANOVA test was used for statistical analysis

Result: Eosinopenia was observed in severe cases whereas normal eosinophil counts were

seen in patients with uneventful hospital stay Conclusion: Eosinophil count remained relatively low during hospitalization in severe COVID-19 patients. Thus eosinopenia plays a role in determining the severity and course of the disease

Title: STUDY ON TEMPORAL PRESENTATIONS OF POSTCOVID SEQUELAE IN PATIENTS ATTENDING TO RESPIRATORY OUT PATIENT DEPARTMENT IN A TERTIARY CARE HOSPITAL

Name of Presenter: **NINA JOY**

Authors (or Co-authors): **Dr. P.Yugandhar**

Institution/Author Organization: **Alluri**

Sitarama Raju Academy of medical science

BACKGROUND:

The novel coronavirus disease pandemic has significant mortality and morbidity due to the lack of specific and effective treatment.Recent studies show Chronic cough,Fibrotic lung disease,Broncheictasis and Pulmonary Vascular Disease are some of the long term Pulmonary complications .

AIMS:1.To document postcovid respiratory complications in patients of a tertiarycare centre. 2.To identify patients who are at high risk . 3.To suggest possible management strategies .

METHODOLOGY:

We performed Symptom analysis and thorough clinical examination of 50 COVID19 positive patients.Their radiological,clinical characteristics and clinical outcomes were documented. RESULTS:Baseline imaging showed diffuse bilateral ground-glass opacities and consolidations, mostly in the posterior and peripheral lung regions. On follow-up examination 21 patients had persistent cough as predominant symptom,12 patients showed residual parenchymal pulmonary fibrosis of varying degrees,1 patient had evidence of reversible airflow obstruction,1 patient developed spontaneous pneumothorax and 1case of COVID with TB were identified.

CONCLUSION:

Persistent respiratory complications following covid-19 may cause substantial population morbidity, and optimal management remains still unclear.It is vital that the respiratory Physician community is primed to detect and manage the long-term consequences of the infection effectively to mitigate the morbidity.

Title: Correlation of Body Mass Index with COVID-19 infection in a Tertiary Health Care Centre.

Name of Presenter: **Dr.Parshwa Naik**
 Authors (or Co-authors): **Dr.Arati D. Shah;**
Dr.Kusum V. Shah; Dr.Yash Rana
 Institution/Author Organization:
Smt.B.K.Shah Medical Institute & Research
Centre & Dhiraj Hospital,Piparia,Vadodara

Introduction-

The SARS-CoV-2 pandemic presents an unprecedented global health crisis. BMI may have an important role in COVID-19 disease, but this still remains unclear. This study shows correlation between BMI, Age, Sex and COVID-19 infectivity. Aim & objectives- To study Body Mass Index (BMI) and it's correlation with RT-PCR confirmed COVID-19 patients.

Methods-

Retrospective data of 190 RT-PCR confirmed COVID -19 positive patients was analysed. They were grouped into three age groups as ≤ 20 , 20 to 50, ≥ 50 (in years) and BMI was calculated. BMI grouping was done according to WHO as ≤ 18.5 (underweight), 18.5 to 24.9(average), 25 to 29.9(Pre-obese), ≥ 30 (obese). Results- Out of 190 patients, 44% males & 50% females were overweight. Majority patients were above 50 years age group. Majority of cases in all age groups were overweight.

Conclusions-

Higher BMI levels in both male & female are associated with higher risk of contracting covid 19.

Title: Spectrum of HRCT Thorax findings in 25 COVID-19 patients: A Retrospective study

Name of Presenter: **Dr. Princee Patel**
 Authors (or Co-authors): **Dr. kusum V. Shah,**
Dr. Arti D. Shah, Dr. Yash Rana
 Institution/Author Organization: **SBKS MI&RC**

AIMS & OBJECTIVE:

To assess the spectrum of HRCT Thorax findings in RTPCR confirmed COVID-19 cases.

INTRODUCTION:

COVID -19 was declared as global pandemic by WHO on March 13 2020. COVID-19 affects the parenchyma of lungs which is seen on HRCT Thorax.

MATERIALS & METHODS:

A Retrospective study was done on 25 RT-PCR confirmed COVID-19 patients and their data was analyzed based on HRCT Thorax findings.

OBSERVATIONS:

Lung parenchymal abnormalities were observed in 19 out of 25 patients .Bilateral

involvement was seen in 64%(Left>Right), unilateral in 12% patients(Right>Left), Multilobar involvement in 68%(Most Common- Left Lower Lobe) , unilobar involvement in 8% patients(Right Middle Lobe & Left Upper Lobe respectively). Ground Glass Opacities(GGOs) were present in 68% patients. Only GGOs in 20%, GGOs with crazy paving pattern in 20%, GGOs mixed with consolidation in 28% patients. Pulmonary vascular dilatation was observed in four patients. Tractional bronchiectasis in 16% patients. Interstitial abnormality such as septal thickening in 28% patients.

CONCLUSIONS: One fourth of microbiologically confirmed cases of COVID-19 patients had normal HRCT Thorax whereas remaining patients had shown GGOs as predominant HRCT abnormality followed by consolidations and septal thickening involving multiple lobes in which bilateral (Left > Right) lower lobe involvement remains the commonest.

Title: Profile of immunological markers in COVID-19 PATIENTS

Name of Presenter: **Dr Pudi Mounika**
 Authors (or Co-authors): **Dr A.Premkumar MD**
 Institution/Author Organization: **Andhra**
Medical College

INTRODUCTION:

Covid-19 currently a global pandemic, but human immune responses to virus remain poorly understood. Identifying the cost effective immune markers which can predict severity and mortality in developing countries like India is the need of the hour.

AIMS AND OBJECTIVES:

To study the profile of immunological markers and identify their role in predicting severity and mortality in covid-19 patients. MATERIALS AND

METHODS:

It is a retrospective observational study among 86 patients who were admitted with diagnosis of covid-19 at GHCCD, Visakhapatnam from period of September to October 2020. Trop-I, Serum ferritin, D-dimer, CRP, LDH, IL-6 were analysed. RESULTS: Among 86 patients, 48(55.82%) were males and predominant age group affected were 51-60 years(32.55%). Patients categorised into mild(58.13%), moderate(23.25%) and severe (18.62%) cases. Among all immunological markers, CRP(51.16%) was the most sensitive marker overall. CRP and D-Dimer elevated in all severe cases while CRP (80%) elevated in moderate cases. Longer inpatients duration, need of NIV (87.5%) and mortality

(24.69%) greater in severe cases.

CONCLUSION:

CRP and D-Dimer in severe cases and CRP in moderate cases can help to discern patients of moderate and severe from mild cases and to stratify patients for ICU transfer. Early recognition of severity is essential in reducing life threatening complications.

Title: CLINICAL CHARACTERISTICS AND FOLLOW UP OF ELDERLY PATIENTS WITH NON SEVERE COVID-19 DISEASE

Name of Presenter: **Rafeeka Keyzra**
 Authors (or Co-authors): **Dr V Vinod Kumar,**
Dr Vidya
 Institution/Author Organization: **Stanley**
Medical College

Introduction

In December 2019, COVID-19 emerged in Wuhan and spread through China and the world. We aimed to describe the clinical characteristics of patients with non severe COVID-19 in elderly patients and subsequent follow up.

Materials and Methods

This is a study of 150 hospitalised older patients, aged 65 and above with laboratory confirmed non severe COVID-19, at Government Hospital of Thoracic Medicine, Tambaram Sanatorium from July 1st to November 1st 2020. We observed and recorded the patients' clinical manifestations, lab tests, radiological findings. Further the patients were followed up post discharge with inflammatory markers, radiological investigation and 6 minute walk test. Results Current clinical data shows higher incidence of moderate disease in elderly patients with multiple comorbidities, a male preponderance, with diabetes being the most common comorbidity, followed by hypertension and cardiovascular disease. Patients with asymptomatic and mild disease had a relatively uneventful course and recovery. The follow up of the patients is under way and the results are to be consolidated. Conclusion Geriatric population is more susceptible to COVID-19, hence more attention should be paid to patients as they may present more commonly with non specific symptoms. This will aid in prompt diagnosis and management of such cases.

Title: CLINICAL PROFILE OF SARS-CoV-2 INFECTED PATIENTS ATTENDING A RURAL MEDICAL COLLEGE HOSPITAL

Name of Presenter: **S.Vijetha**
 Authors (or Co-authors): **C.N Prasad, K. Satish**

Chandra

Institution/Author Organization: **Prathima Institute Of Medical Sciences, Karimnagar, Telangana**

INTRODUCTION-

COVID 19, a predominantly respiratory tract involving disease, is caused by a coronavirus, SARS- CoV-2. The pandemic spread to several countries around the world in the first quarter of 2020. India has seen spread to rural areas and to Telangana by June 2020.

AIM-

The aim of the present study is to evaluate the demographic and clinical spectrum of the SARS -CoV-2 infected subjects in the rural area of Telangana.

MATERIALS AND METHODS-

RT-PCR positive subjects attending Prathima Institute of Medical Sciences, Karimnagar, were taken into the study. The study is between August and October 2020 and includes 108 subjects, with 74.1% males. Subjects were grouped into asymptomatic (14.81%), mild (52.77%), moderate (16.67%) and severe (15.74%) based on clinical and radiological characteristics. Subjects were evaluated by clinical, radiological and laboratory parameters.

RESULTS-

Symptomatics had more comorbidities (34% vs 12.5%), multiple comorbidities were noted with increasing severity of the disease (40.9%). Hypoxia was higher in the severe group (90%, $p < 0.05$). Laboratory parameters also showed changes according to the severity. Deaths occurred in the severe group only.

CONCLUSION-

The profile of subjects with SARS CoV-2 infection in rural India is similar to that of other parts of the country.

Title: Favipiravir Effectiveness in High Risk Moderate COVID-19 Patients – A Retrospective study

Name of Presenter: **Dr Sagar Bhagat**

Authors (or Co-authors): **Dr. Agam vora, Dr. Pramod Dadhich, Dr. Sagar Bharat, Dr. Saiprasad Patil, Dr. Hanmant Barkate**

Institution/Author Organization: **Global Medical Affairs, Glenmark pharmaceuticals Ltd, Mumbai, India**

Background:

Favipiravir, an oral RdRp inhibitor has shown promising results in mild to moderate COVID-19 in recently published randomized, controlled trial on Indian patients.

Aims and objective:

To evaluate effectiveness of favipiravir in high risk moderate covid 19 patients Methods: Retrospectively analysed medical records of favipiravir treated COVID-19 cases from 2 centres to capture key details of high risk moderate COVID-19 including medical history, symptoms, concomitant treatment and clinical outcome. Study was approved by Independent Ethics Committee.

Results:

Of 126 medical records, 48 were of moderate severity. 56.3% were male with mean age 60.1 ± 12.9 yrs. & SpO₂ 92.8 ± 1.9 . 82.9% had ≥ 2 comorbidities. Most common symptoms were fever (87.5%), cough (87.5%) & dyspnea (64.6%). Mean CRP & d-Dimer were 67.7 ± 33.6 & 1162.7 ± 1157.2 respectively. Favipiravir approved regimen were received by all for median of 14d (2–14d). 39.6% patients received concomitant corticosteroid. Rate of clinical improvement on days 3, 5, 7 & 10 were 21.4%, 81%, 97.6% & 100% respectively. Rate of O₂ requirement on days 3, 5, 7, 10 & 14 were 79%, 47.4%, 36.8%, 26.3% & 15.7% respectively. No specific adverse events were recorded. Progression of disease was observed in 12.5% cases with one mortality.

Conclusion: Our study shows promising trend of clinical improvement and reduction in disease progression with favipiravir in high risk moderate COVID-19 patients.

Title: Effectiveness of Favipiravir in COVID-19 patients with Risk Factors for Mortality

Name of Presenter: **Dr. Sagar Panchal**

Authors (or Co-authors): **Dr. Agam Vora, Dr. Pramod Dadhich, Dr. Sagar Bhagat, Dr. Saiprasad Patil, Dr. Hanmant Barkate**

Institution/Author Organization: **Global Medical Affairs, Glenmark pharmaceuticals Ltd, Mumbai, India**

Background:

Age (>50 yrs) and comorbidity association are proven risk factors for rapid progression & mortality in COVID-19.

Objective:

To analyse benefit of favipiravir in COVID-19 patients with high risk (age >50 yrs, ≥ 1 comorbidity).

Methods:

Retrospectively analysed medical records of favipiravir treated COVID-19 cases from 2 centres to capture details of patients with high risk including medical history, symptoms,

concomitant treatment and clinical outcome. Study was approved by Independent Ethics Committee.

Results:

Of 126 favipiravir treated patients, 72 had age >50 years & ≥ 1 comorbidity. Average age was 65.3 ± 8.6 yrs. with similar M:F ratio. Hypertension (84.7%) & diabetes (77.7%) were most common comorbidities. Mean SpO₂ was 93.7 ± 3.3 . Most common symptoms were cough (95.8%), fever (94.4%), myalgia (79.2%), fatigue (69.4) & dyspnoea (48.6%). Median duration of favipiravir treatment was 14 d (2–14d). 47.22% received concomitant corticosteroid. Fever & cough resolved in 100% by day 7 whereas myalgia, dyspnoea & fatigue improved in 98.2%, 97.1% & 86% by day 7 respectively. Oxygen support reduced from 58.3% to 8.3% by day 7. No specific adverse events were recorded. Progression of disease was observed in 11.1% with mortality in 2 patients. Conclusion: Our results showed trend of faster clinical resolution & limited disease progression with favipiravir in high risk COVID-19.

Title: Study of association between severity of Anemia and severity of COVID 19 illness in patients in tertiary center, Bengaluru

Name of Presenter: **Dr Santhosh Kumari KR**

Authors (or Co-authors): **Dr Deepak Kumar R**

Institution/Author Organization:

Kempegowda Institute of Medical sciences, Bengaluru

Introduction:

Severe acute respiratory syndrome coronavirus 2 (SARS CoV 2), which causes novel coronavirus disease 2019 (COVID 19) is an airborne viral infection, which causes infection ranging from asymptomatic cases to severe case of ARDS. Hence risk factors identification, that contribute to the development of severity is important for risk stratification, optimization of treatment and better outcomes. Many studies have shown that anaemia is common in patients with COPD and community acquired pneumonia, and is associated with severe form of the disease. Similarly this study aims to explore the association between severity of anaemia and severity of COVID 19 infection.

Aim :

To study the association between severity of anaemia and severity of COVID 19 illness.

Methodology :

This is a retrospective study, conducted in Dept. of Respiratory Medicine, KIMS Hospital and research centre, Bengaluru. RT/PCR confirmed COVID 19 patients >18 years of age

admitted in our hospital from June to August 2020 were included in the study. ANOVA test was used to study the association of severity in anaemia and severity of COVID. Statistical significance was set at $p < 0.05$. Results: Of 120 COVID patients, 65 were male and 55 were female and 102 survivors and 18 non survivors. There was statistically significant association between severity of anaemia and severity of COVID, with most of category C patients having severe anaemia.

Conclusion:

The degree of severity of anaemia correlates with severity of COVID 19 disease. Key words: Anaemia, COVID 19, RT/PCR

Title: STUDY OF RELATIONSHIP BETWEEN ELECTROLYTE IMBALANCE AND SEVERITY OF COVID 19 DISEASE

Name of Presenter: **DR SHAMA B SHARMA**

Authors (or Co-authors): **Dr Deepak Kumar R**

Institution/Author Organization:

KEMPEGOWDA INSTITUTE OF MEDICAL SCIENCE

Introduction:

Data on the global COVID19 pandemic suggests the presence of inverse relationship between COVID19 severity and serum electrolytes. Aim: Our aim was to investigate the independent predictive factors for the severity and survival of COVID19 disease from routine blood investigations, especially Sodium(Na+), potassium(K+) and chloride(Cl-). Methodology: Ours was a hospital record based, retrospective observational study which included a total of 120 RT-PCR positive cases admitted at Kempegowda Institute of Medical Sciences and Research centre Bengaluru between June to August 2020. The cases were categorized into non-severe which included WHO category A and B and severe which included WHO category C. Demographic and laboratory parameters were analysed. Statistical analysis was done. Mann Whitney test was used. Results: Severe electrolyte imbalance like hyponatremia, hypophosphatemia was noted in severe cases when compared to non-severe cases of COVID. No difference in chloride level was noted. Conclusion: serum sodium, potassium and chloride are independent predictors for COVID19 severity and survival. Routine evaluation of these electrolytes can help identify high risk cases with COVID 19.

Title: Role of intravenous dexamethasone in hospitalized RT-PCR positive SARS-CoV-2 patients in a tertiary care hospital

Name of Presenter: **Mukthineni Sri Sindhu Ravali**

Authors (or Co-authors): **Dr,Palaparti Jayakar babu**

Institution/Author Organization: **Katuri medical college**

Introduction:

Dexamethasone, a systemic glucocorticoid, with anti-inflammatory and immunosuppressive properties. In patients with SARS-CoV-2 pneumonia, hyper inflammatory response is observed during their clinical course. Glucocorticoids may modulate inflammation-mediated lung injury and thereby reduce progression to respiratory failure and death.

Aim:

To determine the efficacy of intravenous dexamethasone in hospitalized RT-PCR positive SARS-CoV-2 patients. Methodology: A total of 50 patients who were tested positive with RT-PCR for SARS-CoV-2 in the month of August, who were admitted in a tertiary care centre and were treated with a course of intravenous dexamethasone were included in the study.

Result:

Out of 50 cases, there was significant decrease in their CRP (C-reactive protein) levels with administration of dexamethasone. 44 cases showed significant improvement in their symptoms with decrease in their mean CRP levels at the time of admission from 59.34 to 37.34 after administration of a course of intravenous dexamethasone. 6 patients showed no significant improvement in their CRP levels during their stay in hospital and required other additional investigative treatments for SARS-CoV-2.

Conclusion:

A course of intravenous dexamethasone in hospitalized RT-PCR positive SARS-CoV-2 patients with saturation of 94% and less with room air had improved outcomes. Patients positive response to a course of intravenous dexamethasone demonstrates that they may blunt the severity of inflammation, decreased ICU admissions, need for mechanical ventilation and health care cost.

Title: EFFICACY OF REMDESIVIR IN MODERATE TO SEVERE PATIENTS OF COVID-19

Name of Presenter: **Sneha Susan jacob**

Authors (or Co-authors): **Prof. K.V.V.**

Vijayakumar M.D, Dr. V.Suryakumari M.D

Institution/Author Organization: **Government hospital for chest and Communicable diseases, Andhra medical college, Visakhapatnam**

INTRODUCTION

The Solidarity Trial led by the World Health Organization which presents the largest study so far on anti-ebola drug remdesivir shows no impact on reduction in mortality, in the overall patient group compared to prevailing standard of care nor was benefit noted in any patient subset. These have also put a major question mark on the utility of the repurposed drug remdesivir for the infectious disease which has been a sought-after drug since the beginning of the pandemic. Remdesivir, as of now, is permitted for emergency use authorisation in moderate to severe Covid-19 patients as part of the national clinical management protocol in India.

METHODOLOGY

Study period: June 2020 to November 2020
Study design -- Hospital based retrospective study. Procedure: The oxygen supplementation duration, NIV requirement, 30 day mortality and length of hospital stay was compared in a control arm of 40 COVID 19 patients who was not on Remdesivir with 40 COVID 19 patients who were given a 5 day course of Remdesivir. Confounding factors like comorbidities, antibiotics and steroid usage were taken into consideration.

RESULTS

Under analysis. Patients under treatment arm shows good prognostic outcomes. To be verified with adequate sample size.

Title: Relation of diabetes mellitus with mortality in COVID19 patients: A retrospective study.

Name of Presenter: **SRI LAKSHMI**

TIRUVEEDHULA

Authors (or Co-authors): **BADUSHA MD**

Institution/Author Organization: **NRI**

MEDICAL COLLEGE, VISHAKAPATNAM

Introduction:

Diabetes mellitus (DM) is a chronic metabolic condition. It causes many changes in the normal functioning of the body. There are reports that COVID 19 mortality is more in those with comorbid diabetes mellitus. The study aims to find the association between DM and COVID19 mortality.

Aims:

To find association between diabetes mellitus and COVID19 related mortality.

Methodology:

This is a retrospective cohort study conducted in a tertiary care hospital dedicated to COVID19 treatment. A total of 332 patients admitted during the month of August 2020

were analyzed. Data was analyzed using R language to meet the study objectives. Results: There is significant association between age ($p < 0.001$), diabetes mellitus ($p = 0.010$), random blood sugar ($p = 0.007$) and HbA1C ($p < 0.001$) with the COVID19 mortality. As age ($r = -0.300$), RBS ($r = -0.146$) and HbA1c ($r = -0.322$) levels increase there is more chances of mortality. Similarly, the diagnosis of diabetes mellitus ($r = -0.136$) is correlated with increased chances of mortality.

Conclusions:

The study finds a link between the presence of diabetes mellitus and mortality associated with COVID19. There are other variables which needs to be taken into consideration along with diabetes mellitus in the mortality.

Title: COMORBIDITIES AS RISK FACTORS FOR DEVELOPMENT OF PULMONARY SEQUALAE IN MODERATE TO SEVERE CASES OF COVID19

Name of Presenter: **Dr.D.S.S.V.SRI DEVI**

Authors (or Co-authors): **Dr.K.SOWMYA, Dr.S.RAGHU, Dr.D.Sudheer**

Institution/Author Organization: **GUNTUR MEDICAL COLLEGE, GUNTUR**

INTRODUCTION:

COVID19 leads to wide spectrum of respiratory diseases with high incidence of ARDS especially in patients with comorbidities like hypertension and diabetes. It may result in pulmonary sequalae like GGOs, septal thickening, fibrotic bands

AIMS AND OBJECTIVES:

To study comorbidities as risk factors for development of pulmonary sequalae in discharged patients with moderate to severe COVID19.

METHODS:

Prospective study involving 50 patients with moderate to severe COVID19 pneumonia admitted in wards of Dept of Pulmonary medicine, Govt.Fever hospital, Guntur.

STUDY PERIOD :

8months (March 2020-October 2020).

INCLUSION CRITERIA - A Confirmed moderate to severe case of COVID19 by RTPCR/TRUNAT/RAT/CT CHEST. Age-18-60years.

EXCLUSION CRITERIA - All outpatients. Past H/O Pulmonary TB, Interstitial lung disease and any fibrotic lung disease.

RESULTS:

50 Cases of moderate to severe COVID19 were seen during study period. 22% have no comorbidities and 78% have comorbidities(DM,HTN,COPD and others).After 3Months follow up Chest CT showed abnormal findings(GGOs,septal thickening,fibrotic bands) in 38%of study population. 46% of Pts with Hypertension, 33% of Pts with Diabetes, 25% of Pts with COPD, 37.5% of Pts with other comorbidities developed pulmonary sequalae.36% of Pts with no comorbidities also developed pulmonary sequalae

CONCLUSION: Pulmonary sequalae is common in COVID19 Patients with comorbidities and needs to be addressed.

Title: Study of correlation of inflammatory markers and symptomatology in post covid 19 follow up in OPD of dedicated covid hospital.

Name of Presenter: **DR SUNIL YADAV**

Authors (or Co-authors): **DR ARTI JULKA, DR SWAPNIL JAIN, DR BHAVYA SHAH(S)**

Institution/Author Organization: **RD GARDI MEDICAL COLLEGE , UJJAIN**

Introduction -

Patients with covid 19 have raised pro inflammatory markers such as C reactive protein and D dimer which are related to disease severity and symptomatology. In follow up cases of previously covid 19 positive cases in our covid speciality opd patients presented with persistently high proinflammatory markers and prolonged symptoms.

Methods -

To assess the correlation between raised pro inflammatory markers and symptoms in post covid 19 follow up.

Methodology - This is a retrospective single center cohort study of covid follow up cases who were admitted in our dedicated covid hospital as covid positive. Patients were evaluated by their repeat proinflammatory markers(CRP, D-dimer) level after 15 days of discharge from hospital in correlation with their symptoms.

Result -

we follow up total 70 patients of which 52(70%) were male and 18(30%) were female, of these 21 patients(30%) have raised proinflammatory markers and also presented with persistent shortness of brreath, cough and generalised weakness.Conclusion - Patients who were followed up post covid 19 who presented with symptoms also have raised pro inflammatory markers. On treatment with antifibrotic agents and steroids such patients showed improvement in symptoms

and decrease in their proinflammatory markers in further follow up visits.

Title: Accurate and Automated Quantification of COVID19 Disease Severity on Chest Imaging using Artificial Intelligence

Name of Presenter: **Suthirth Vaidya**

Authors (or Co-authors): **Vimal Raj, Abhijith Chunduru, Krishna Chaitanya, Saketh Chennamsetty, Adarsh Raj**

Institution/Author Organization: **Predible Health**

PURPOSE

Visual severity assessment of CT imaging in COVID19 patients often suffers from inter-rater variability and does not give granular information on disease extent. In this study, we develop and validate an artificial intelligence-based algorithm for the quantification of COVID19-affected regions from chest CT imaging.

METHOD AND MATERIALS

A software solution (LungIQ) using deep convolutional neural networks was developed by Predible Health using 500 chest CTs labelled by radiologists. The software identifies regions of ground-glass opacities and consolidation and displays the percentage involvement in each lobe, also calculating the 25 -point severity score. We compared the results with those marked by a thoracic radiologist with 15 years of experience on an independent dataset of 50 patients.

RESULTS

The software solution demonstrated a sensitivity of 91% at a voxel-level in the detection of COVID19 findings, with a mean volume difference of 2.6% and a mean difference in severity score of 1 point. The volume difference was higher in the lower lobes.

CONCLUSION

Artificial intelligence-based software solutions for the quantification of COVID19 burden from chest CT imaging are viable tools for quick and reliable severity estimation.

CLINICAL RELEVANCE

Artificial intelligence can provide quick, reliable and granular information on the severity in COVID19 patients

Title: A Systematic Review of clinical and laboratory parameters associated with increased severity among COVID-19 patients.

Name of Presenter: **TISA PAUL**

Authors (or Co-authors): **Dr Preethi , Dr Asmita, Dr Akhilesh, Dr Nithya, Dr Tajik**
Institution/Author Organization: **Amrita institute of medical sciences**

Background and aims :

Corona virus disease 2019 (COVID-19) is extremely difficult to contain and had affected more than 148 countries worldwide. The main aim of this systematic review is to provide a comprehensive summary of clinical and laboratory parameters associated with increased severity among COVID-19 patients.

Material and Methods:

All the available data from high-quality research articles relevant to the epidemiology, demographics, trends in hospitalization and outcomes, clinical signs and symptoms, diagnostic methods and treatment methods of COVID-19 were retrieved and evaluated for the inclusion.

Results:

The mean age of severe group was 59.3 years compared to 46.5 years in non severe group. COVID-19 was more severe in men than women. Clinical presentation was variable among different studies including fever, cough, headache, dyspnea, nausea, vomiting, diarrhoea etc. However, dyspnea was the risk factor associated with more severe disease. Laboratory parameters associated with increased severity were lymphopenia $<0.8 \times 10^9/L$, thrombocytopenia $100 \times 10^9/L$, leucocytosis $TC > 11109/L$, procalcitonin $>0.5ng/mL$, d dimer $> 2 mcg/mL$, aspartate transaminase elevation $> 150U/L$, LDH $> 250U/L$.

Conclusion:

The commonest clinical symptoms were fever, cough and dyspnea. The laboratory parameters associated with severe disease were lymphopenia, and elevated LDH, D dimer and Procalcitonin.

Title: D-DIMER AS A PREDICTOR OF SEVERITY AND MORTALITY IN COVID 19 PATIENTS

Name of Presenter: **Dr UPPILI GOUTHAMI**
Authors (or Co-authors): **Dr A Prem Kumar MD**
Institution/Author Organization: **Andhra medical college**

INTRODUCTION:

Covid 19 is a disease caused by SARS-COV 2. Abnormal coagulation function has been demonstrated to be involved in disease progression of Covid 19. AIMS

AND OBJECTIVES:

To study D dimer as a predictor of severity and mortality in covid 19 patients .

METHODOLOGY:

A retrospective observational study among 82 covid 19 patients was conducted for period of August -september 2020 in GHCCD. Clinical , demographic and correlation of D dimer upon admission with disease severity and in hospital mortality were analysed .

RESULTS:

Out of 82 cases males 58.5%, females 41.4%. Most common presenting symptom was fever 82.9%.D-dimer elevated in mild (23.5%), moderate (46.1%) and severe (100%) cases .Mortality occurred only in severe cases (59.09%) of covid .Elevated D-dimer $>4mg/L$ (100%) seen in all non survivors ,whereas comorbidities association is seen in only (61.53%) of nonsurvivors .

CONCLUSION:

D-dimer levels commonly elevated in covid . Significantly higher levels found in those with severe illness and can be used as a prognostic marker for inhospital mortality .

Title: Health Related Quality of life among the covid-19 positive health care individuals after 14 days of discharged

Name of Presenter: **Dr.Utkarsh Kumar Srivastava**
Authors (or Co-authors): **Dr.Hemant kumar**
Institution/Author Organization: **S.N.Medical college, Agra (U.P)**

Objective:

To survey the health-related quality of life (HRQoL) among the health care individuals with COVID-19 in their first medical follow up after 14 days of discharged

Methods:

All Health care worker diagnosed with COVID-19 were enrolled in the study from various medical centre in U.P. Epidemiology, clinically and HRQoL data was collected and statistics was done by using Student T-test.

Results:

SF-36 questionnaire demonstrated a significant worsening of HRQoL in covid-19 positive health care individuals like Physical Functioning(PF) ($p<0.0001$) Role physical (RP) ($p<0.002$), Bodily pain (BP) ($p<0.0019$), role-emotional (RE) ($p<0.013$) , Social Functioning (SF) ($p<0.0001$), Mental Health(MH)($p<0.0001$), General Health(GH)($p<0.0001$) as compared to normal health care individuals but there is no difference in Vitality (VT)($p<0.0631$) of covid-19

positive health care individuals as compared with normal health care individuals.

Conclusions:

Health-related quality of life worsen in covid -19 positive health care individuals in their first medical follow up after 14 days of discharge . Patients suffered from significant physical and psychological impairment. Therefore, prospective monitoring of individuals exposed to SARS-CoV-2 is needed in order to fully understand the long-term impact of COVID-19.

Title: Comparing inflammatory markers in COVID19 patients with disease severity at a tertiary care center : A retrospective study.

Name of Presenter: **Dr Vasavi Cheguri**
Authors (or Co-authors): **Dr Arti D Shah, Dr Kusum V Shah, Dr Yash rana**
Institution/Author Organization: **S B K S M I & R C**

INTRODUCTION: -

Corona virus disease 2019 is caused by SARS-CoV-2. Uncontrolled, self perpetuating and tissue damaging inflammatory activity has been described in pathogenesis of infection ,leading to elevation of inflammatory markers such as serum Lactate Dehydrogenase ,serum ferritin, Erythrocyte Sedimentation Rate, C Reactive protein ,D-dimer .

AIM & OBJECTIVE: -

- 1)To analyze the common inflammatory markers which are raised in COVID19 patients.
- 2)To observe the association of inflammatory markers in relation to the severity of disease.

MATERIAL & METHOD'S: -

Retrospective data of 50 patients was evaluated and the trends in inflammatory markers was observed.

RESULT:

In this study Serum LDH was increased in 100% of the patients , C-Reactive Protein was increased in 94% of patients, ESR was increased in 92% of patients, Serum ferritin was increased in 82% of patients and D-dimer was increased in 64% of patients who were severely ill.

CONCLUSION: -

This study showed that Serum LDH and CRP are the most common inflammatory markers which are raised and there is significant correlation between inflammatory markers and the severity of the disease.

Title: Disease Spectrum of Patients

attending in a Post Covid Clinic of KeralaName of Presenter: **Dr. K. Venugopal**Authors (or Co-authors): **Dr. Deepu B., Dr. Radhin**Institution/Author Organization: **General Hospital, Alappuzha****Introduction**

Post Covid Clinic has been started all over Kerala since Nov-2020. In G H Alappuzha it was started from Nov 1st on two days instead of one day recommended from higher authority. we are analyzing preliminary data of patient attended in this clinic for one month. It may guide future action plan and research idea about Post Covid Illness in various part of Kerala.

Aim of the study

To study disease spectrum in post Covid clinic attendees

Material and Method

All patients attended in the Post Covid clinic were included in the study. Those with less than 10 days of Covid – Negative result were excluded from the study. Patient were interviewed as per a pre tested structured questionnaire by a pulmonologist in the clinic.

Result

A total of 52 patients included in the study. Male – Female ratio is 1:1. They were in the age group of 5 -80 years and 83% were in the age group of 20-70. The predominant disease were breathlessness which was present in 34 cases (65%) with female – male incidents of 20 & 14 respectively. Only 12 patients had breathlessness during Covid infection period . Other symptoms were as follows. Tiredness – 25 (48%), body ache and LBA – 14 (26%), Cough – 11 (21%), Anomie / Ageusia – 3 (5%), Fever- 2 (4) and in 11 it was of non specific symptoms like abdominal pain, chest discomfort, and Palpitation.

Conclusion

Breathlessness is the major symptom in patient attending in the Post Covid clinic followed by tiredness.

Title: Neutrophil-to-lymphocyte ratio as an independent predicting factor of mortality in patients with COVID 19 and its correlation with CT severity scoringName of Presenter: **VIJAY BABU.R**Authors (or Co-authors): **DR.Gajanan S Gaude , DR.Bhagyashri B Patil , DR.Jyothi Hattiholi , DR.Gautam S , DR.Kiran Kumar Pujar**Institution/Author Organization: **JAWAHARLAL NEHRU MEDICAL COLLEGE, KAHER , BELAGAVI****BACKGROUND:**

This retrospective study was done to find whether Neutrophil to Lymphocyte ratio (NLR) can be a prognostic factor in admitted patients with Covid-19 infection and its correlation with CT severity scoring.

METHODS:

Patients who expired due to Covid-19 infection at the KLE Hospital between August 1, 2020 to October 31, 2020 were retrospectively analysed. Patients were divided into three groups as mild, moderate and severe based on CT severity scoring. NLR values was measured at the time of admission. The primary outcome was to find correlation between NLR value and CT severity scoring. RESULTS: 163 patients who died of covid-19 were included in this study. NLR ratio was found to be higher in patients with higher CT severity score. NLR ratio in severe group was 15.86. Patients in moderate and mild group had an NLR of 11.25 and 9.26 respectively. Patients in severe group were found to have more than one co-morbidity.

CONCLUSION:

This study suggest that the NLR at hospital admission is associated in-hospital mortality among patients with covid-19. NLR ratio also appears to correlate with CT severity scoring. Therefore, the NLR appears to be a significant prognostic biomarker of outcomes in critically ill patients with covid-19.

Title: CLINICAL AND DEMOGRAPHIC PROFILE OF MILD COVID 19 DISEASEName of Presenter: **DR. VITTHAL RAO. M. CHINTALWAR**Authors (or Co-authors): **DR. KETAKI UTPAT, DR. UNNATI DESAI, DR. J M JOSHI, DR. R N BHARMAL**Institution/Author Organization: **TNMC BYL CH NAIR HOSPITAL,MUMBAI,MAHARASHTRA****INTRODUCTION:-**

COVID-19 is a global pandemic, affected hundreds of countries all over the world. Disease severity ranges from asymptomatic or mild cases to severe cases. AIM:- To report clinical and demographic profile of mild cases of COVID-19 disease.

METHODOLOGY:-

It is a retrospective study of 105 Laboratory diagnosed COVID-19 positive patients. The clinical, radiological and laboratory data were collected including age, sex, symptoms, and swab conversion rate. RESULT:- The mean age was 39.75 years with a male preponderance. The most common symptom was sore throat followed by fever. Their vital and laboratory parameters were normal. The most common comorbidity was hypertension followed by diabetes. Swab conversion rate ranges from 3 to 24 days with the average duration of 10 days. We used the innovative 40 step test to identity early deterioration. Eight cases were transferred to high dependency unit/intensive care in view of breathlessness & desaturation in oxygen level. All recovered completely.

CONCLUSION:-

COVID-19 is a treatable condition if we assess patients based on their early mild symptomology and early identification of deterioration with the use of simple clinical test and pulse oximetry.

Title: Knowledge ,Perception and barriers of Optimal Mask usage among General Public

Name of Presenter: **ADITYA A**

Authors (or Co-authors): **Akhilesh Kunoor, Aravind MS, Asmita Mehta,Mithun Raj, Nithya haridas,Soumya MP,Tajik Mohammed Shafi**

Institution/Author Organization: **AMRITA INSTITUTE OF MEDICAL SCIENCES**

Introduction:

Optimal Mask usage is one of the most important strategy in airborne infection control. Awareness regarding hand hygiene and mask usage are increasing among general public.

Objective:

To estimate the knowledge, attitude and practice regarding mask usage among general public

Materials and Method:

This study was conducted as a questionnaire based descriptive study containing 30 questions . Assuming awareness regarding mask usage among general public to be at least 60%,with 95% confidence interval and 10% allowable error sample size was calculated as 200. Results: 52.7% of males and 47 % females responded to the questionnaire. More than 66 % of the responders were aware of all types of available masks.54% of responders opined that N95 was effective in prevention of airborne infections.35.3% opined that N95 is effective for COVID as per CDC recommendation. The common barriers for routine use of mask are suffocation(49.3%),Exertional breathlessness (46.9%),spectacle fogging (37.7%),fear of hypoxia (18.8%),ineffective communications (26.1%),13% headache ,cost (6.8%),1.9%(dryness of eyes).. Knowledge regarding mask usage among study population was low(49.5%),as per original Bloom's cutoff criteria.

Conclusion:

Good practices were followed by 57% of responders. More awareness regarding mask usage to be created among public for prevention of airborne infections

Title: DO CLINICORADIOLOGICAL FACTORS PREDICT AETIOLOGY OF NON-RESOLVING

Name of Presenter: **DR AJITHA RAJ**

Authors (or Co-authors): **DR K P VENUGOPAL, ASSOCIATE PROFESSOR, GOVT MEDICAL COLLEGE, KOTTAYAM**

Institution/Author Organization: **GOVT. MEDICAL COLLEGE , KOTTAYAM**

BACKGROUND

Non-resolving pneumonia, an uncommon pulmonary dilemma needs dedicated review of history and extensive work up. This study focuses on aetiology and factors contributing to non-resolution, which determines proper management and timely interventions.

OBJECTIVES

To identify aetiologies of non-resolving pneumonia.

To determine whether clinic-radiological factors can predict aetiologies.

METHODOLOGY

Cross-sectional study done among 77 patients with non-resolving pneumonia attending a tertiary centre over 1 year. Aetiologies, clinic-radiological patterns and risk factors were assessed.

RESULTS

Mean age 59.62±11.9years. 77.9% were males. Most prevalent aetiology was lung malignancy 44.2%(34) followed by infections 40.3%(31) dominated by Tuberculosis14.3%(11). Adenocarcinoma32.5% with rare variety of mucinous adenocarcinoma was seen in 3.9%. Historical points favouring malignancy were smoking (mean smoking index 932) (p value(0.001), chestpain(p value0.001) and haemoptysis(p value0.006).Hypoxemia and multi-lobar (p value0.006) involvement predominantly noted in adenocarcinoma. Klebsiella with significant association to fever (p value0.023) was the second most prevalent infectious aetiology. Actinomycosis(7%) a rare entity noted, have significant association with chestpain(p value 0.032).For peripheral lesions Transthoracic biopsy had diagnostic yield of 100%.

CONCLUSION

All cases of non-resolving pneumonia should be investigated systematically. Patients with smoking history ,chestpain, haemoptysis may require extensive evaluation to rule out malignancy.

Title: ASSESSMENT OF SEVERITY OF BRONCHIECTASIS USING MODIFIED

REIFF SCORE, SPIROMETRY AND SPUTUM CULTURE

Name of Presenter: **DR CAROL HANNAH BABU**

Authors (or Co-authors): **DR ARCHANA B, DR DEEPAK KUMAR R**

Institution/Author Organization: **KIMS HOSPITAL & RESEARCH CENTRE, BENGALURU, KARNATAKA.**

Introduction:

Bronchiectasis is an irreversible airway dilation that involves the lung in either a local or a diffuse manner. It is used to describe abnormal, irreversible dilated and thick-walled bronchi.

Aim:

To find the correlation between Modified Reiff score and sputum culture, spirometry, duration of symptoms and the number of exacerbations.

Methodology:

This is a descriptive study conducted in Dept of Respiratory Medicine, KIMS Hospital and Research Centre, Bengaluru, Karnataka. HRCT confirmed, bronchiectasis patients were included in the study. Spirometry and sputum culture were done and Modified Reiff score was calculated for each patient. Proportion and mean were used to describe distribution of study variables. Difference in modified Reiff score across culture outcome was tested using independent student t test. Statistical significance was set at P < 0.05.

Results:

Of 70 bronchiectasis patients, 43 were male (61.4%) & 27(38.6%) were female. The mean age was 47.16 years. Statistically significant association was seen between the modified Reiff score and Pseudomonas growth(p=0.001), exacerbation rate(p=0.000) and FEV1 values(p=0.043), but no association with duration of symptoms.

Conclusion:

In this study, Pseudomonas growth in sputum was associated with increased severity of bronchiectasis in HRCT and a greater reduction in spirometry.

Keywords:

Bronchiectasis, Reiff score, exacerbation.

Authors have no financial assistance to disclose.

Title: PREVELANCE AND RISK FACTORS FOR DRUG RESISTANCE IN PATIENTS WITH LOWER RESPIRATORY INFECTIONS IN HEALTHCARE ASSOCIATED INFECTION - A SINGLE CENTRE STUDY FROM EASTERN INDIA

Name of Presenter: **G.Lohitha Sri Gouri**
 Authors (or Co-authors): **Saswat Subhankar , C Mohan Rao**
 Institution/Author Organization: **Kalinga Institute of Medical Sciences , Bhubaneswar**

Background:

Lower respiratory infections are a common entity among healthcare associated infections(HCAI) mostly witnessed in nursing home residents, patients on long term care and patients receiving home or hospital based intravenous therapy and undergoing dialysis.

Aim of the Study:

Assess prevalence and risk factors of resistance among the patients developing lower respiratory infections as a consequence of Healthcare Associated Infection.

Materials and Methods:

The study was conducted as a prospective cohort model. All eligible patients were subjected to detailed history, laboratory and radiological investigations. All categorical parameters were compared using Fisher's exact test. Continuous parameters using independent t-test and statistical analysis was carried out using software Stata 15.1.

Results and Discussion:

Klebsiella spp (20.95%), and Acinetobacter spp (6.1%) were most commonly isolated. Multi-drug and extensive drug resistance were encountered among these organisms. Male gender, immune-compromised state, bilateral pulmonary involvement and hospitalisation for at least 48 hours in preceding 90 days were associated with isolation of MDR organisms.

Conclusion:

Lower respiratory infection among HCAI needs targeted antibiotic therapy covering MDR organisms prevalent in the local population. Data from different institutions to corroborate our findings regarding antibiotic resistance pattern of the microbes is recommended.

Title: A RANDOMIZED CONTROL TRIAL TO COMPARE EFFICAY OF NEBULIZED AMPHOTERICIN B WITH THAT OF ORAL ITRACONAZOLE IN PATIENTS WITH

PULMONARY ASPERGILLOMA

Name of Presenter: **Dr JAGADEESH MANIKANTA**
 Authors (or Co-authors): **Animesh Ray, Naveet Wig, Sanjeev Sinha, Ashutosh Biswas, Manish Soneja, Prayas Sethi, Surabhi Vyas, S K Kabra, Immaculata Xess, Gagandeep Singh**
 Institution/Author Organization: **ALL INDIA INSTITUTE OF MEDICAL SCIENCES**

OBJECTIVES:

To compare the effectiveness of Nebulized Amp B with oral itraconazole in reducing symptoms and/or radiological improvement at the end of 6 months of therapy and to compare their side-effects

METHODS:

It was a parallel group RCT with a non-inferiority design conducted over 2 years in a tertiary care hospital in patients who were symptomatic due to pulmonary aspergilloma.

RESULTS:

A total of 32 patients, age and sex matched, were recruited in the 2 arms with the commonest complaints being hemoptysis (94%) and cough (78%). There was history of past tuberculosis in 91% of patients and IgG (sp. for *Asp fumigatus*) was positive in 63% patients. At the end of 6 months there was no significant difference between the 2 groups, in terms of clinical improvement/stability (75% in oral itraconazole vs 90% in Amp B) , radiological improvement/stability (75% vs 90%), severe bleeding requiring hospitalization (15% vs 13%, p=0.88). Amp B had higher incidence of minor side-effects as compared to oral itraconazole (67% vs 12.5%, p= 0.01).

CONCLUSIONS:

Neb Amphotericin B is non-inferior to oral itraconazole in pulmonary aspergilloma for clinico-radiological improvement, though it is associated with higher incidence of minor side-effects.

Title: A STUDY OF MICROBIOLOGICAL PROFILE AND SENSITIVITY PATTERN IN PATIENTS WITH EXACERBATION OF BRONCHIECTASIS IN A TERTIARY CARE HOSPITAL

Name of Presenter: **DR.PRIYANKA RAY(JR)**
 Authors (or Co-authors): **DR.AMIYA KUMAR DWARI (GUIDE) DR.AMIT KUMAR MAJUMDAR (CO GUIDE)**
 Institution/Author Organization: **NRS MEDICAL COLLEGE**

Bronchiectasis is defined as the abnormal, irreversible dilatation and thickening of bronchi. Bronchiectasis is of clinician's concern because of its frequent exacerbations. In this article ,the most common organisms causing exacerbation of bronchiectasis and their drug sensitivity pattern has been studied, which would assist in formulating a cost effective antibiotic strategy.

The common organisms isolated from both sputum and BAL culture from the patients with exacerbation of bronchiectasis are *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, *Acinetobacter baumannii* ,*Escherichia coli* , *Staphylococcus aureus* and *Haemophilus influenzae*.

Pseudomonas aeruginosa in both sputum and BAL is mostly sensitive to Aminoglycosides, Cefoperazone Sulbactam, Carbapenems . *Klebsiella pneumoniae* is mostly sensitive to Colistin, Carbapenems, Tigecycline, Piperacillin Tazobactam,. *Acinetobacter baumannii* is mostly sensitive to Carbapenems. *Escherichia coli* is mostly sensitive to Colistin, Tigecycline, Aminoglycosides. *Staphylococcus aureus* is mostly sensitive to Coamoxyclov, Linezolid, Vancomycin. *Haemophilus influenzae* in sputum is mostly sensitive to Carbapenems, Cefotaxime, Coamoxyclov; in BAL is to Carbapenems, Piperacillin Tazobactam , Tigecycline.

Sputum and BAL have nearly the same efficacy in detection of the pathogenic organisms of LRT.So sputum culture can replace BAL fluid culture in the work up of exacerbation of bronchiectasis.

Title: ASSESSMENT OF LUNG ULTRASONOGRAPHY AS A TOOL FOR FOLLOW UP OF COMMUNITY ACQUIRED PNEUMONIA

Name of Presenter: **RIHANA BASHEER**
 Authors (or Co-authors): **DR. SANJEEV NAIR,DR. PRAVEEN.G. S,DR.K. ANITHA KUMARI**
 Institution/Author Organization: **GOVT. MEDICAL COLLEGE TRIVANDRUM**

INTRODUCTION

Chest radiography for follow-up of consolidation in Community acquired pneumonia(CAP) pose radiation risk for patient. Chest ultrasonography(USG) is a simple investigation without radiation risk.

AIMS&OBJECTIVES

To determine the proportion of CXR confirmed CAP patients in whom consolidation is visualized on Ultrasonography, difference in clearance of lesions in USG and X-ray at 2weeks and 4weeks; and factors associated with delayed resolution in USG.

MATERIALS & METHODOLOGY

Study design: Prospective cohort. Sample size-110. All CXR confirmed cases of CAP were evaluated with an initial USG and those with consolidation sonographically were followed up for clearance with CXR and USG at 0,2&4weeks. Data analyzed using Epi-info7.

RESULTS AND DISCUSSION

Taking Chest X-ray as gold standard, sensitivity of ultrasonography in detecting consolidation was 90.91%(100/110). Three patients died and the remaining 97 were followed up. At the end of 2 weeks, 80.41%(78/97) patients had \geq 50% clearance on chest X-ray and 58.76%(57/97) patients had \geq 50% clearance on USG. At the end of 4 weeks, 65.97%(64/97) patients had 100% clearance on chest X-ray and 63.91%(62/97) patients had 100% clearance of lesions on USG. Type2-diabetes, asthma and serum urea >40mg/dL were found to have significant association with delayed clearance of consolidation on USG.

CONCLUSION

Chest ultrasonography is an alternative to CXR in follow-up of consolidation in CAP.

Title: Reliability and Effectiveness of Pneumonia Scoring Systems (MulBSTA and Modified FluA-p) as Predictors of Disease Severity and Mortality in Patients Infected with SARS-CoV-2

Name of Presenter: **Dr.Rishab Rampradeep**

Authors (or Co-authors): **Dr. G Gayathri, Dr V Gangadharan**

Institution/Author Organization: **Saveetha Medical College Hospital, Chennai**

Introduction:

Pneumonia scoring systems help assess disease severity and anticipate potential complications, allowing physicians to prioritize patients with a high risk of predicted mortality and thereby improve clinical outcomes. However, their role in the current COVID-19 pandemic remains unclear.

Aim:

To investigate the accuracy and reliability of MulBSTA and modified FluA-p viral pneumonia scoring systems for prediction of disease severity and mortality in patients infected with

SARS-CoV-2

Methods:

Retrospective single center study conducted in Saveetha Medical College Hospital from July to September 2020. Patients with a positive RTPCR test were enrolled using systematic random sampling. FluA-P score was modified to be better suited for SARS-CoV-2 by the inclusion of steroid therapy.

Results:

50 patients were enrolled into the study and divided into two groups, 20 who were discharged (40%) and 30 patients had died (60%). The mean MulBSTA score among those who had recovered was 5.2 and 9.9 for patients who had died (P value<0.01); The Modified FluA-p score showed a mean of 1.3 for patients who had survived and 5.9 for those who had died (P value<0.01)

Conclusion:

MulBSTA and Modified FluA-P pneumonia scores could thus aid physicians in risk stratification and help improve clinical outcome in COVID-19 hospitalised patients.

Title: PREVALENCE OF INFLUENZA IN THE PANDEMIC SEASON AMONG THE COVID-19 NEGATIVE SARI AND ILI CASES ADMITTED IN TERTIARY CARE HOSPITALS OF WEST BENGAL

Name of Presenter: **SAYANI BOSE**

Authors (or Co-authors): **DR.BHASWATI BANDOPADHYAY, DR.PAULAMI PALCHOWDHURY**

Institution/Author Organization: **CALCUTTA SCHOOL OF TROPICAL MEDICINE**

Background:

COVID-19, caused by SARS-CoV-2 virus, continues to cause infection and death. Both covid19 and Influenza are respiratory diseases with similar presentation ranging from mild to severe disease and death. Though COVID-19 has taken the upper hand in respiratory disease, Influenza should also be taken into consideration while making differential diagnosis. Since there are antivirals available for Influenza, every attempt should be made to detect Influenza among the COVID-19 negative cases so that patients can be treated effectively and complications like pneumonia can be avoided. Aim: Detection of Influenza A and B virus among COVID-19 negative SARI AND ILI cases admitted in tertiary care hospitals of west Bengal.

Methodology: Nasopharyngeal and

oropharyngeal swabs collected from patients. Real time RT PCR for SARS-CoV-2 virus done. Real time RT PCR for Influenza A+B virus using VIASURE RT PCR kits done on the negative samples. Total 200 such samples were tested for Influenza A+B virus from April to October.

Results:

1. 13 samples (6.5%) tested positive for Influenza A virus. 2. 4 samples (2%) tested positive for Influenza B virus.

Conclusion:

Despite the ongoing pandemic, Influenza should not be overlooked so that patients can receive correct diagnosis and effective treatment on time.

Title: Antimicrobial resistance of acinetobacter baumannii of lower respiratory tract and mortality- a cross-sectional study from a tertiary care teaching hospital in Kerala

Name of Presenter: **SHARON ANNE THOMAS**

Authors (or Co-authors): **Beena Thomas, P.Sukumaran, Seema Oommen, Midhun M, Doye George**

Institution/Author Organization: **PUSHPAGIRI MEDICAL COLLEGE HOSPITAL**

Background:

Acinetobacter baumannii has evolved as a common MDR microbe.

Aims and objectives:

To determine the profile of antimicrobial resistance and mortality and their associated factors in Acinetobacter baumannii infection of lower respiratory tract (LRT). Methodology: This was a record based cross-sectional study done in a tertiary care teaching hospital in Kerala. Records of all 63 Acinetobacter baumannii LRT infection in 2017, were retrieved and analysed. MDR was defined as resistance to atleast one agent of three or more antimicrobial classes. Proportion of MDR, carbapenem resistance and resistance to other major antimicrobials were calculated. Determinants of carbapenem resistance and its associated antimicrobial resistance were explored. Proportion of mortality and the associated factors were explored.

Results:

Proportions of MDR and carbapenem resistance were 85.7% and 41.3% respectively. 90.5% was resistant to Piperacillin-tazobactam. Carbapenem resistance was associated with MDR. Mean duration of mechanical ventilation and ICU stay prior to and after the infection

were longer for patients with carbapenem resistant strains. Mortality rate was 75.6%. Older age and ICU stay prior to infection were associated with mortality.

Conclusions:

Rates of antimicrobial resistance in *Acinetobacter baumannii* and mortality were high in this setting, comparable to reports from other parts of India.

Title: Study of clinical profile of 40 patients of lung abscess

Name of Presenter: **DR. SHRADDHA NAVINCHANDRA PATEL**

Authors (or Co-authors): **Dr. SANJAY TRIPATHI, Dr. SAVITA JINDAL**

Institution/Author Organization: **A.M.C. MET MEDICAL COLLEGE, AHMEDABAD**

INTRODUCTION:

A lung abscess is a localized area of destruction of lung parenchyma in which infection by pyogenic organism results in tissue necrosis and suppuration. A changing patterns of the disease has been reported in developed countries, where secondary lung abscess due to underlying medical conditions, such as malignancy or immunosuppression, is becoming more common.

AIMS AND OBJECTIVE:

To study the clinical profile in lung abscess patients.

To study predisposing factors responsible for development of lung abscess.

To know anatomical localization of lung abscess by chest X-ray examination- PA and lateral view.

To evaluate response to medical treatment.

METHODOLOGY:

40 diagnosed cases of lung abscess were included in the study. All the patients were subjected to detailed history and evaluated for clinical presentation, radiological distribution, pathogenic organisms and resolution of lung abscess with treatment.

OBSERVATION AND CONCLUSION:

• 29 (72.5%) patients with lung abscess are in age group 41-60 years and 30 (75%) out of total 40 are males.

• Most important predisposing factor encountered is poor oral hygiene in 20 (50%) patients.

• Cough with expectoration (100%) and fever (97.5%) are common presenting symptoms.

• Lung abscess more commonly involved

upper lobe of both lungs in 25 (62.5%) cases.

• Routine aerobic culture and sensitivity of sputum report are very helpful in management of patients.

• Resolution of lung abscess is achieved in 100% cases in period of 42 days.

Title: To study the utility of Respiratory Biofire in the management of adults with acute respiratory infections

Name of Presenter: **Dr Viral Nanda**

Authors (or Co-authors): **Dr Lancelot Pinto**

Institution/Author Organization: **PD Hinduja National Hospital and MRC**

Aim-

To determine if timely etiological diagnosis could have an impact on medical management in relation to antibiotic and antiviral prescription.

Methodology-

A prospective cohort study of patients above 18 years of age with acute respiratory tract infection with symptom onset within 7 days at PD Hinduja Hospital wards AND ICU from period of January 2020 to June 2020. Patients less than 18 years of age were and who already had a positive respiratory biofire report were excluded.

Results-

The most common organism was Influenza AH3. No antibiotics were changed in 80 patients. Antibiotics were stopped in 73 patients and continued in 27 patients. The yield of sending the sample on day 1 was 60.87 percent followed by 26.09 percent on day 2 which brings into consideration to send the test on day 1 probably before starting any drug therapy. Only 7% of patients had mortality in the biofire group. Conclusion-The use of a highly sensitive assay using clinical samples that is feasible for application worldwide. This may lead to an increased rate of diagnosis of viral infections and to improved patient outcomes, and in particular to a reduction in the overuse of antibiotics and antivirals. Timely testing significantly reduces the mortality of the patients.

Title: Pleural Nocardiosis

Name of Presenter: **AISHWARYA ALAVANDAR**

Authors (or Co-authors): **Dr.Prof. Chandrasekar, Dr.Prof.Dhanasekar, Dr.B.Hariprasad**

Institution/Author Organization: **SRI RAMACHANDRA MEDICAL COLLEGE AND**

HOSPITAL

Background:

Nocardiosis involving pleura in an immunocompetent patient is a rare documentation reported here. This case emphasizes nocardiosis as a differential diagnosis in patients with pleural lesions. Case report: A 33 year old female presented with complaints of dyspnoea, anorexia, cough with expectoration, right side chest pain and fever since one week. She is a case of dermatomyositis for past 1 year and under oral steroid Prednisolone(25mg) for 1 year. Her past history is uneventful. Chest examination revealed diminished breath sounds and dullness to percussion over right infrascapular, inframammary regions. Examination of other systems was unremarkable. Haemoglobin was 12.5 gm%, ESR 45 mm/h, TLC 10,800 /cu. mm. RBS was 131 g/dl. RFT normal. Viral makers were negative. Chest X-ray revealed right sided pleural effusion. Diagnostic tapping done and aspirated pleural fluid showed sugar 245.3g/dl, ADA 91.6 IU/L, LDH 9027g/dl, WBC 580 cells/cu.mm. USG guided pigtail catheter inserted. Pleural fluid cytology negative for malignant cells. AFB smear and GeneXpert MTB not detected. Gram staining showed Gram positive branching filamentous bacteria. Bacterial culture grew *Nocardia* species. Started on Trimethoprim-Sulfamethoxazole along with imipenem. Conclusion: This particular case emphasizes the need for high index of clinical suspicion of pulmonary nocardiosis. Nocardiosis should be considered even in patients without any risk factor.

Title: A Middle aged Gentle man with Community acquired pneumonia, empyema and acute transient deafness

Name of Presenter: **Anand V**

Authors (or Co-authors): **Jolsana Augustine, Divya R, Melcy Cleetus, Chandrasekar S, Rajesh V**

Institution/Author Organization: **Rajagiri Hospital, Aluva, Ernakulam**

Introduction

Community acquired pneumonia (CAP) is an exceedingly common problem encountered in pulmonary practice. Empyema complicates a small proportion of CAP cases. Sepsis, multiorgan failure, metastatic spread of infection etc are well described complications of CAP. Diminished acuity of hearing is rarely described as a complication of CAP. We share the case of a middle aged gentleman with CAP with acute transient deafness due to an uncommon bacterial etiology.

History

A 54 year old gentleman presented with 5 day history of fever and left sided chest pain. He was a smoker and butcher by profession. His past history was remarkable for poorly controlled type 2 diabetes mellitus for the past 8 years. His chest pain worsened and he developed progressive shortness of breath for past 2 days which prompted an emergency department visit.

Presentation

The patient was tachypneic and hypoxic at presentation, with a respiratory rate of 28 / minute and SpO₂ of 93% on room air. Clinical examination revealed features of left sided large pleural effusion which was confirmed by chest radiograph. A CT scan of the chest was also performed which showed left lower lobe consolidation with large left pleural collection, with enhancing pleura consistent with empyema. He was hemodynamically stable. Investigations revealed neutrophilic leucocytosis and normal renal functions. No features of meningitis were elicited. Left sided pleural fluid was drained with tube thoracostomy and 1.2 litres of thin pus was drained. He developed diminished sensation of hearing 48 hours after presentation and ENT evaluation with audiogram revealed severe sensorineural hearing loss.

Diagnosis

Pleural fluid cultures and blood cultures grew Streptococcus suis. CSF examination was normal. A diagnosis of Streptococcus suis pneumonia and empyema was made.

Management

Given the severe presentation with CAP and empyema, he was initiated on piperacillin tazobactam with doxycycline, and empyema was drained. Intercostal drain was removed after 4 days when the discharge ceased and lung expanded. Significant clinical improvement and radiological clearance was evident by the fifth day. He was discharged on the seventh day of hospital stay.

Complications

The sensorineural hearing loss persisted to a lesser degree of severity at discharge. At 14 days of follow up visit, there was complete radiological clearance and normalisation of his hearing.

Clinical Implications/ Learning points

Streptococcus suis is a rare cause of CAP. Disease due to the agent is endemic in pigs and most reported cases in humans occur in associated with pig rearing. Meningitis is

the commonest presentation. Hearing loss of varying severity occurs in upto 50% of human cases. Sepsis and renal failure are reported with considerable frequency. The clinical suspicion raised because of the occupation of the patient and clinical presentation (new onset hearing loss in a CAP patient) prompted us to aggressively search the microbial etiology, which helped us in conclusive diagnosis and tailored management.

Title: PULMONARY MANIFESTATIONS OF A CASE OF SCRUB TYPHUS: SUSPECT EARLY AND TREAT PROMPTLY

Name of Presenter: **Dr. Konduru Aneesha**
 Authors (or Co-authors): **Dr. Ashok Kumar, Dr. Ch Radhika, Dr. R. Srinivasan**
 Institution/Author Organization: **Meenakshi Medical College Hospital and Research Institute**

INTRODUCTION:

Scrub typhus is one of the common causes of acute febrile illness in India. The pulmonary manifestations of scrub typhus includes interstitial pneumonia, interstitial edema and pleural effusions.

HISTORY:

A 55 year old diabetic female came with complaints of fever, breathlessness [grade 3 mMrc], generalized swelling, loose stools, vomiting since 1 week.

PRESENTATION:

On examination an eschar was seen in the left axilla. Patient was febrile, tachycardic. On chest auscultation there were bilateral diminished breath sounds in the infrascapular area and infraaxillary area. DIAGNOSIS :Scrub typhus IgM detected on ELISA. From eschar and whole blood PCR was done and Scrub Typhus antigen was detected. CXR showed bilateral CP angle blunting, right lower zone heterogeneous opacity. CT Chest showed bilateral mild pleural effusion, bilateral patchy consolidation. Pleural fluid analysis showed protein - 3.6, glucose - 81, lymphocytes- 65%, ADA - 46, LDH - 302. Patient was started on Tab Doxycycline along with antipyretics and IV fluids. Patient showed dramatic improvement clinically. CONCLUSION : Pulmonary manifestations in scrub typhus are well documented and can be fatal particularly in the form of Acute respiratory distress syndrome, hence early diagnosis is warranted for favorable outcomes.

Title: MULTIPLE INFECTIONS IN A PATIENT WITHOUT IMMUNOSUPPRESSION

Name of Presenter: **Dr.Nitheesha**
 Authors (or Co-authors): **DR K .SAILAJA , DR RAMAKRISHNA REDDY ,DR.NITHEESHA**
 Institution/Author Organization: **Medicity institute of medical sciences ,ghanpur**

A case report of a 33year old male patient with multiple infections travelling from Democratic Republic of Congo, in current situation of Covid -19 pandemic. He presented with fever, difficulty in breathing, fatigue and had respiratory failure requiring mechanical ventilation, infectious serology workup was positive for scrub typhus, Ig G Dengue was positive ,peripheral smear was positive for Plasmodium Falciparum and Tracheal aspirate gave a positive result for RTPCR for Covid 19 .patient recovered but post recovery paratracheal lymphnode enlargement persisted.In view of multiple infections tuberculosis was suspected but Endobronchial Ultrasound guided Transbronchial needle aspiration was done which showed non necrotic epitheloid granuloma suggestive of sarcoidosis. Patient improved with steroid treatment. This case is being showcased to highlight the multiple infections transmitted by mosquitoes endemic to the area of Democratic Republic of Congo.

Title: A CASE IF THORACIC ACTINOMYCOSIS

Name of Presenter: **Pratheeb Kumar**
 Authors (or Co-authors): **Dr.sridhar,Dr.ajay narashiman**
 Institution/Author Organization: **Stanley medical college and hospital**

INTRODUCTION :-

Actinomycosis is a rare,chronic and slowly progressive granulomatous disease caused by filamentous gram positive anaerobic bacteria from Actinomycetaceae family. It can mimic other conditions like malignancy and tuberculosis and so often it is misdiagnosed. However it has good prognosis if diagnosed early. Actinomyces are common commensals of human oropharynx,gastrointestinal tract and urogenital tract. Infection occurs when mucosal integrity is breached. Its classified clinically according to the anatomical site involved as – orocervicofacial,thoracic,abdominopelvic,cns and musculoskeletal. Orocervicofacial form is the most commonest form accounting for 50% of infections. Thoracic actinomycosis accounts for 15-20% and usually results from aspiration of oropharyngeal secretions. Initially the clinical picture is similar to that of pneumonia.

CASE REPORT :-

A 52 year old male who is a known case of diabetes and hypertension was admitted with complaints of cough with expectoration, low grade fever, shortness of breath and loss of weight for past 4 months. He was referred from a private hospital as a case of non resolving consolidation right middle lobe after treating with antibiotics. On examination his vitals were stable with right axillary crepitations on auscultation. Ct chest was done which showed a chronic middle lobe collapse with consolidation. Sputum examinations were negative. So a bronchoscopy was done and biopsy taken from right middle lobe lesion. Biopsy was positive for actinomyces infection. Hpe was suggestive of actinomyces with splendore- hoeppli phenomenon. Opinion of CTVS sought. They advised a PET scan which was highly suggestive of malignancy. So they proceeded with right middle lobectomy. The operative specimen HPE was also suggestive of actinomyces. So he was treated with amoxicillin-clavulante (825mg/125mg) twice daily for a total duration of 6 weeks. Patient is completely recovered and on regular follow up now.

CONCLUSION :-

Though actinomycosis is a rare disease, early disease diagnosis can result in complete resolution. So the physician should always consider actinomycosis as an differential diagnosis for conditions like tuberculosis and malignancy .

Title: FATAL DUAL FUNGAL INFECTION IN AN IMMUNOCOMPROMISED : RARE CASE REPORT

Name of Presenter: **DR. SHAIK RAFIYA SULTHANA**

Authors (or Co-authors): **DR. ASHFAQ HASAN, DR. SYED MAHMOOD, DR. ALEEMUDDIN NAVEED, DR. FAHAD ABDULLAH, DR. SYED SHABBIR**

Institution/Author Organization: **DECCAN COLLEGE OF MEDICAL SCIENCES, HYDERABAD.**

Next to aspergillosis, mucormycosis is the second most common mycosis caused by filament as fungi. It is associated with high incidence of mortality. Combined invasive mucormycosis and aspergillosis is rarely described. The occurrence of two pathogenic fungi occurring simultaneously makes the diagnosis difficult and treatment even more challenging. We present a rare case of a 49-year-old male, with history of poorly controlled diabetes having subacute history of fever, dry cough with progressive dyspnoea. He already received multiple courses of antibiotics

before being referred to our institute. Chest x ray and CT Revealed consolidation in the right upper and middle lobe. Bronchoscopy revealed cheesy exudate. TBLB Showed colonies of separate and aseptate fungal growth. Patient received aggressive antifungal therapy with Amphotericin B and supportive antibiotics but patient had rapid worsening leading to an eventual demise

The 49-year-old male, presented in the emergency department with complaints of low-grade intermittent fever and cough since six weeks associated with gradually progressive dyspnoea since two weeks. He was a non-smoker with poorly controlled diabetes since last four years. He had no history of lung disease. He had received four courses of different antibiotics (including parenteral) outside before being referred to our institute upon deterioration of pneumonia.

On examination, patient was tachypneic with a respiratory rate of >30/min. Chest auscultation revealed inspiratory coarse crackles over right hemithorax in inter scapular and infra scapular area. Chest radiograph showed right heterogeneous opacity in the upper and mid zone with subtle blunting of costophrenic angle (fig 1). CT chest confirmed right upper, middle and lower lobe consolidation with minimal pleural effusion and few nodular infiltrates in left lower lobe. Haematological investigations revealed leucocytosis of 28000 with 88% neutrophils. Blood sugars were markedly deranged and serum creatinine was 2.0mg/dl. He was non-reactive for human immunodeficiency virus. Blood cultures were found to be sterile. Sputum analysis revealed plenty of inflammatory cells with fungal elements seen on KOH mount. Due to rapid deterioration, both clinically and radiologically, bronchoscopy was done which showed cheesy exudates clinging to the walls of the right main bronchus extending into right lower lobe bronchus distally (fig. 2). Broncho alveolar lavage (BAL) confirmed both septate and aseptate fungal elements suggestive of aspergillus and mucormycosis respectively. Trans bronchial lung biopsy (TBLB) showed fungal colonies of aspergillus and mucormycosis (fig. 3). He was started immediately on intravenous liposomal amphotericin B. Despite aggressive antiobiotics and antifungals, this patient had rapidly worsening downward course leading to his demise.

Title: PULMONARY MUCORMYCOSIS IN A POST PNEUMONECTOMY PATIENT

Name of Presenter: **Dr. Korat Satish Laljibhai**

Authors (or Co-authors): -

Institution/Author Organization: **IMS & SUM hospital**

Mucormycosis is a rare opportunistic fungal disease. Pulmonary mucormycosis is even rarer. We report a case of mucormycosis in a post-pneumonectomy patient with discharging surgical site sinus.

A 54-year-old diabetic male who underwent a left pneumonectomy for uncontrolled hemoptysis due to pulmonary tuberculosis presented with left side chest pain, cough with expectoration and discharging sinus at the surgical site starting 6 months after surgery. Recurrence of TB and other bacterial infections were excluded by pus analysis, CT Thorax revealed a hypodense material with spongiform appearance with entrapped air in pneumonectomy cavity subsequently went for CT guided biopsy from the same and showed non-septate hyphae with right angle branching consistent with mucormycosis. Patient recovered with antifungal Amphotericin-B course.

Title: RHINOSPORIDIOSIS: AN UNUSUAL PRESENTATION

Name of Presenter: **SHILPA CHANDRAN**

Authors (or Co-authors): -

Institution/Author Organization: **INSTITUTE OF CHEST DISEASES, CALICUT, KERALA**

History:

- 39 years old male.
- Presented with shortness of breath & Epistaxis for 1 month.

Examination:

- Chest movements decreased on Right side lower part.
- VF, VR decreased on Right ISA, IFSA.

Investigation:

- CECT Thorax: Soft tissue density lesion in lower lobe bronchus, segmental bronchi on right side with collapse of the lower lobe and glottis, subsegmental atelectasis middle lobe, mediastinal lymphadenopathy, No pleural effusion, CT features suggestive of bronchial airway and laryngeal rhinosporidiosis.
- FOB: Intraluminal polypoidal growth occluding Right Intermediate Bronchus.
- KOH Mount: Spherules and large number of endospores typically present.

Discussion:

- Chronic granulomatous disease.

- Protistal microbe, belonging to 'mesomycetozoea'
- Endemic in Southern India & Sri Lanka.
- Order of Involvement: Nose>Nasopharynx>Lacrimal Sac>Conjunctiva.
- Bronchial involvement very rare.
- 2 to implantation of spores.
- High chance of recurrence.

Title: A CASE OF PULMONARY MUCORMYCOSIS

Name of Presenter: **MUKTHINENI SRI SINDHU RAVALI**

Authors (or Co-authors): **Dr,Palaparti Jayakar babu**

Institution/Author Organization: **KATURI MEDICAL COLLEGE**

INTRODUCTION:

1)Mucormycosis is an infection caused by fungi of the order MUCORALES. 2) Hallmark of mucormycosis :Extensive angioinvasion with resultant vessel thrombosis and tissue necrosis.3) NECROTISING PNEUMONIA is a predominant feature.4)Quantitative(NEUTROPENIA) and Qualitative(hyperglycemia,Corticosteroid usage)defects impair chemotaxis and killing activity of phagocytes

CASE SCENARIO:

A 51year Old male brought to causality with altered sensorium from 2days.His RBS level was 565mg/l and his urine ketones are positive .He was admitted in ICU.On day 4,he developed high grade fever with coughing out of blood tinged sputum .Chest x ray and CT scan are suggestive of right middle lobe consolidation. Fibre optic Bronchoscopy was done and no active bleeding focus seen.

METHODS:

BAL& biopsy taken from right segmental bronchus was sent for gram stain;AFB stain; Culture/sensitivity,KOH mount for fungal elements;drug sensitivity. DIAGNOSIS:sections studied from biopsy showed extensive tissue necrosis with epitheloid giant cells;AEPTATE,BROAD,FUNGAL HYPHAE possibly MUCOR. TREATMENT: Injection AMPHOTERICIN B 2mg/kg/day given for 3 days;later on injection POSACONAZOLE 300mg in 150ml Normal saline given for 5 days.Patient was then referred to CTVS(cardiothoracic vascular surgeon) where he was planned for right middle lobectomy.

CONCLUSION:

Fungal etiology should be considered with high suspicion in patients with immunosuppression.

Title: Concomitant Pleural infection of Mycobacterium Tuberculosis and Burkholderia Cepacia in a COVID positive patient

Name of Presenter: **Dr. Suyash Singh Rathore**

Authors (or Co-authors): **Dr. Lokesh Kumar Saini, Dr. Prakhar Sharma, Dr. Mayank Mishra, Dr. Ruchi Dua, Dr. Girish Sindhwani**

Institution/Author Organization: **AIIMS Rishikesh**

INTRODUCTION-

Burkholderia-Cepacia is an aerobic-grampositive-rod found mainly in soil and moist surrounding. It commonly causes colonization and causes infection in patients with the chronic granulomatous disease, cystic fibrosis, and bronchiectasis. It is rare to find B-Cepacia and mycobacterium-tuberculosis pleural infection concomitantly.

HISTORY AND PRESENTATION-

A 45-year-old male, chronic-smoker, uncontrolled-diabetic, active-COVID-19(IgM positive) with old treated Pulmonary-Tuberculosis presented with the complaints of fever associated with chills and rigor cough-nonproductive for 15 days and, sudden onset right-sided chest-pain and SOB for five days. DIAGNOSIS- Right pyopneumothorax with concomitant Burkholderia and tubercular etiology with mild COVID-19 infection

MANAGEMENT-

Chest X-ray and HRCT showed right pyopneumothorax and active infective changes in bilateral lung fields, likely tubercular. Microbiological Pleural-fluid studies showed pale-yellow colored fluid with 80,000 cells/mm³ (neutrophil-predominant) with, Gram-negative bacilli on gram stain, AFB on ZN stain, low-positive CBNAAT for mycobacterium-tuberculosis, and growth of B.-Cepacia on aerobic culture. The patient was put on Anti-Tubercular-Treatment and antibiotics (as per sensitivity for B.-Cepacia), for which the patient responded well.

LEARNING POINTS-

Pleural infection of Burkholderia is not a common entity, and concomitant Burkholderia and Tuberculosis infection are even rare. In this case, chronic smoking, uncontrolled diabetes, previous tuberculosis infection, and probably active COVID infection made the patient more susceptible to both diseases.

Title: Rare Complication of COVID19 :Rhino-orbital mucormycosis

Name of Presenter: **A.Abidni Aashis**

Authors (or Co-authors): **V.sindhu,Kranthi Kumar,Rohit,Alekhyia,Megha ,Dr. Manmadharao,Dr.Latha Sarma ,Dr.Ramana Prasad ,Dr .Mohd.Nawaz**

Institution/Author Organization: **Krishna institute of medical sciences**

51 years old male k/c/o Diabetes presented with c/o cough, fever, Shortness of breath. On evaluation his CT Chest showed features s/o Covid 19. COVID 19 RTPCR was done and tested positive . He was treated with antivirals, antibiotics , steroids, O2 support , prophylactic anticoagulant and other supportive measures . He was discharged in haemodynamically stable condition . On follow up after 2 weeks he presented-with c/o right eye pain with headache , vomiting and photophobia. On evaluation MRI brain features s\o fungal sinusitis with secondary orbital cellulitis, ischemic optic neuropathy and superior ophthalmic vein thrombosis.CT PNS showed features of deviated nasal septum to left ,mucosal thickening in right maxillary sinus with blocked osteomeatal unit, mucosal thickening also noted in left maxillary/bilateral ethmoid ,sphenoid ,frontal sinuses with bilateral sphenoid Ostia blocked.Right orbital exenteration! with FESS was done and FESS scrapings were send for HPE which revealed mucormycosis .Extensive use of steroids/ monoclonal antibodies/broad-spectrum antibiotics may lead to the development/ exacerbation of a preexisting fungal disease. Physicians should be aware of the possibility of secondary invasive fungal infections in patients with COVID-19 .

Title: Possible case of NTM

Name of Presenter: **Alwa karunasree**

Authors (or Co-authors): **Dr.satyaprasad**

Institution/Author Organization: **Mamata medical College**

UNDIAGNOSED CASE WITH MULTIPLE CAVITIES
Case history

A 30 year old male presented with complaints of cough with expectoration ,dyspnea ,loss of weight,loss of appetite on and off.sputum for AFB positive in spot n early morning samples and cbnaat is negative in 3 different times in duration of 3 years..started on att and used for 6 months twice and used mdr regimen for few days..LPA done during this period showed no resistance to drugs.Examination :

vitals stable..other systems wnl. Investigations ; leukocytosis, usg abdomen wnl. .chest xray showed multiple cavitory lesions in right upper lobe..

Title: A case of empyema necessitans due to interruption antitubercular treatment

Name of Presenter: **DR.AMANPREET KAUR**
 Authors (or Co-authors): **DR.AMIT GOYAL**
 Institution/Author Organization: **GOVT. MEDICAL COLLEGE, AMRITSAR**

Empyema necessitans (EN) (also sometimes spelled as empyema necessitatis) is a rare long term complication of empyema thoracis. It refers to extension of a pleural infection out of the thorax and into the neighbouring chest wall and surrounding soft tissues, e.g. extension of an empyema out with the pleural cavity. These cases result from inadequate treatment of an empyema and usually occur after a necrotizing pneumonia or pulmonary abscess. EN has become less common with the routine drainage of empyema and antibiotic use. We present a case of young male who is diagnosed as a case of pulmonary TB now present with rare complication of empyema necessitans.

Title: ABPA without Bronchial Asthma with associated pulmonary aspergilloma-A Rare Entity

Name of Presenter: **DR.AMIT GOYAL**
 Authors (or Co-authors): **DR.AMANPREET KAUR**
 Institution/Author Organization: **GOVT. MEDICAL COLLEGE, AMRITSAR**

Aspergillus is a fungus with ubiquitous presence. It is liable for spectrum of diseases depending upon the host immune status varying from allergic bronchopulmonary aspergillosis (ABPA) in atopics, aspergilloma in chronic lung cavity, and chronic pulmonary aspergillosis (CPA) or invasive pulmonary aspergillosis (IPA) in immunocompromized. However, overlap among them has been observed as immune status changes due to treatment with steroids for ABPA or development of diabetes which itself results in immunosuppression. Allergic bronchopulmonary aspergillosis (ABPA) is that the best recognized manifestation of Aspergillus associated hypersensitivity to Aspergillus antigens in patients with long standing atopic asthma. Rarely, ABPA has been described in association with other diseases without history of asthma and its association with pulmonary aspergilloma is usually not

concomitantly present. It has so far not been known to complicate pulmonary tuberculosis. We present a rare case of ABPA without prior history of asthma along with its coexistence with Aspergilloma complicating previously treated tubercular cavity.

Keywords:

ABPA,Aspergilloma,Asthma

Title: An unusual cause of hemoptysis

Name of Presenter: **BATOE RAM MEENA**
 Authors (or Co-authors): **Dr.mohd.javed Qureshi**
 Institution/Author Organization: **Institute of respiratory diseases SMS medical College Jaipur**

CASE REPORT-

AN UNUSUAL CAUSE OF HEMOPTYSIS
 INTRODUCTION :

Hydatidosis is one of the most important zoonotic diseases and usually manifests as liver hydatidcyst. Lung hydatidcyst is an unusual presentation. Caused by a parasite Echinococcus granulosus.

MATERIAL & METHODOLOGY:-

A 26 years old female presented with right sided chest pain, cough and shortness of breath for the past 2 months and blood in sputum for one month. On examination patient had pallor, reduced chest movements and intensity of breath sounds over the right side chest.Chest X-ray showed homogenous rounded opacity with regular border in the right lung mid zone. Ultrasonography abdomen showed an hypoechoic lesion. CECT chest showed a heterogeneous density with air foci in the right upper lobe of lung . Total eosinophiliccount was raised. Stool examination was negative for ova and cysts. Serum IgGfor Echinococcuswas positive.

RESULTS :-

Basis of clinic-radiology, serological findings patient diagnosed as pulmonary and hepatic hyaditidosis. CONCLUSION :- Zoonotic diseases should always be kept in mind as a differential for patients presenting with haemoptysis. Timely diagnosis and management can save the life of patient.

Title: Stenotrophomonas Maltophilia:A Rare cause of Pleural effusion

Name of Presenter: **Dr Bhumika Madhav**
 Authors (or Co-authors): **Dr Jayalakshmi T.K, Dr Bharat Agarwal, Dr Laxman Jessani, Dr**

Dhanaji Revande

Institution/Author Organization: **Apollo hospitals Navi mumbai**

Introduction

Stenotrophomonas Maltophilia is an uncommon cause of ICU sepsis or ventilator associated pneumonia . Isolation of the organism in pleural fluid is rare.

Case report –

43 year female presented to the hospital with worsening dyspnea, cough and anasarca. Past history was insignificant except hypothyroidism and history of abdominal hysterectomy and unilateral oophorectomy 3 months ago . Chest Radiograph was suggestive of large left side pleural effusion. Other investigations revealed low blood albumin levels. Her other tests including liver and kidney functions were normal. Pleural fluid was drained with intercostal drainage tube. Pleural fluid culture grew Stenotrophomonas maltophilia which was sensitive to Trimethoprim Sulfamethoxazole and Levofloxacin. She was started on Albumin infusion and diuretics to correct the hypoalbuminemia. Her pleural effusion resolved gradually and anasarca also reduced. She was treated with intravenous trimethoprim sulfamethoxazole and levofloxacin. She improved well and was discharged on oral antibiotics .

Conclusion-

S. Maltophilia is a very tricky organism and is usually multi drug resistant, affecting immunosuppressed hosts. Such rare causes of infective pleural effusion should be kept in mind when dealing with unexplained pleural effusions.

Title: Mucormycosis with positive Atoll Sign (Mucormycosis presenting as pneumonia)

Name of Presenter: **Dr. Bhumini Patel**
 Authors (or Co-authors): **Dr. P.V Potdar,Dr Karan Singla, Dr Udaya.S.**
 Institution/Author Organization: **MGM Medical Collage And Hospital, Navi Mumbai**

INTRODUCTION:

Mucormycosisisanimportant opportunistic mycosis in severely immunocompromised patients.Presents commonly as pulmonary and rhinocerebral syndromes. Necrotising Pneumonia is predominant feature of pulmonary mucormycosis.One of the common risk factors predisposing being diabetes mellitus.

HISTORY:

50 year male, farmer presented with complaints of severe back pain fever, cough with mucopurulent expectoration and breathlessness and hoarseness of voice. The patient was an uncontrolled diabetic.

PRESENTATION:

On examination was tachycardic and tachypnoeic with Bilateral wheeze on auscultation and Right middle zone bronchial breath sounds.

DIAGNOSIS:

Patient presented with leucocytosis. Chest-xray suggestive of right midzone patch of consolidation and HRCT CHEST showed an incomplete crescent of consolidation encompassing a region of GGO that is positive A-toll sign. Bronchoscopy was done and Microbiology suggestive of growth of mucor.

MANAGEMENT:

Patient was administered Liposomal Amphotericin-B with adequate hydration and other symptomatic treatment including diabetic control.

CLINICAL IMPLICATION:

Early diagnosis means early treatment and leading to less mortality rates- 50-70% (Pulmonary) vs >90% (Disseminated disease). It is advisable to keep low threshold of suspicion in immunocompromised patient. Control of diabetes and Liposomal Amphotericin-B increases cure rates.

Title: MICROFILARIA IN PLEURAL EFFUSION ; A RARE CASE REPORT

Name of Presenter: **DR. E. RAJU**

Authors (or Co-authors): **PROF & HOD DR. MAHABOOB KHAN**

Institution/Author Organization:

GOVERNMENT GENERAL AND CHEST HOSPITAL/OSMANIA MEDICAL COLLEGE

INTRODUCTION;

Lymphatic filariasis is a public health problem in India. It is characterised by wide range of clinical presentations from asymptomatic microfilaremia to lymphedema and elephantiasis. The adult worms reside in lymphatics whereas larva circulate in blood. Filariasis co-existent with pleural effusion is rare but has been reported. Pleural effusions associated with microfilaria have some evidence of lung pathology or tropical pulmonary eosinophilia.

CASE REPORT;

A 22 yr old male, alcoholic resident of medak dist was admitted with complaints of left sided chest pain, SOB, fever since 1 month. A provisional diagnosis of tubercular pleural effusion was made. Pleural fluid aspiration was done and sent for analysis. It was a non-chylous effusion. Cytology revealed microfilaria in pleural fluid. Patient was started on Diethylcarbamazine for a period of 3 weeks revealed reduced effusion and complete resolution by 6th week.

CONCLUSION;

The most common cause of pleural effusion in young patients in our country is tuberculosis. But many idiopathic effusions have also been known. The presence of microfilaria in the pleural fluid and successful response to treatment with DEC is evidence of filarial etiology of pleural effusion.

Title: Non Tuberculous Mycobacteria – Pulmonary Disease – A case series from a tertiary care centre

Name of Presenter: **Dr Febi Ann Roy**

Authors (or Co-authors): **Dr Amithash M P, Dr Vyshak U S, Dr Rahul Magazine, Dr Vishnu Prasad S**

Institution/Author Organization: **Kasturba Medical College, Manipal**

Introduction:

Non-Tuberculous Mycobacterium Pulmonary Disease (NTM – PD) is of great concern because of its increasing global incidence. However, diagnosis is often delayed.

Objectives: To study the clinical, radiological, microbiological profile, treatment regimen and outcomes on cases of NTM – PD in a tertiary care centre.

Methodology:

Nine cases of NTM - PD were included and clinical, microbiological and radiological investigations were analysed.

Results:

Out of 9 cases, 55.56% were females. Most common presentation was cough. All patients except one had past history of anti-tubercular treatment. Radiological investigations revealed structural lung disease. Sputum was positive for AFB staining and Genexpert was negative in all. BAL samples were properly collected, decontaminated and sent for AFB culture. *M. abscessus* was most common species followed by *M. intracellulare*, *M. scrofulaceum*, and *M. interjectum*. All were started on NTM regimen and showed clinico-radiological

improvement.

Conclusion:

Most of the NTM-PD are misdiagnosed as pulmonary tuberculosis. Sputum AFB positive and Genexpert negative gave clue to NTM infection. Early diagnosis, accurate species identification, appropriate treatment and adherence lead to good clinical outcomes.

Title: A Rare case of Maggots at ICD site

Name of Presenter: **Kanchi S Sravani**

Authors (or Co-authors): **Dr. G. N. Srivastava**

Institution/Author Organization: **Institute of Medical Sciences**

Maggots (fly larvae) over limb ulcers are seen in patients with poor hygienic living conditions, negligence and lack of education in lower socioeconomic backgrounds.

Treatment involves turpentine oil application, debridement and regular dressings. A 65 year old male who had undergone intercostal drainage for long standing massive malignant pleural effusion was presented in Emergency with complaints of itching at site of ICD wound. Examination revealed maggots. Surrounding skin was found to be excoriated. Turpentine oil applied and maggots were removed. On further examination, the wound was found to be communicating with the pleural cavity. It is interesting to note that, though not a pleasant sight to have maggots on one's body, they have been known to be capable of naturally removing slough and necrotic tissue. Hence used in non-healing ulcers, Maggot debridement therapy. Maggots at ICD site is a rare entity and can be prevented by preoperative counseling and educating the patient prior to discharge regarding wound care.

Title: A JOURNEY TO NONTUBERCULOUS MYCOBACTERIAL INFECTION

Name of Presenter: **DR KARTHIKA PRASAD**

Authors (or Co-authors): **DR SHUBHRA JAIN, DR VINOD JOSHI, DR ASHISH SINGH**

Institution/Author Organization: **SMS MEDICAL COLLEGE JAIPUR**

INTRODUCTION

NTM infection following *Aspergillus* and tubercular infection is a rare presentation. This is a case of *Mycobacterium abscessus* infection of lung in a patient with treated PTB and sub-acute invasive aspergillosis.

MATERIALS AND METHODS

A 62-year-old male presented with diffuse chest pain, shortness of breath, high grade fever and productive cough for 6 months. He had history of microbiologically confirmed pulmonary tuberculosis in 2018; took ATT and got improved. In 2019 patient presented with hemoptysis. Sputum microscopy and CBNAAT were negative and fungal culture was positive for *Aspergillus Flavus* and was treated with antifungal therapy. Recent radiograph showed new infiltrates over right lower zone. Sputum for AFB was positive and CBNAAT result was negative twice. Sputum bactec culture revealed NTM infection in two repeat sputum samples.

RESULTS

Based on clinical, radiological and laboratory findings, NTM infection of lung established. Species subtyping showed *M. abscessus*. Patient was started on NTM regimen and was improved.

CONCLUSION

NTM infection occurs as preceding, concomitant or as a complication of sub-acute invasive aspergillosis. So it is important to investigate early if there is a clinical or radiological suspicion, for better outcome.

Title: An uncommon case - A case report of Hepatopulmonary amoebiasis

Name of Presenter: **DR.KOTHAPALLY SAI DHEDEEPIYAA**

Authors (or Co-authors): **Dr.Ramesh Kumar K, Dr.Ranganath D**

Institution/Author Organization: **Bhaskar Medical College and Hospital**

Infections with *Entamoeba histolytica* are more prevalent in the tropical regions. Most of the infections are asymptomatic but some produce a spectrum of clinical syndromes, ranging from dysentery to abscesses of the liver or other organs. Extra-intestinal infection by *E. histolytica* most often involves liver. Pleuro-pulmonary involvement, seen as the second most common extra-intestinal pattern of infection, is frequently associated with amoebic liver abscess. We report herein the case of a 50 year-old male Alcoholic & Smoker complaining of Cough with expectoration, fever and Chest pain, presenting with hepatopulmonary amoebiasis. The diagnosis was established from direct examination of sputum, in which trophozoites of *E. histolytica* were detected. Further investigation revealed a positive pleural fluid for *E. histolytica* cysts and trophozoites. The patient was diagnosed with primary pleuropulmonary amoebiasis and

he responded promptly to surgical drainage and metronidazole therapy. The outcome was favorable under adequate treatment. On regular follow-up visits, the patient was asymptomatic.

Title: A RARFE CASE OF DISSEMINATED MUCORMYCOSIS

Name of Presenter: **Dr LAKSHMI S**

Authors (or Co-authors): **Dr Manju R, Dr pratap upadhaya, Dr Vishnukanth govindharaj, Dr Madhusmita mohanty mohapatra, Dr Dharm prakash dwivedi**

Institution/Author Organization: **JIPMER**

INTRODUCTION:

Mucorales are ubiquitous, filamentous fungi of class Zygomycetes with low intrinsic pathogenicity causing fulminant, fatal infection, mostly in immunocompromised host. Diagnosis becomes difficult due to non-specificity of symptoms.

CASE DETAILS:

19 year old male with type 1 diabetes mellites, with acute onset fever, cough and breathlessness. Chest x-ray was suggestive of bilateral lower lobe consolidation. Patient had leucocytosis. Endomucosal biopsy done was suggestive of Mucor and was started on Amphotericin B. During the stay, he developed irrelevant talks, NCCT brain showed left frontal abscess and emergency left pteriotomy and abscess drainage done. Biopsy showed angioinvasive mucormycosis. Patient was treated with Amphotericin B and oral posaconazole.

DISCUSSION:

Disseminated mucormycosis has nonspecific manifestations which makes its diagnosis difficult. The most common site to disseminate is brain in a case with primary lung foci and has high mortality. Hence a routine screening for other sites of involvement especially brain would help in timely medical and therapeutic interventions which are vital factors in improving the outcome.

CONCLUSION:

In all cases of pulmonary mucormycosis, a clinical suspicion of other sites of involvement, may help in early diagnosis and prompt treatment of disseminated disease, improving the patient outcome and disease mortality.

Title: A rare case of chylothorax caused by probable *Paragonimus westermani*

Name of Presenter: **LAKSHMINARAYANA JASTI**

Authors (or Co-authors): **BARNEY ISSAC T.J , RICHA GUPTA, T. BALAMUGESH, MEERA THOMAS**

Institution/Author Organization: **CHRISTIAN MEDICAL COLLEGE VELLORE**

Introduction:

Paragonimiasis is a parasitic infection endemic to Asia. *Paragonimus* is known to cause pulmonary disease. Pleural involvement is less common; chylothorax is reported only once. History: 65 year-old lady presented with breathlessness and right chest pain for 3 months. She denied cough, hemoptysis. Elsewhere, for a right pleural effusion which was drained, she was treated empirically with antitubercular therapy.

Diagnosis:

Chest x-ray revealed a right pleural effusion. Pleural tap was milky; biochemical analysis showed a high triglyceride levels (334mg/dL) confirming a chylothorax; cytology was negative. CT thorax did not reveal a cause and lymphangiogram was normal. An ultrasound guided pleural biopsy reported chronic pleuritis. The CT found a pulmonary embolism and anticoagulation was initiated. She was discharged on MCT diet, to keep on follow up. Three months later, increase in effusion led to a thoracoscopic pleural biopsy. Though this reported chronic pleuritis again, the fluid sent for cytology showed focal foreign body giant cell reaction, egg and larval form of *Paragonimus westermani*.

Management:

On treatment with Praziquantel, she improved clinically and radiologically at 1 month review..

Learning-points:

In countries like India where parasitic infections are endemic, pleural effusion secondary to parasites needs to be considered. Paragonimiasis can rarely cause chylothorax.

Title: DR. A. MAHILMARAN , DR.A.SUNDARARAJA PERUMAL , DR.C.PALANIAPPAN

Name of Presenter: **DR. A. MAHILMARAN**

Authors (or Co-authors): **DR.A.SUNDARARAJA PERUMAL , DR.C.PALANIAPPAN**

Institution/Author Organization: **MADRAS MEDICAL COLLEGE , CHENNAI -3**

Background:

Pleuropulmonary complications of amoebic

liver abscess occur 20-30% only, despite being frequently found in association with it .

Case report :

26 years old male ,fisherman by occupation resident of periyakupam , chronic alcoholic ,with no known co morbidities presented with complaints of chest pain , breathlessness for one week with history of dysentery 15 days back .On clinical examination had findings consistent of right pleural effusion , CT chest was done which showed right loculated pleural effusion hence USG guided thoracentesis done and aspirate was found to be brown coloured and was sent for analysis. On routine blood investigation ,ALT and AST were mildly elevated .Therefore USG abdomen was performed and found altered echoes in the liver so proceeded with CECT abdomen ,wherein ruptured liver abscess with subdiaphragmatic collection was noted .By the time pleural fluid analysis had arrived ;which was found to be exudative ,acute inflammatory pathology with Entamoeba histolytica trophozoite present in it ,which proved the transdiaphragmatic rupture of amoebic liver abscess .Later patient was put on pigtail drainage and medical management for 2 weeks .

Conclusion :

Doubt of amoebic liver abscess as aetiology of right pleural effusion in young adults is to be considered in clinical settings.

Title: PLEURAL EMPYEMA SECONDARY TO RUPTURED AMOEBIC LIVER ABSCESS - A CASE REPORT

Name of Presenter: **Dr. M. RAJEEV NAIK**
 Authors (or Co-authors): **Dr M. NARENDER**
 Institution/Author Organization: **Osmania medical college, Hyderabad**

INTRODUCTION:

An amoebic liver abscess is an extra-intestinal manifestation of amoebiasis that can present with complaints such as right upper quadrant pain and fever. It might not necessarily be associated with abdominal complaints and can have many other atypical presentations. It may present with lung diseases, cardiac diseases, or brain abscesses. We present a case of a patient with empyema secondary to amoebic liver abscess whose diagnosis was delayed due to an unusual presentation.

HISTORY& PRESENTATION:

A 30-year-old male patient with presented to the emergency department with fever and shortness of breath for the past three weeks.

The SOB was associated with a cough and right lower chest pain. The patient was previously started on antituberculous treatment in a local hospital after he reported there with a low-grade fever, SOB, night sweats, and chest pain. On examination, the patient was in acute distress with SOB; pallor was seen.

On chest examination, there were decreased breath sounds, in the middle and lower zones on the right side.

DIAGNOSIS:

Radiology (Chest X-ray , USG Chest , USG Abdomen and CT chest & abdomen) & Microbiology (Trophozoites seen in wet mount microscopy of Pus sample taken from empyema) confirmed the diagnosis .

MANAGEMENT ; A chest tube was inserted with the goal of draining the pleural fluid collection.

A course of Anti-Amoebicidal drugs given . Video-assisted thoracoscopic surgery (VATS) - decortication and drainage of loculated pockets of pleural fluid were performed.

For Liver abscess management referred to Gastroenterology dept .

LEARNING POINTS /CONCLUSION :

Pleuro-pulmonary amoebiasis is easily confused with other illnesses, and it is treated as pulmonary TB, bacterial lung abscess, and carcinoma of the lung. This case has been presented to highlight the need for high index of suspicion in diagnosing and the importance of early imaging , serological tests , microbiological examination and intervention in treating this case .

Title: CASE REPORT- MUCORMYCOSIS IN A DIABETIC FEMALE

Name of Presenter: **Dr. Prashamsa Chelimala**
 Authors (or Co-authors): **Dr M G Krishna Murthy, Dr. T Pramod kumar**
 Institution/Author Organization: **GANDHI MEDICAL COLLEGE AND HOSPITAL**

INTRODUCTION:

Mucormycosis is the second most common mycosis caused by filamentous fungi. This occurs in severe immunocompromised status. We report a middle age diabetic(otherwise immunocompetent) female with Mucormycosis.

HISTORY:

A 65 year old female, poorly controlled diabetic, Hypertensive, Hypothyroid presented with high grade, intermittent fever for 2

months, cough with greenish expectoration since 2 months and pleuritic chest pain since 2 months. History of loss of weight and appetite present. The patient was treated with repeated courses of antibiotics before presenting to our institution.

PRESENTATION:

SPO2 was 99% with room air. Other vitals were stable. S/E: B/L air entry present. Diminished breath sounds on right infra scapular and infra axillary area. DIAGNOSIS: HIV work up and blood cultures were negative. Thin walled cavitary lesion with adjacent pleural thickening with surrounding consolidation noted in antero-basal segment of right lower lobe on her chest films and CECT. A bronchoscopic (lavage-based) could not yield the diagnosis.. CT Guided biopsy revealed a growth of Mucor.

MANAGEMENT:

Microbiology based treatment with Amphotericin B.

CLINICAL IMPLICATION AND LEARNING POINTS:

Since a high level of mortality occurs in immunocompromised patients with mycoses, an accurate and rapid diagnosis is critical for the early initiation of appropriate anti-fungal treatment.

Title: PULMONARY MUCORMYCOSIS : A SUBACUTE FATAL LUNG DISEASE

Name of Presenter: **Dr. Raghul Raj S.**
 Authors (or Co-authors): **Dr. Saugata Bhaumik, Prof. Dr. Niranjana Kumar Sit , Dr.Pronoy Sen, Dr. Aritra Mahapatra**
 Institution/Author Organization: **BURDWAN MEDICAL COLLEGE AND HOSPITAL, PURBA BURDWAN, WEST BENGAL**

INTRODUCTION

Pulmonary Mucormycosis is a life-threatening opportunistic angio-invasive infection caused by Mucorales fungi of the Zygomycetes class, affecting mostly immunocompromised individuals.

HISTORY

A 52 years old Male with uncontrolled Diabetes of 3 years duration, presented with a 1-month history of progressive shortness of breath, fever with chills, and cough with mucopurulent expectoration associated with 3 episodes of haemoptysis.

PRESENTATION

On examination, the patient was febrile,

tachycardic and tachypneic with oxygen saturation 94% at room air.

DIAGNOSIS

The chest radiograph revealed ill-defined opacity in the right lower zone. CECT Thorax revealed Right Lung Lower Lobe consolidation with Air bronchogram. On Bronchoscopy, right lower lobe mucosa was congested with narrowed lumen. Bronchoscopic biopsy section showed non-septate broad hyphae in a neutrophilic background suggestive of Mucormycosis.

MANAGEMENT

Patient was started on liposomal Amphotericin B at a dose of 3 mg/kg daily and increased to 5 mg/kg daily for 1 month along with intensive blood sugar control with insulin. Patient improved clinically and radiologically after 1 month.

LEARNING POINTS

Amphotericin B, along with surgical resection of the involved areas of the lung and treatment of the underlying disease, is the mainstay of treatment.

Title: ISOLATED PULMONARY HYDATID CYST : A RARE CASE REPORT

Name of Presenter: **DR RAHUL**

VASHRAMBHAI LAIYA

Authors (or Co-authors): **Dr Nimit Khara, Dr Yagnang Vyas, Dr Dhaval Prajapati, Dr Sateesh Patel, Dr Rajiv Paliwal**

Institution/Author Organization: **SHREE KRISHNA HOSPITAL, PRAMUKHSWAMI MEDICAL COLLEGE, KARAMSAD**

Introduction :

Echinococcosis is rare infectious disease in human being that occurs by larval stages of taeniid cestodes of genus Echinococcus. Human cystic echinococcosis is most common presentation. Liver is most common site followed by lungs. Symptoms of lung infestation lead to sudden onset of chest pain, cough, fever and hemoptysis after cyst rupture. Chest X-ray and CT Chest is principal investigation for Pulmonary-hydatid-cyst.

History and Presentation:

23 year old male student came with Dry Cough, fever, left side chest pain since 15 days. Diagnosis: Chest X-Ray S/o homogenous opacity in left upper zone. CECT thorax shows Large sharply marginated, soft tissue density lesion with peripheral rim enhancement and central hypodense area with few linear thin separations seen at left apical region along

anterior mediastinum suggest complex cystic lesion possibly cystic teratoma/?necrotic nodal lesion.

Management:

Pharmacotherapy and/or surgery. Surgical intervention is most preferred treatment of choice. Pharmacotherapy includes Benzimidazoles group of drugs like mebendazole or albendazole.

Clinical implication:

Pulmonary-hydatid-cyst is rare infectious disease of pulmonary system and needs proper management. Delay in management leads to complications, if not taken care may lead to life threatening situation. Surgery for Pulmonary-hydatid-cysts irrespective of size whether intact or ruptured can be safely performed with low morbidity and negligible mortality and is treatment of choice.

Title: PULMONARY HYDATID WITHOUT LIVER INVOLVEMENT: A CASE SERIES

Name of Presenter: **Dr Roopanshi Jain**

Authors (or Co-authors): **Dr Ashish kumar Prakash, Dr Anand jaiswal, Dr Pinky goyal, Dr Sandeep mittal,**

Institution/Author Organization: **MEDANTA-THE MEDICITY**

Pulmonary hydatid is not a rare disease. But raising a suspicion for its diagnosis is limited. There are limited approaches for the diagnosis and treatment of the same. We present here four cases of pulmonary hydatid, without liver involvement, with emphasis on how it was misdiagnosed and received multiple improper treatments and the complications they had land into. Most of our cases presented with cough, sputum and hemoptysis. For the nonspecific signs and symptoms, patient is generally treated on a wrong line of diagnosis. Two of the cases were already treated for abscess and fungal infection. One of the patients was on anti-tubercular treatment. One of our case was secondarily infected with aspergilloma. One of the case was referred to oncologist to start chemotherapy. Interestingly, to raise a suspicion, none of our case had liver involvement. A detailed history revealed expectoration of white salty material in sputum, living with sheep and dog and expectorating grape-like vesicles in sputum. History helped us to put hydatid as one of our differentials. Echinococcal Serology was positive in three cases. Only three cases had on-table appearance of hydatid cyst. All four cases underwent surgical management for complete cure.

There is a need of strong suspicion, a detailed history and a set of proper investigations to diagnose and timely manage the pulmonary hydatid disease.

Title: Nocardiosis in solid organ transplant recipients: a diagnostic conundrum

Name of Presenter: **Dr. SATHISH CHANDAR REDDY. S**

Authors (or Co-authors): **Dr. Tinku Joseph .K , Dr. Sobha Subramaniam**

Institution/Author Organization: **Amrita Institute of medical sciences**

INTRODUCTION :

Nocardiosis is more common in immunocompromised, especially in posttransplant patients, highest in post lung and heart transplants, lowest in liver and kidney transplant. Most common site is the lung.

METHODOLOGY

Patients recruited from department prospective database from may'2020 to october'2020, diagnosed with nocardiosis in post-renal transplant recipients.

RESULTS

61 year male, underwent transplant in 2013, who developed right middle lobe pneumonia, showed mild radiological and symptomatic improvement on parenteral antibiotics. Later, presented with recurrent, non-resolving pneumonia. Bronchoscopy, BAL and biopsy done . BAL grew Nocardia. 57 year male, underwent transplant in 2018, presented with fever and significant weight loss. PET CT showed FDG avid consolidation in Right upper-lobe ,mimicking malignancy. Underwent Bronchoscopy and biopsy. BAL grew Nocardia 11 year boy, underwent transplant in 2019, presented with fever and vomiting. PET CT showed Right upper lobe cavitory consolidation with Mediastinal-lymphadenopathy. EBUS-TBNA Needle wash culture grew Nocardia. All three cases were started on appropriate antibiotics (septran, linezolid or ceftriaxone). Two improved with treatment ,third expired with secondary sepsis.

CONCLUSION

Nocardiosis should always be suspected in renal transplant patients with pneumonia, not responding to standard antibiotic therapy. It may have multitude of presentations as masses with or without cavitation, nodules or consolidation.

RESEARCH**Title: A case of right sided septated pleura effusion with hydatid cyst of liver with cholelithiasis**Name of Presenter: **DR. SHIV KUMAR PANDEY**Authors (or Co-authors): **DR. KUMAR GIRENDRA, DR. ABHIJEET KHANDELWAL, DR. SUNIL MUKATI, DR. ROTHMAN PT, DR. KSHITIZ CHOURASIYA**Institution/Author Organization: **INDEX MEDICAL COLLEGE HOSPITAL & RESEARCH CENTRE****INTRODUCTION:**

If hydatid cyst ruptured in lung, it can cause asphyxia, hemoptysis, anaphylactic shock, respiratory failure, respiratory failure, pneumonia, destroyed liver, bronchoectasis, pulmonary abscess, empyema, pneumothorax, aspergilloma in cyst cavity. If it ruptures in liver, cause infection, rupture of biliary tree, peritoneal & pleural cavity.

AIM:

to detect cause & early management of right sided pleural effusion

METHOD:

We are presenting a case of 54 year male with dyspnoea, chest pain, abdomen pain, shoulder pain from one month. USG- hydatid cyst of liver, right sided septated pleural effusion with passive collapse of lung, mild ascites, cholelithiasis. same finding in HRCT chest. Tube thoracostomy with fibrinolysis was done. But septa was remained. So, Thoracoscopy was done to break septa.

RESULT:

Patient was improved. Lung expanded. We referred patient to surgery department for further management.

CONCLUSION:

A step wise approach & considering all differential diagnosis, we can easily reach to final diagnosis.

Title: BACTERIAL PNEUMONIA CONCEALING PULMONARY GRANULOMATOSIS WITH POLYANGITIS- A DIAGNOSTIC DILEMMAName of Presenter: **SNEHA LEO**Authors (or Co-authors): **MADHUSMITA MOHAPATRA, MANJU RAJARAM**Institution/Author Organization: **JAWAHARLAL INSTITUTE OF POSTGRADUATE MEDICAL EDUCATION AND****Introduction:**

Pulmonary cavity is a thick walled, gas filled space of lucency or low-attenuation, within pulmonary consolidation or a mass. Cavities may result from malignancy, inflammation, infection, vascular, trauma or may be congenital.

History and presentation:

A 60 year-old male, chronic smoker and alcoholic, diabetic with uncontrolled blood sugars presented with complaints of cough with mucopurulent expectoration, mild hemoptysis and fever for the past 15 days. For the above said complaints he was treated with 1 week of IV antibiotics in an outside hospital and was referred as symptoms worsened. On admission his vitals were stable. Total WBC counts -36,000 and RFT was deranged.

Diagnosis and management :

Chest Xray showed right middle zone a large cavity and left side mild pleural effusion. Sputum investigations did not turn up convincing. FOB done and BAL fluid grew klebsiella pneumoniae. Fungal culture and CBNAAT were negative. Patient was receiving sensitive antibiotics however clinically and radiologically worsened. Hence USG guided biopsy was attempted, which revealed biopsy-noncaseating granulomatous inflammation with fibrinoid necrosis around the vessels. Blood C-ANCA was elevated 4 times from the baseline.

Conclusion:

Clinical and radiological and microbiological presentation deviated the diagnosis from Pulmonary Wegener's granulomatosis. Hence a broad approach with factual clinical suspicion is essential while diagnosing pulmonary cavity diseases.

Title: A CASE OF CHRONIC CAVITARY PULMONARY ASPERGILLOSIS, A RARE ENTITYName of Presenter: **SOUMYADEEP GHOSH**Authors (or Co-authors): **SIBES KUMAR DAS**Institution/Author Organization: **MEDICAL COLLEGE HOSPITAL****Background:**

Several chronic form of Aspergillus infections exist, among which chronic cavity pulmonary aspergillosis runs a progressive course, affects immunocompetent individuals with a pre-existing lung disease

Case Summary:

A 28 years old immunocompetent male was admitted with dry cough and intermittent haemoptysis for 1 year. He had history of hospitalisation for massive hemoptysis six months ago. He had past history of pulmonary tuberculosis 5 years back and took anti tuberculous drug for 6 months and was declared cured. Chest X-ray PA view done at the end of anti tuberculosis therapy showed presence of a residual cavity in left mid zone. Recent chest X-Ray PA view revealed presence of thick walled cavities in right and left middle zones. Chest CT revealed thick walled cavities in right middle lobe and left lingular lobe. Level of Aspergillus fumigatus specific IgG antibody was high. He was diagnosed as a case of CCPA with background of healed pulmonary tuberculosis. He was put on tablet itraconazole 200mg twice daily. Follow up visit after one month showed symptomatic improvement.

Conclusion

In any patient presenting with pulmonary cavities with past history of cavity lung diseases i.e-Tuberculosis, possibilities of CCPA should be considered and thoroughly investigated.

Title: Post primary PTB / ASPERGILLOMA/ COVID SUSPECTED/ TRACTION BRONCHIECTASISName of Presenter: **DR SRISHTI GOUR**Authors (or Co-authors): **Dr. Kumar Girendra, Dr. Abhijeet Khandelwal, Dr. Manjul Bajpayee**Institution/Author Organization: **INDEX MEDICAL COLLEGE AND RESEARCH CENTER****INTRODUCTION-**

Aspergillus is an opportunistic fungal pathogen that may cause devastating disease in immunocompromise hosts.

AIM-

To diagnose aspergilloma in a case covid positive patient with fibrocavitary changes.

METHOD-

We describe case of a man with clinical diagnosis of aspergilloma in covid positive patient.

CASE-

A 60yrs old male presented to the opd with c/o cough with expectorant yellowish white in colour, mild fever since months at night, SOB grade 4 since 3 days, loss of taste and

smell since 2 days, appetite loss, wt loss since month, o/e pt was conscious, oriented, restless, hb-14.7, wbc-16000/u, ESR-50MM, N/L/M/ E/B-85/12/02/00/00, CRP-1/8th positive, urine c/s-plenty of pus cells, RTPCR-positive, CXR PA view shows b/l infiltration both lower lung fields, homogenous opacity in rt hilar region. HRCT-CT severity score 6/25, patchy ground glass opacity in rt lower lobe and lingula, fibrocavitary changes with adjacent traction bronchiectasis in rt upper lobe, left upper lobe has soft tissue density area surrounding crescent of air most likely s/o fungal ball.

CONCLUSION-

Aspergillosis should be considered in COVID positive with fibrocavitary changes who are not responding to initial management.

Title: First Case Report of Nocardia beijingensis Infection in a COVID-19 Patient in India

Name of Presenter: **DR SWADIP MISHRA**

Authors (or Co-authors): **Dr Amit Dhamija, Dr Abhinav Guliani**

Institution/Author Organization: **Sir Ganga Ram Hospital, New Delhi**

Introduction

Nocardia species are delicate, filamentous gram-positive, aerobic, acid-fast, branching rods. Nocardia infections are divided into pulmonary, disseminated, and cutaneous nocardiosis.

History

A 69-year-old male patient with hypothyroidism and a history of pulmonary tuberculosis presented with complaints of fever and shortness of breath. He was evaluated for COVID-19 and found to be positive. His HRCT thorax reported bilateral peripheral, subpleural, and diffuse areas of ground glassing with a septal thickening.

Presentation

The patient had hemoptysis. Vital signs at admission were stable. Physical examination was unremarkable. Diagnosis Laboratory results showed leucocytosis. Sputum evaluation revealed a positive Kinyoun Stain for acid-fast organisms resembling Nocardia. Sputum culture was positive for Nocardia beijingensis.

Management

The patient was allergic to sulphamethoxazole drugs. So, was started on Meropenem and Amikacin as per the sensitivity report. Repeat HRCT thorax showed diffuse ground-glass opacities with

reticular stranding and intralobular thickening involving bilateral lung fields with few areas of crazy pavement appearance. After 2 weeks of treatment with Meropenem and Amikacin, repeat sputum analysis was done, which reported negative.

Clinical Implications

Nocardia beijingensis is believed to have originated in Southeast Asia and has been associated mainly with infections in immunocompromised. However, this is the first case report of Nocardia beijingensis in an immunocompetent COVID-19 patient in India.

Title: An unusual presentation of hemoptysis

Name of Presenter: **Syed ahamed mufthah**

Authors (or Co-authors): -

Institution/Author Organization: **Sawai man singh medical college and attached hospitals, Jaipur**

INTRODUCTION

Amoebiasis is a spectrum of disease ranging from asymptomatic colonisation (90%) to invasive amoebiasis (10%). Invasive amoebiasis presents as intestinal colitis more commonly and liver abscess and rarely involving lungs.

METHODOLOGY

A 32 yr old alcoholic male presented with complaints of blood in sputum for 2 days, right side chest pain dull in nature radiating to right shoulder since 10 days, low grade fever since 10 day, cough with expectoration mucoid in nature since 10 days. On examination, VF and VR were increased in infra mammary, infra axillary areas and had also dull note on percussion. TLC was 38,000, Chest xray showed right lower zone opacity with air under diaphragm, USG abdomen revealed hypo echoegenic lesion in liver. CECT chest showed consolidation with surrounding GGO's in the anterior segment of right lower lobe. CECT abdomen showed necrotic lesion in the right superior lobe of liver with underlying pus, pig tail insertion done pus and around 800ml pus drained. Entamoeba specific serum IgG was positive and patient started on Inj metronidazole, iv fluids. Patient symptomatically improved.

RESULT AND CONCLUSION

Invasive amoebiasis involving the lungs is an rare and life threatening complication. Hence timely diagnosis and appropriate management can decrease the mortality and hasten the recovery period.

Title: A Rare finding of Aspergillus niger as a cause of Pyopneumothorax in an Immunocompromised Patient: A Case Report

Name of Presenter: **THAMEE SHAHID**

Authors (or Co-authors): **Mohammed Abdul Basith, Syed Mahmood Ahmed, Aleemuddin NM, Fahad Abdullah, Ashfaq Hasan**

Institution/Author Organization: - **Deccan College of Medical Sciences**

Fungal etiologies are very rare as causes of pleural effusion. We report a case of a 68 year-old man who was commenced on a trial of ATT initiated before he presented to us a month later with a pyopneumothorax. Evacuation of the pleural collection with microbiological analysis (fungal culture) revealed Aspergillus niger. The patient was initiated on treatment with Voriconazole with consideration for decortication. At follow up the patient was pending decortication by had improved substantially both clinically and radiologically. Fungal diagnoses account for ~1% of all pleural effusions. Very few cases of Aspergillus niger in the pleural fluid have been mentioned in literature.

Title: A Case Report: 42-Year-Old Female Presenting with Chronic Shortness of Breath and Cough

Name of Presenter: **Dr. H Vamshi Krishna**

Authors (or Co-authors): **Dr Chaitanya Kumar, Dr Shankarappa Mudgal**

Institution/Author Organization: **Navodaya Medical College and Research Centre, Raichur**

Introduction:

A 42-year-old female presents with complaints with SOB on exertion, associated with cough, non-productive since 3 months. She was seen for similar complaints by a physician 3 months back. At that time, she was diagnosed with acute bronchitis, treated with bronchodilators, empirical antibiotics and tapering short course steroids. No improvement in symptoms. No history of fever, night sweats, chest pain, vomiting, diarrhea, neurological changes, increased bruising or bleeding. No history of allergies, tuberculosis, previous hospitalization, smoking, alcohol intake, tobacco chewing, known comorbidities. Physical examination: Vitals stable. She has diffuse rales and mild wheezing; tachypneic.

Investigation:

Pancytopenia (Hb%-7.5gm%, platelet count-65000 per mm³). Blood cultures negative for bacterial growth and gram staining. Chest X-ray - mild interstitial

pneumonitis. CT chest - diffuse centrilobular micronodular pattern with focal consolidation. Third day of broad spectrum antibiotics showed no improvement in symptoms, further history taking revealed that her husband breeds pigeons. Diagnostic bronchoscopy with BAL returned cloudy and muddy fluid. Cytology showed Histoplasma capsulatum.

Diagnosis:

Acute pulmonary histoplasmosis.

Management:

In symptomatic patients, treatment with Itraconazole is indicated, duration of 6-12 weeks. Response monitored with chest X-ray.

Clinical implications:

While illnesses such as pneumonia are prevalent, it is important to keep in mind that rare diseases are possible. Collecting a complete history is important.

Title: ISOLATED PULMONARY CYSTICERCOSIS PRESENTING AS A MASS LESION

Name of Presenter: **DR VATSAL BHUSHAN GUPTA,**

Authors (or Co-authors): **DR PARUL MRIGPURI, PROF B.K.MENON**

Institution/Author Organization: **VALLABHBHAI PATEL CHEST INSTITUTE**

INTRODUCTION

Cysticercosis confined only to the lungs is very unusual. The conventional manifestation of cysticercosis in the lung is the presence of pulmonary nodules. We report a case of isolated pulmonary cysticercosis masquerading as mass lesion.

CLINICAL PRESENTATION

60 years old non-smoker male with chief complaints of cough, breathlessness and intermittent hemoptysis from 2 years and left-sided chest pain from 2 months. CXR shows a homogenous opacity in the left upper zone done 1.5 years back. He had history of consumption of ATT with no symptomatic relief. Routine workup was negative. Repeat CXR showed significant increase in the size of the lesion and appearance of new rounded opacities on the contralateral side. CECT chest revealed heterogeneously enhancing solid soft tissue tumor with multiple areas of necrosis. CT guided trucut biopsy showed diffuse parenchymal changes with ill-defined granulomas. Serology was positive against Taenia solium with IgG values of 2.61IU/L, measured by ELISA. Provisional diagnosis of

isolated pulmonary cysticercosis was made and patient was started on tab Albendazole (15mg/kg) along with oral prednisolone. Patient showed symptomatic and radiological improvement.

CONCLUSION

Our case describes novel manifestation of human cysticercosis. Pulmonary cysticercosis may present as mass lesion mimicking malignancy.

Title: Lung abscess with pneumothorax in a case of COVID-19 patient.

Name of Presenter: **Dr. Vineet Kulkarni**

Authors (or Co-authors): **Dr. Gajanan S. Gaude Prof. and HOD of Respiratory Dept, Dr. Bhagyashree Patil, Dr. Jyoti Hattiholi, Dr. Gautam S., Dr. Kirankumar Pujar, Jawaharlal Nehru Medical College and KLE's Dr. Prabhakar Kore H**

Institution/Author Organization: **Jawaharlal Nehru Medical College and KLE's Dr. Prabhakar Kore Hospital, Belgaum – 590 010**

Introduction:

COVID-19 has swept the globe. Much less is known about the disease, and is associated with complications like ARDS, septic shock with fatal outcome. We present a case of lung abscess with pneumothorax in a COVID-19 patient as a post COVID sequel in diabetic patient.

Aim:

To study and evaluate lung abscess with pneumothorax as post COVID sequel in diabetic.

Method and Results:

40 year male with diabetes admitted for cough and breathlessness. Diagnosis of COVID-19 confirmed by RT-PCR and other radiological findings and other tests. He was treated with antibiotics, oxygen, and supportive treatment and discharged on the 10th day. Patient re-admitted 10 days after discharge with breathlessness and investigations showed lung abscess of pseudomonas organism with pneumothorax. Treated with ICD and antibiotics like clindamycin, beta lactam and discharged after removal of ICD and clinical stability.

In conclusion:

It is observed from this patient study that, patient with co-morbidities like diabetes have a high prevalence of post COVID sequel and complications which may be serious and fatal.

Title: Ruptured Hydatid Cyst - A case report

Name of Presenter: **Dr Vinodha K**

Authors (or Co-authors): **Dr M G Krishnamurthy, Dr T Pramodkumar, Dr P Eshwaramma, Dr G Ramulu, Dr V Veena**

Institution/Author Organization: **Gandhi medical college and hospital, Secunderabad**

INTRODUCTION

Hydatid cyst is caused by Echinococcus granulosus. Liver is the most common site of involvement followed by lung. It is usually diagnosed as an incidental finding in chest imaging. Hydatid cyst may rupture into pleural space or bronchus. Ruptured hydatid cyst has high risk of mortality.

HISTORY

A 17 year old female presented with complaints of left sided chest pain, cough with expectoration, hemoptysis, loss of weight and loss of appetite, H/O contact with dog.

PRESENTATION

Chest movements decreased and dull note in left side. Absent breath sounds in left side.

DIAGNOSIS

Chest x ray revealed cavity with air fluid level in left hemithorax. CT chest showed left upper lobe cavitary lesion with air fluid level and fluid shows enhancing floating membrane suggestive of ruptured hydatid cyst.

MANAGEMENT

Cyst excision and marsupialization was done.

CLINICAL IMPLICATIONS

Ruptured hydatid cyst is often difficult to diagnose because it can be misdiagnosed radiologically as lung abscess or hydropneumothorax. Early diagnosis will prevent severe complications and reduces mortality rate.

Title: Role of Chest Imaging in Diagnosis of Community Acquired Pneumonia

Name of Presenter: **Aditya Kr. Gautam**

Authors (or Co-authors): **Adesh Kumar, Shivam Priyadarshi, Ashish Kr. Gupta, Prashant Yadav**

Institution/Author Organization: **Uttar Pradesh University of Medical Sciences, Saifai, Etawah U.P.**

Background

The diagnosis of Community Acquired

Pneumonia(CAP) is made by symptoms of Respiratory infection, compatible physical examination and new infiltration in chest radiograph. According to most clinical guidelines, the supposed gold standard tool for diagnosing pneumonia is a chest X-ray (CXR) which can distinguish pneumonia from other respiratory tract infections.

Aim and objectives

To study the Radiological Profile and it's role in diagnosis of community Acquired Pneumonia.

Materials and methods

Chest X-rays was done in 125 patients of CAP admitted in Respiratory Medicine, UPUMS Saifai, Etawah U.P. during study period from January 2019 to March 2020. HRCT Thorax was done in 53 out of 125 CAP patients.

Results

Left lower zone (32%) being the most common zone involved while left middle zone (8%) was least commonly involved. Bilateral infiltration was seen in 14.4%. Patchy consolidation (75%) was the most common Chest X ray finding followed by multilobar infiltration (37%). On HRCT Thorax, consolidation (86.8%) was the most common feature followed by Ground glass opacity (54.7%).

Conclusion and Clinical Implication

Chest radiograph is essential to make clinical diagnosis of CAP. However, sputum culture is vital to arrive at etiology in CAP.

Title: Experience of CLABSI prevention measures in a medical ICU in a tertiary care hospital in north India.

Name of Presenter: **Mahendran A J**

Authors (or Co-authors): **S Chakrabarti, R Gaiind, N Gupta, P Ish**

Institution/Author Organization: **Safdarjung Hospital**

INTRODUCTION-

Central line associated blood stream infection (CLABSI) is one of the major Hospital acquired infections, causing significant of morbidity and mortality.

AIM:

To study the change in CLABSI rate after implementation of intensive educational interventions for healthcare workers pertaining to bundles of infection prevention.

MATERIALS AND METHODS:

In 6 months observation period, 61 intensive

care unit (ICU) cases with central line were followed for development of CLABSI. In the post intervention (9 months) phase, 103 cases of central line were followed in the same ICU and the educational interventions were reaped thrice three monthly.

RESULTS-

Even though was no overall improvement in CLABSI rate after the intensive educational interventions intervention in the two groups; a significant fall (25.3 Vs 8.1) in CLABSI rate was seen in the immediate post-intervention month along with significant improvement in compliance of practices like hand hygiene ($p < 0.05$). Besides, there was a 15.5% reduction in CLABSI when the acute respiratory distress syndrome (ARDS) predominant months in pre and post intervention phases were considered.

Conclusion:

Intensive teaching programmes can cause significant compliance to hygiene practices and possible reduction in CLABSI in resource limited settings. However, such interventions need to be regularly repeated and strictly to have a beneficial effect.

Title: PAPER ON BI-DIRECTIONAL INCIDENCE OF COVID-19 AND TB

Name of Presenter: **ALLAMPATI BALA SREE SOWMYA**

Authors (or Co-authors): **Dr. Moksheswarudu, Dr. K. Sailaja**

Institution/Author Organization: **Kurnool Medical College**

INTRODUCTION:

Covid 19 is declared pandemic with around 9 million cases in India. Covid 19 and TB have similar clinical presentation and diagnosis of co-infection is likely to be missed which leads to significant morbidity and mortality.

AIMS:

1) To know the incidence of TB in covid 19 positive cases 2) To know the incidence of covid 19 in patients diagnosed with TB

METHODOLOGY:

2004 covid 19 positive patients between Sept 9th-Oct 31st in Kurnool district, A.P, were tested for PTB through sputum CBNAAT/ TRUNAAT. 1250 cases which were diagnosed to have TB and were on follow-up were tested for covid 19 by nasopharyngeal swab RTPCR/ TRUNAAT.

RESULTS:

Around 1.25% of covid 19 positive patients were diagnosed to have PTB and around 1.60% of TB patients were diagnosed to have covid 19 infection.

CONCLUSION:

Lung damage caused by covid 19 virus and use of immunomodulators for treatment of moderate to severe covid 19 predisposes patients for new TB infection or activation of latent TB. Coexisting TB will predispose to severe covid 19 illness. Missing the diagnosis of covid 19 and TB co-infection will lead to significant morbidity and mortality in high TB burdened countries like India. So bi-directional covid 19 and TB testing will help to improve clinical outcomes.

Title: Study of Secondary Bacterial Pathogens infecting Patients of Pulmonary Tuberculosis and their Antibiotic Sensitivity at SMS Medical College, Jaipur

Name of Presenter: **DR.AMIT CHAUHAN**

Authors (or Co-authors): **DR.MANOJ SAINI, DR. CHAND BHANDARI, DR.NARENDRA KHIPPAL (SENIOR PROFESSOR), DR.JAVED QURESHI, DR.GEETA SOLANKI**

Institution/Author Organization: **SMS MEDICAL COLLEGE, JAIPUR**

Background:

Pulmonary Tuberculosis (TB) is a potentially serious infectious disease caused by Mycobacterium tuberculosis. Secondary bacterial infection is one of the most important complications in these patients. Secondary bacterial infection causes worsening of clinical course in TB patients and this ultimately leads to higher mortality among pulmonary TB patients. Materials and Method: In this single centre hospital based observation study, 115 pulmonary tuberculosis patients age above 14 years, admitted in our hospital with suspicion of secondary infection clinically or having complaints like fever, cough, chest pain, shortness of breath, increased sputum production, increase in sputum purulence in spite of taking antitubercular therapy or patients with high total leucocyte counts were included.

Results:

Out of 115 sputum samples, Staphylococcus was found in 31.30 % patients, followed by Pseudomonas (17.39%), Streptococcus (12.17%), Escherichia coli (10.43%), Enterobacter (7.83%), Klebsiella (6.09%), Acinetobacter and Burkholderia in 1 % cases. According to antibiotic sensitivity pattern antibiogram was made.

Conclusion:

Secondary bacterial infections are common in pulmonary tuberculosis patients. Early diagnosis and treatment with appropriate antibiotics should be considered along with antitubercular treatment. Detailed evaluation with culture and antibiotic sensitivity will help to choose the appropriate antibiotics.

Title: STUDY OF CLINICORADIOLOGICAL PROFILE, TREATMENT AND OUTCOME OF LUNG ABSCESS PATIENTS ADMITTED IN A TERTIARY CARE HOSPITAL

Name of Presenter: **DR. ANIRBAN MONDAL**

Authors (or Co-authors): **PROF.(DR.)**

ATIN DEY, ASSO PROF.(DR.) SOMNATH BHATTACHARYA

Institution/Author Organization: **R.G.KAR MEDICAL COLLEGE & HOSPITAL, KOLKATA**

Introduction:

A lung abscess is a localized area of destruction of lung parenchyma where infection by pyogenic organisms cause tissue necrosis and suppuration leading to formation of cavities.

Aims and objectives:

To examine clinical presentation, radiological features, to study the causative organisms, different outcomes of lung abscess, to assess the correlation between risk factors and outcomes.

Materials and methods:

It is a descriptive, observational and cross-sectional study where 50 lung abscess patients, admitted in Dept. Of Respiratory Medicine, R.G.Kar Medical College and Hospital were included and evaluated with history taking, clinical examination, laboratory investigations. They were treated with proper antibiotics after culture sensitivity and were followed up after 6 weeks.

Results and analysis:

of the patients were male and above 60 years of age. Poor oral hygiene was most common predisposing factor. Predominant symptoms were cough, fever and expectoration. Staphylococcus aureus was the most common organism followed by klebsiella pneumoniae, mycobacterium tuberculosis. At 6 week follow up, 50% patients were cured, 34% developed empyema, 16% had sepsis.

Conclusion:

Lower Haemoglobin(<8g%), HIV reactive status was significantly associated with mortality.

Empyema was higher in elderly patients. Diabetes was significantly associated with sepsis.

Title: A STUDY ON CLINICO-RADIOLOGICAL PROFILE AND TREATMENT OUTCOME OF EMPYEMA THORACIS PATIENT ADMITTED IN A TERTIARY CARE HOSPITAL AT KOLKATA.

Name of Presenter: **Dr ARITRA GANGULY**

Authors (or Co-authors): **DR (ASSOC. PROF.) SOMNATH BHATTACHARYA, DR (PROF.) ATIN DEY**

Institution/Author Organization: **R. G. KAR MEDICAL COLLEGE AND HOSPITAL**

Introduction:

Empyema thoracis by definition is pus in the pleural space. Patients having pleural effusion with thick, purulent appearance and a supportive evidence of infective etiology were included in our study.

Aims and objectives:

To evaluate clinical presentation, radiological, microbiological profile and to study the risk factors, complications & treatment outcomes of empyema thoracis patient admitted in a tertiary care hospital.

Methodology:

History, clinical examination, pleural fluid study, blood and radiological investigations of 50 empyema thoracis patient were done periodically over six months and the data had been analyzed statistically.

Results:

Majority patients were male above 60 years of age with diabetes mellitus, smoking, gastro-esophageal reflux and past history of tuberculosis were predominant risk factors. 72% patient had known causative organism of their empyema thoracis of which M. tuberculosis was highest followed by S. pneumoniae. Bronchopleural fistula and empyema necessitans were two complications noted. Pleural fibrosis, fibrothorax, trapped lung, persistent empyema & death were the adverse outcomes. Most of these complications and adverse outcomes were more among the tubercular empyema thoracis patient, diabetics and those having multiple encysted pleural collection.

Conclusion:

Patients of tubercular empyema thoracis especially with diabetes mellitus were found to have more complications and adverse treatment outcomes.

Title: Study of 50 cases of Empyema

Name of Presenter: **Dr. Arjunsinh Asvinsinh Gohil**

Authors (or Co-authors): **Dr. Chintan Shah**

Institution/Author Organization: **B J Medical College Ahmedabad**

Introduction:-

Empyema is collection of frank pus in pleural space.

Aims, objective:-

To study the clinical profile, etiological factors, radiological manifestation and laboratory diagnostic findings of empyema

Methodology:-

Descriptive clinical evaluation study of 50 patients above the age of 12 years who were admitted with the diagnosis of empyema was done at TB Hospital, civil hospital ahmedabad, Asarwa from March 2018 to Nov 2019 with proper inclusion and exclusion criteria. Result:- Age: 12-19 yrs(10%) 20-29yrs(20%) 30-39yrs(28%) 40-49yrs(28%) >50yrs(14%)

Clinical presentation:-

Fever(100%) Cough(100%) Dyspnea(35%) Chest pain(40%) Pain Abdomen(2%) Duration of symptoms:- <7days(20%) 7-14days(50%) 15-21 days(30%)

Predisposing factors :-

Pneumonia(86%) Liver abscess(2%) Tb(10%) General Physical

Examination:-

Pallor(44%) Facial puffiness(6%) Cyanosis(3%) Shock(4%) Hypertension(4%) USG:- Multiloculated(58%) Nonoculated(40%) Multiloculated with Pyopneumothorax(1%) Pleural fluid:- Glucose <40(84%) >40(16%) LDH <1K(24%) >1K(76%) Macroscopy Pus(82%) Seropurulent(18%) Protein <3(6%) >47(94%) Culture:- no growth(80%) Growth(20%) P.Aruginosa 4% S.pneumoniae 6% Klebsiella 10%) Treatment:- Tube thoracostomy(44%) Thoracoscopic debridement(14%) Thoracotomy&Decortication(42%)

Conclusion:-

Empyema continues to be prevalent in our country particularly in the lower socioeconomic strata due to the delay in seeking medical care, inappropriate antibiotics, dosages and duration of it. Empyema fluid is in present scenario with prior antibiotic

treatment, fluid is sterile most of times. Pleural fluid biochemical parameters vary depending on stage of empyema, severity and previous antibiotic therapy. Ultrasonography is ideal investigation for staging, detecting loculations and planning treatment. In stage I empyema with no loculations, antibiotics with tube thoracostomy would suffice. But in stage II empyema there is a changing trend towards VATS in an experienced, tertiary care hospital. Complicated empyemas however will require Thoracotomy and decortication.

Title: Study of Clinical, Microbiological profile and treatment outcome of Pyopneumothorax in a Tertiary care Hospital.

Name of Presenter: **K.SHYAMALA PRAGNYA**
 Authors (or Co-authors): -
 Institution/Author Organization: **ANDHRA MEDICAL COLLEGE**

INTRODUCTION :

Pyopneumothorax is defined as the collection of pus and air in the pleural cavity and is treated with antibiotics/ antitubercular treatment depending on aetiology & Intercostal tube drainage tube or surgery.

AIM :

To study Clinical, Microbiological profile & treatment outcome of Pyopneumothorax in a Tertiary care Hospital.

Materials & Methods :

The present study was a retrospective study in 40 patients admitted with pyopneumothorax in Department of Pulmonary Medicine, Andhra Medical College, Visakhapatnam from May 2019 - December 2020. Demographic, clinical, treatment and outcome data were collected from hospital data and analysed. Results: Among 40 patients included in study males 36 were & females were 4. About 30% (12) were immunocompromised, 10 were diabetic & 2 were HIV positive. Pus for culture was pseudomonas 32%, klebsiella pneumonia 15%, staphylococci 5%, streptococci 2% & E coli 2%, sterile 42.5%. Pus for CBNAAT is positive in 37.5%. All cases were managed with intercostal tube drainage with antibiotic coverage/Anti tubercular treatment. Outcome is complete lung expansion in 50%, partial expansion 30%, 17.5% referred to thoracic surgery, 2.5% expired.

Conclusion :

Intercostal drainage with under water seal was the treatment of choice in most of the patients. Tuberculosis pyopneumothorax is associated

with poor outcome.

Title: BACTERIOLOGICAL AND CLINICAL PROFILE OF COMMUNITY ACQUIRED PNEUMONIA (CAP) IN A TERTIARY CARE CENTRE

Name of Presenter: **Dr.NISNA. MEDAPPIL**
 Authors (or Co-authors): **Dr.RESHMI.S.NAIR, Dr.KAMALA.R**
 Institution/Author Organization: **GOVERNMENT MEDICAL COLLEGE, TRIVANDRUM**

INTRODUCTION

Pneumonia is a common cause of infection related mortality. Pneumococci is the commonest cause of bacteremic pneumonia.

AIMS AND OBJECTIVES

To determine the bacteriological and clinical profile of patients with CAP in a tertiary care centre, and the proportion of Pneumococci in the sputum of these patients.

METHODOLOGY

This was a Cross sectional study with sample size of 135. All patients with CAP were evaluated with routine blood investigations, sputum gram stain, culture & sensitivity. The details were assessed with a structured questionnaire. Data analysed using Epi-info 7.

RESULTS

Of the 145 patients studied, the mean age was 60, M:F = 105:40. 64.8% patients were smokers. The commonest presenting symptom was cough (95.86%), commonest respiratory comorbidity was COPD (40%) and normal flora in sputum culture for 86 patients (59.31%; 95%CI: 50.85%-67.38%). Commonest organism isolated was klebsiella in 28 patients (19.31%; 95%CI: 13.23%-26.69%), followed by Pseudomonas in 14 (9.66%; 95%CI: 5.38%-15.67%), Pneumococci in 8 (5.52%; 95%CI: 2.41%-10.58%). 86.4% isolates were pansensitive. The factors associated with infection with difficult organisms (Pseudomonas, Klebsiella and Acinetobacter) are diabetes (p = 0.02) and smoking (p = 0.02).

CONCLUSION

Sputum culture was negative in 59.31%. Pneumococci could be isolated only in 5.52%.

Title: IN PREDICTION OF SEVERITY OF COMMUNITY ACQUIRED PNEUMONIA (CAP), A DROP IS EQUIVALENT TO CRB 65

Name of Presenter: **DR.P.TANUJA**

Authors (or Co-authors): -

Institution/Author Organization: **ANDHRA MEDICAL COLLEGE**

INTRODUCTION:

The A-DROP scoring system assesses the following: 1. age (male > or = 70 years, female > or = 75 years) 2. dehydration 3. respiratory failure (Spo2 < or = 90% or Pao2 < or = 60 mm Hg) 4. orientation disturbance (confusion) 5. low blood pressure (systolic bp < or = 90 mm Hg). CRB-65 assesses (confusion, respiratory rate > or = 30 /min, low blood pressure (diastolic < or = 60 mm Hg or systolic < 90 mm Hg and age > or = 65 years). These are the scoring systems used for assessing severity in CAP. These are used to assess severity of pneumonia where first day blood urea level values are not available.

AIM :

To compare the efficacy of A-DROP & CRB 65 in predicting severity of CAP

MATERIALS AND METHODS:

Observational study was conducted on patients with CAP hospitalised at GHCCD. IN HOSPITAL MORTALITY after admission was compared following assessment of severity using the A-DROP, CRB 65 scoring systems. RESULTS: 32 patients were taken, of which males were 17 and females were 15, of which four patients were dead, 28 were discharged from hospital. Both A-DROP and CRB 65 scores were higher in dead patients.

CONCLUSION:

A-DROP can be used to assess severity of CAP and gives similar results to CRB - 65

Title: STUDY OF CLINICAL AND BACTERIOLOGICAL PROFILE OF COMMUNITY ACQUIRED PNEUMONIA IN A TERTIARY CARE CENTRE

Name of Presenter: **Dr.Saravanan MC**
 Authors (or Co-authors): **Dr.Ghanshyam Verma**
 Institution/Author Organization: **Sree Balaji Medical College and Hospital**

Introduction

Community acquired pneumonia (CAP) is a common clinical problem. The aim of our study was to obtain comprehensive insight into the clinical and bacteriological profile of CAP requiring hospitalization. Material & Methods: The study population consisted of 100 patients admitted with the diagnosis of CAP. Severity of CAP assessed under CURB-65 criteria and

their outcome monitored. Sputum was the most common etiological source of organism isolation followed by blood. Data was collected / analysed by appropriate statistical analysis for categorical outcomes with differences, considered significant if p-value < 0.05. Results Maximum number of patients presented with cough, followed by fever. Sputum culture showed predominantly Streptococcus pneumoniae in 42% followed by Klebsiella pneumoniae in 22%, Staphylococci aureus in 10%. Common predisposing factors were smoking, alcoholism, diabetes mellitus, COPD, Old PTB treated, BA and Bronchiectasis. In the study the mortality rate was 2%. Discussion Age group above 50 years and males are most commonly affected. COPD was the most common pre-existing respiratory illness and Diabetes Mellitus was the most common co-morbidity observed in patients affected with CAP. The predominant symptom seen is cough followed by fever. The most common pathogen was found to be Streptococcus pneumoniae. Chest radiograph in our study populace revealed right sided disease (56%) more than left sided disease (34%) and with bilateral involvement in 10%. Mortality rate was 2%.

Title: Clinical and Bacteriological profile of patients with Community Acquired Pneumonia at rural tertiary care centre of Western U.P.

Name of Presenter: **Dr. SHIVAM PRIYADARSHI**
 Authors (or Co-authors): **Dr. Adesh Kumar, Dr. Amit Singh, Dr. Ashish Kumar Gupta, Dr. Dhiraj Kumar Srivastava**
 Institution/Author Organization: **Uttar Pradesh University of Medical Sciences, Saifai, Etawah**

Introduction

Community acquired pneumonia (CAP) remains common and serious illness despite availability of potent anti-microbial agents. Aim and Objectives The present study aims to study the Clinical and Bacteriological Profile of Community Acquired Pneumonia in patients attending OPD/IPD at UPUMS, Saifai, Etawah (U.P). Methodology A total of 125 admitted patients during study period of 2019-20 were enrolled for the study who met inclusion and exclusion criteria. Patients were admitted based on CRB65 score, hypoxia and presence of unstable comorbidities. Apart from clinical and radiological evaluation, patients underwent microbiological studies. Results Mean age was 50.5±17.2 years with 80 males and 45 females. Cough(99.2%) was most common presenting symptom followed by fever(98.4%). COPD(25.6%) was

most common comorbidity followed by Past history of Pulmonary Tuberculosis(22.4%) and Type2 DM(8.8%). Bacterial growth was present in 72.8% cases with predominance of Gram negative bacilli (83.5%). Klebsiella pneumoniae(35.5%) was the most common bacteria isolated followed by Escherichia coli(15%) and Pseudomonas aeruginosa(14%). Most of the isolates were resistant to Cotrimoxazole and Ertapenem. 16.8% patients required ICU admissions. Overall, Mortality rate was 4% while among ICU admissions, it was 24%. Conclusion Avoidance of risk factors, use of severity parameters for hospitalisation, sputum culture and use of specific antibiotics are of paramount importance in management of CAP.

Title: PULMONARY COMPLICATIONS IN TREATED SWINE FLU H1N1 PATIENTS WITH NO PREVIOUS LUNG DISEASE

Name of Presenter: **Dr. SUBASH E**
 Authors (or Co-authors): **DR . GUNJAN SONI, DR. MANAK GUJRANI**
 Institution/Author Organization: **Sardar patel medical college ,Bikaner**

OBJECTIVES:

To assess the pulmonary sequela in patients of swine flu after treatment with no respiratory disease previously.

METHODS:

The study was conducted in 50 patients who attended Respiratory Medicine OPD within a period of 12 months following treatment for H1N1. They were assessed clinically, radiologically and PFT.

RESULTS:

Out of 50 subjects, female : male ratio was 32:18. Mean age group was 40. Mean duration of symptoms was 7 months with commonest reported being dry cough (72%) , breathlessness (60%), chest tightness (28%) and chest pain (20%). Spirometric revealed restrictive pattern in 16(32%) with moderate to severe restriction in 7(14%) subjects. 6(12%) patients had obstructive pattern of which 2 showed bronchial reversibility, 4(8%) showed mixed pattern. 24(48%) had normal spirometry. DLCO done in patients with abnormal spirometry findings (26), 14(54%) had normal diffusion, 8 (31%) had mild reduction, 4 (15%) with moderate to severe reduction. On HRCT chest, 12(24%) showed GGO, 10(20%) had centrilobular nodules, 6(12%) showed consolidation patch, 3(6%) had NSIP pattern and 2(4%) had traction bronchiectasis. Rest 17(34%) had no HRCT

abnormalities.

CONCLUSION:

From our study it shows around 60% subjects had symptoms for one year post H1N1. 52% and 66% had changes in lung function and HRCT respectively .

Title: A Clinical, Radiological and Microbiological profile of Lung abscess in a Tertiary care hospital

Name of Presenter: **Dr. P .Udayasree**
 Authors (or Co-authors): -
 Institution/Author Organization: **Andhra medical college**

Introduction:

Lung abscess is defined as localized area of destruction of lung parenchyma with radiologically detectable opacity with an air fluid level(usually >2 cm in diameter).

Aims & objectives:

To study the clinical, radiological and microbiological profile of lung abscess.

Materials and methods:

It is a retrospective observational study conducted at Department of Pulmonary Medicine, Andhra Medical College, Visakhapatnam from march 2019 to December 2019. 36 patients included in the study group.

Results:

Out of 36 patients , male and female ratio was 8:1. Mean age of study population was 53.3%. Most common symptom was cough with expectoration(91.6%), common risk factor observed was poor oral hygiene(61.1%). Radiologically right upper lobe predominantly involved in 44.4%. Klebsiella was the common organism isolated in 41.6%. Mycobacterium tuberculosis was found in 11.1% cases. Malignancy observed in one case.

Conclusion:

In our study group Lung abscess was common in males with poor oral hygiene, most common symptom was cough with expectoration. Klebsiella was commonest organism isolated. Radiologically right upper lobe predominantly involved

Title: A DESCRIPTIVE STUDY OF ENDOSCOPIC PRESENTATIONS IN SUSPECTED BRONCHOGENIC CARCINOMA AND THEIR CORRELATION WITH HISTOPATHOLOGY AT THE INSTITUTE OF RESPIRATORY DISEASES, SMS MEDICAL COLLEGE, JAIPUR

Name of Presenter: **DR ANIKET MONDAL**

Authors (or Co-authors): **DR PARVATHI BHASKAR, DR GOVIND SINGH RAJAWAT, DR SURESH KOOLWAL (Senior Professor, IRD, Jaipur)**

Institution/Author Organization: **INSTITUTE OF RESPIRATORY DISEASES, JAIPUR**

BACKGROUND-

Lung cancer is the malignancy with the highest mortality worldwide hence early diagnosis plays an important role in increasing survival. Although histopathological examination of bronchial biopsy specimen remains the gold standard test, morphological appearance is also important in supporting the diagnosis.

AIM-

To correlate the bronchoscopic presentations of bronchogenic carcinoma with histopathology.

METHODOLOGY-

This descriptive cross sectional study was conducted on 122 patients admitted for suspected bronchogenic carcinoma in the Institute of Respiratory diseases, SMSMC, Jaipur. FOB findings were noted with regard to side, site, and type of lesion. 102 patients were pathologically diagnosed with primary lung cancer. The bronchoscopic findings were correlated with histopathology.

RESULTS-

Most of the 102 cases were in the sixth decade of life. The main anatomical site of bronchogenic carcinoma was main bronchi followed by lobar bronchi. Most common morphologic presentation of bronchogenic carcinoma was endobronchial growth and for all the endobronchial growths, squamous cell carcinoma was the most common histopathological diagnosis. For adenocarcinoma, nonspecific morphological finding (external compression) was the most common finding rather than endobronchial growth.

CONCLUSION-

The bronchoscopic appearance was closely associated to histological type of lung carcinoma.

Title: PROCEDURAL SATISFACTION AMONG PATIENTS IN USING 1% OR 2% LIGNOCAINE AS LOCAL ANAESTHETIC IN ENDOBRONCHIAL ULTRASOUND

Name of Presenter: **Dr. Asha Gopalakrishnan Nair**

Authors (or Co-authors): **Dr. Ujjwal Parakh, Dr. Bobby Bhalotra**

Institution/Author Organization: **Sir Ganga Ram Hospital, New Delhi – 110060**

INTRODUCTION

Minimally invasive and highly accurate diagnostic procedures like EBUS-TBNA has become part of standard clinical practice. Patient satisfaction is an important aspect of clinical practice as it will affect the willingness of the patients to continue to attend the health care centers.

OBJECTIVES:

Aim of proposed study is to enhance our knowledge of patients comfort and satisfaction levels in comparing of 1% lignocaine and 2% lignocaine in optimally sedated patients during EBUS procedure. As a result the study will potentially increase the safety of EBUS TBNA procedure

METHODOLOGY:

This study is a prospective, single blind Randomised control trial, equivalence study comparing 1% to 2% lignocaine solution as topical anaesthetic during EBUS TBNA via spray as you go method.

RESULTS:

VAS scores for overall procedural satisfaction and operator mediated cough were similar between the two groups. Total dose of lignocaine was higher in group 2 compared to group 1, however no cases of lignocaine toxicity was observed. There was no significant difference in the likert score between the 2 groups.

CONCLUSION:

1% is effective as 2% lignocaine without compromising procedural satisfaction. Hence there is a consideration in shifting the procedure from a higher concentration to a lower concentration of lignocaine during EBUS.

Title: DIAGNOSTIC UTILITY OF ULTRASOUND GUIDED PERCUTANEOUS TRANSTHORACIC CORE NEEDLE BIOPSY.

Name of Presenter: **DHANISHA.C.P**

Authors (or Co-authors): **Dr.M.SRAVAN KUMAR,Dr.PHANI KUMAR,Dr. P.RAVI**

Institution/Author Organization: **KAKATIYA MEDICAL COLLEGE**

INTRODUCTION

Image guided Trans thoracic needle biopsy (TTNB) is used for the diagnosis of countless thoracic diseases. CT is the most common imaging modality used for guidance followed by ultrasound for peripheral lung masses.

AIMS AND OBJECTIVES

To Evaluate diagnostic utility of ultrasound guided percutaneous TTNB in peripheral lung masses.

METHODOLOGY

Lesion location was achieved by scanning the intercostal spaces by ultrasound, and Doppler scan was used to bypass the vessels from the biopsy path. Biopsy site was then disinfected, and local anesthesia was given. The biopsy was performed using a GUN BIOPSY needle under real-time guidance with Ultrasound. The biopsy sample was preserved in a formalin jar and sent for histopathology.

RESULTS

The majority of patients were in the mean age group of 50 to 59 years. Of the 40 cases, 23(57.5%) were males and 17 (42.5%) were females. Most common presenting complaint was cough 31(77.5%) Most common lesion observed in left upper lobe (34.3%) .90% were diagnosed as malignancy, 10% were benign lesion. adenocarcinoma 16(44.4%) was the most common malignancy observed. most common complication were pneumothorax(5%).

CONCLUSION

Ultrasonographically guided TTNB is safe, less expensive, less time consuming, less invasive diagnostic tool and no radiation toxicity to peripheral lung lesions.

Title: A STUDY ON EFFECT OF STREPTOKINASE IN MULTILOCULATED PLEURAL EFFUSION & COMPLEX EMPYEMA

Name of Presenter: **Dr.G.Sivakalyani**

Authors (or Co-authors): -

Institution/Author Organization: **Katuri medical college**

BACKGROUND:

In patients with multiloculated exudative pleural effusion and complex empyema. It is

always difficult to drain the fluid, most of the cases end up in aggressive surgery, fibrinolytics like streptokinase is a good alternative.

METHOD:

A total of 23 patients with age > 18 years with multiloculated pleural effusion and empyema presented to Katuri Medical College, Guntur, from Sep 2018 to Aug 2019, were included in the study. Findings are confirmed by radiology and ultrasound. ICD was kept in all patients and streptokinase 2.5 lakh units mixed in 50 ml saline was given through ICD tube twice for 3 days, after failure to drain the effusions with a standard chest tube because of multiloculation and multi-septation.

RESULTS:

Post procedure drain was noted and radiologically evaluated. Out of 23 patients 19 patients showed good lung expansion and increase drainage of pleural fluid and 3 cases showed moderate lung expansion and 1 patient showed hypersensitivity.

CONCLUSION:

Streptokinase is proved as effective, safe, cheaper and easily available fibrinolytic used in drainage of multiloculated pleural effusion who fail to drain adequately with a standard chest tube.

Title: Usefulness of Galactomannan in BAL and its correlation with serum galactomannan and microbiological confirmation in 'probable' Invasive Pulmonary Aspergillosis

Name of Presenter: **Dr. Krutesh Tripathi**

Authors (or Co-authors): **Dr. Naresh Patel, Dr. Tushar Patel, Dr. Rushi Patel**

Institution/Author Organization: **GCS Medical College and Research Centre, Naroda, Ahmedabad**

Introduction:

Aspergillus is a ubiquitous fungus known to produce Pulmonary Aspergilloma (PA), Allergic Bronchopulmonary aspergillosis (ABPA) and Invasive Pulmonary Aspergillosis (IPA). IPA has the highest case fatality. It is more common in immunocompromised hosts and with underlying lung diseases like COPD. Gold standard for diagnosis is histological evidence but it is risky while microbiological culture is time-consuming. Timely diagnosis of IPA improves survival.

Aims and Objectives:

To determine usefulness of BAL galactomannan (GM) in diagnosis of 'probable' cases of invasive pulmonary aspergillosis.

To correlate BAL positivity with microbiological confirmation/ blood GM positivity.

Study type:

Retrospective, Observational

Methodology:

30 patients with 'probable' IPA based on EORTC/MSG criteria were included in the study. All these patients were subjected to detailed history, clinical, radiological examination, blood GM level and bronchoscopy.

Discussion:

Out of these 30 patients 26 patients with BAL galactomannan level more than 0.7 ODI were further analyzed and correlated with serum galactomannan and microbiological confirmation (smear/culture). Out of these 26 BAL galactomannan positive, 19 (73.07%) were serum GM positive and 15 (57.69%) were microbiologically positive.

Conclusion:

BAL GM detection is an early and valuable adjunctive diagnostic tool for diagnosis of IPA.

Title: Role of pleural biopsy in exudative pleural effusions

Name of Presenter: **Dr. M. Brighton**

Authors (or Co-authors): **Dr. J. K. Mishra, Dr. G. N. Srivastava, Dr. T. Anbarasan, Dr. Akhilesh Tiwari, Dr. Sujeet K. Karn, Dr. B. Gowthami**

Institution/Author Organization: **Institute of Medical Sciences, Banaras Hindu University, Varanasi**

BACKGROUND:

Pleural effusion remains the most common manifestation of pleural pathology. Sometimes it is difficult to find etiology in spite of routine biochemical and cytological examination of pleural fluid. Pleural biopsy helps in establishing an etiology in exudative pleural effusion particularly when malignancy is suspected or when results of detailed pleural fluid analysis are inconclusive.

AIM:

This study aims to evaluate the role of pleural biopsy to determine the etiology of exudative pleural effusion and to correlate it with biochemical and cytological parameters of pleural fluid.

MATERIALS & METHODS:

100 consecutive patients of pleural effusion were selected from outpatient and indoor department of tertiary hospital in Varanasi.

It was prospective and observational study conducted over a period of 2 years. Biochemical, cytological and microbiological evaluation of pleural fluid was done in all cases. Those with exudative pleural effusions underwent pleural biopsy by Abram's needle. Subsequently, the etiology of effusion was determined.

RESULTS:

Tuberculosis was the most common etiology, followed by Malignancy. Pleural biopsy was done in 100 patients. Pleural tissue obtained in 92 cases. Malignancy diagnosed in 35, tuberculosis in 57 on histopathological examination. Out of 57 histopathologically proven tuberculosis cases, adenosine deaminase (ADA) was more than 70 U/L in 44 cases.

CONCLUSIONS:

In our study, Tuberculosis is more common than Malignancy, particularly in young patients. When thoracoscope is not available, pleural biopsy can give definite diagnosis. Pleural fluid ADA \geq 70 U/L is almost diagnostic of tuberculosis, where pleural biopsy is not recommended.

CLINICAL IMPLICATION:

Pleural biopsy using Abram's needle is easily available, inexpensive and has good diagnostic value in cases with uncertain etiology and low complication rate.

Title: Incidence and severity for significant bleeding during TBLB in patients with no clinical risk factors for bleeding Dr. Mathew Varghese Nellimootil, Dr. Prince James, Dr. D.J. Christopher

Name of Presenter: **Dr. Mathew Varghese Nellimootil**

Authors (or Co-authors): **Dr. Prince James, Dr. D.J. Christopher**

Institution/Author Organization: **Christian Medical College and Hospital, Vellore**

Problem in Abstract

Title: ROLE OF ULTRASOUND AND CT GUIDED FNAC AND TRUCUT BIOPSY IN THE DIAGNOSIS OF INTRA-THORACIC LESIONS

Name of Presenter: **1st Dr. PAPIA**

MONDAL,3RD YR MD PGT

Authors (or Co-authors): **2nd Dr. JAYDIP DEB, Prof. and HOD, Dept. of Pulmonary Medicine, NRSMC**

Institution/Author Organization: **NIL RATAN SIRCAR MEDICAL COLLEGE AND HOSPITAL, KOLKATA- 700014**

INTRODUCTION:

Percutaneous trans-thoracic fine needle aspiration cytology (FNAC) and Tru cut biopsy both are well-established diagnostic procedures for thoracic lesions since last few decades. Both procedures are safe, rapid, and accurate in diagnosing thoracic mass lesions. The introduction of percutaneous imaging guided biopsy technique has made it possible to avoid procedures like open lung biopsy, bronchoscopic /thoroscopic guided lung biopsy which come with the price of being more expensive, demanding much expertise, with many complications and long hospital stays

OBJECTIVES:

To determine the diagnostic yield and complications of USG guided and CT guided Fine needle aspiration and Tru cut biopsy in cases with intra- thoracic lesions.

MATERIALS AND METHOD:

50 patients with intra-thoracic lesions were selected from OPD and IPD of NRSMCH. Cytopathological and or histopathological studies were done in all cases by Fine needle aspiration and Tru cut biopsy from lesions either under USG guidance where lesions were abutting chest wall, in rest of the cases under CT guidance.

RESULT:

Diagnostic yield of CT guided and USG guided FNAC were respectively 63.9% and 64.3%. Diagnostic yield of FNAC irrespective of CT or USG guidance was 64%. Diagnostic yield of CT guided and USG guided Tru cut biopsy respectively were 91.7% and 92.9%. Diagnostic yield of Tru-cut biopsy was 92%. In this study complication rate was low. Only complication found in USG guided procedure was 1 case of chest pain (7.2%). Complications in CT guided procedure were 1 case of Haemoptysis (2.8%), 2 case of Pneumothorax (5.6%) and 1 case of chest pain (2.8%).

CONCLUSION:

Both USG guided and CT guided FNAC and biopsy are efficient diagnostic procedures for intra-thoracic lesions and diagnostic yield in both procedures comparable. Tru cut biopsy procedure is superior to FNAC procedure for definite diagnosis. Complication rate in both the CT and USG guided procedure are very low.

Title: Diagnostic yield of fiberoptic bronchoscope guided biopsy in diagnosing various histopathological subtypes of lung carcinoma in Kumaon region of Uttarakhand

Name of Presenter: **DR. PRIYANK GOYAL**
 Authors (or Co-authors): **DR. D. C. PUNERA**
 Institution/Author Organization: **GOVT. MEDICAL COLLEGE, HALDWANI**

Introduction :

Globally, lung cancer is the most common cancer (12.3% of all cancers in 2018) and the leading cause of cancer related deaths (18.3%). In India, in 2018, it constitutes 5.9% of all cancers, ranked 4th and ranked 3rd among cancer related deaths (8.1%). Tobacco use in any form is number one risk factor for lung cancer. Most common histological type is non-small cell lung carcinoma. Bronchoscopic guided bronchial biopsy is one of the most important and valuable tool in early diagnosis of lung cancer.

Objectives :

To find out diagnostic yield of bronchoscope guided bronchial biopsy in diagnosing lung carcinoma and to detect incidence of various histopathological subtypes.

Methodology :

This hospital based cross-sectional study was carried out in Department of Respiratory Medicine, Government Medical College, Haldwani between period of 1st October 2019 to 31st March 2020. A total of 60 patients of clinically and radiologically suspected lung carcinoma were included and fiberoptic bronchoscopic bronchial biopsy was carried out in all. Biopsy samples were sent to pathology department for histopathological analysis.

Results :

Out of 60 biopsies, 48 were found to be malignant, 7 were non-malignant, 3 were inconclusive and 2 were inadequate sample. Overall diagnostic yield of bronchial biopsy in detecting lung carcinoma was 80%. The most common histopathological subtype was Squamous cell carcinoma (62.5%), Adenocarcinoma (20.83%) and Small cell carcinoma (16.66%).

Conclusion :

Bronchoscopic guided bronchial biopsy is one of the most important and valuable investigation to diagnose lung carcinoma.

Title: A Study Of Exudative Pleural Effusions- Relationship Between Thoracoscopic Findings and Type Of Lesion On Histopathology

Name of Presenter: **Dr. RAJENDRA PRASAD**
 Authors (or Co-authors): **Sr. Prof. Dr. Suresh Koolwal, Dr. G.S. Rajawat**
 Institution/Author Organization: **IRD,SMS MEDICAL COLLEGE, JAIPUR**

BACKGROUND-

Medical thoracoscopy is a minimally invasive procedure for diagnosing and treating pleural diseases especially undiagnosed exudative pleural effusion. Diseases causing pleural effusion can have specific pattern of pleural lesions which can be identified by thoracoscopy. AIM- To establish relationship between thoracoscopic findings & nature of lesion causing exudative pleural effusion.

METHODS-

This observational study was done in IRD, SMS Medical College, Jaipur from August 2019 to August 2020. Fifty subjects with undiagnosed pleural effusion who fulfilled inclusion and exclusion criteria were included in the study. Medical thoracoscopy using rigid thoracoscope was done in these enrolled patients. Clinical, thoracoscopic findings and histopathological data of these patients were collected and analyzed.

RESULTS-

Maximum patients were in the age group of 40-60 years. Most common thoracoscopic findings were nodules (44%) followed by sago grain infiltration(22%).Malignancy (62%) was the most common histopathological finding of pleural biopsy followed by granulomatous lesions suggestive of tuberculosis (28%). The overall diagnostic yield was 90% and 98% among patients who had thoracoscopic pleural findings.

CONCLUSION-

appearance of pleural lesion is specific for underlying cause of exudative pleural effusion.

Title: CT SCAN VS FOB- IN EVALUATION OF HEMOPTYSIS DUE TO UNKNOWN CAUSE

Name of Presenter: **RAJESH AGRAWAL**
 Authors (or Co-authors): **Piyu Jain, Chinkita Agrawal**
 Institution/Author Organization: **ROHILKHAND MEDICAL COLLEGE AND HOSPITAL, BAREILLY**

Introduction:

The common causes of hemoptysis in India are Tuberculosis, Malignancy, Bronchiectasis,

Post TB Sequelae and Aspergilloma. Cases where diagnosis is not made on basis of CXR/lab investigations, CT scan/FOB can be done to reach our diagnosis. Aim: To assess CT vs FOB as preferred diagnostic modalities in evaluation of hemoptysis due to unknown cause.

Material and Methods:

A retrospective study conducted in 101 patients with hemoptysis in one year (2016-2017) at Rohilkhand Medical College, Bareilly. Result: Amongst 101, CXR, sputum AFB/lab investigations made diagnosis in 64 patients. In remaining 37, malignancy was diagnosed in 10(27.0%), Bronchiectasis in 8(21.6%), PTB in 9(24.32%), Old PTB Sequelae in 6(16.2%), Aspergilloma in 3(8.1%), Pneumonia in 1(2.7%). 21(70.02%) diagnosed on CT showed Bronchiectasis in 8(38.9%), Mass lesion (peripheral) in 3(14.2%), Aspergilloma in 3(14.2%), CAP in 1(4.7%), Old PTB Sequelae in 6(28.5%). 16(43.2%) diagnosed on FOB showed PTB in 9(56.2%), mass (central) in 7(43.7%).

Conclusion:

CT could make diagnosis in 70.2% while FOB in 43.2% cases. Indications for FOB -CXR showing central homogenous opacity s/o mass lesion, cavitary/infiltrative lesion with sputum AFB negative/non-productive, for CT Scan -CXR being WNL, nonconclusive, peripheral homogenous opacity s/o mass lesion where CT guided biopsy could be performed.

Title: The yield and safety profile of endobronchial ultrasound guided transbronchial needle aspiration (EBUS TBNA) in diagnosing the patients with mediastinal lymph nodes and peri-bronchial lesions at a tertiary care hospital in western Maharashtra

Name of Presenter: **Dr Robin Choudhary**
 Authors (or Co-authors): **Dr Vikas Marwah**
 Institution/Author Organization: **Army Institute of Cardiothoracic Sciences, Pune**

Introduction

The evaluation of mediastinal lymphadenopathy and masses poses a diagnostic challenge. This is because of myriad of possible etiologic causes; their proximity to numerous vital structures, and the difficulty of access for biopsy. Enlargement of intrathoracic lymph nodes can be due to a variety of causes including infection, inflammation, neoplastic etiology, or just nonspecific reactive hyperplasia

Aims and Objectives

To study the yield and safety profile of endobronchial ultrasound guided

transbronchial needle aspiration (EBUS TBNA) in diagnosing the patients with mediastinal lymph nodes and peri-bronchial lesions.

Methodology

Retrospective analysis of EBUS guided TBNA characteristics of 116 patients with undiagnosed mediastinal lymphadenopathy Observation

Our patients presented with nonspecific symptoms of cough, fever and weight loss. On radiological examination they had various degree of mediastinal lymphadenopathy. The mean age at presentation was between 30-40 with the oldest patient of 70 years. 88 out of 116 patients were males and 28 were females. On Fiberoptic bronchoscopy 1 patient was found to have left vocal cord palsy. The carina was widened in 28% of patients. Most common lymph node sampled was subcarinal (68%). MTB gene Xpert was positive in 45 cases and resistance was detected in 3 cases. Most common diagnosis was Tuberculous lymphadenitis (67.9%).

Conclusion

EBUS has proven its utility in diagnosing and staging the mediastinum for malignant lesions. It has now become the preferred method to sample mediastinal lymph nodes with sensitivity and specificity comparable to mediastinoscopy, which is the gold standard. However, the role of EBUS in non-malignant mediastinal involvement has not been studied extensively. In this study, we assessed the usefulness and safety profile of this technique in diagnosing mediastinal lymphadenopathy of unknown cause.

Title: Swift Acute emergency Personal Novel video laryngoSCOPE (SAPNOSCOPE) - An innovative solution and potential game-changer on the horizon for intubation in resource-limited countries.

Name of Presenter: **Sapan Kumar**
 Authors (or Co-authors): **Kishore Pichamuthu, Priyamvada Singh**
 Institution/Author Organization: **Evangelical Hospital Khariar**

Video laryngoscope is an invaluable tool in COVID era for intubation. Its use is solely restricted by cost. We aimed to develop safe, reliable, portable, easy to manufacture and inexpensive video laryngoscope and compare with conventional Macintosh. Methods: Video borescope is a device that allows visualization of difficult to access place, Video borescope consists of a miniature camera at one end of a flexible tube and high definition screen at another end. Borescope camera (Cost-2500INR) was aligned and attached to Macintosh blade

no 3 (Cost-1000INR) using resin (Cost-700INR). The device was called SAPNOSCOPE (Total costing-4200INR). Safety and efficacy of the device was tested on mannequin by performing intubation by 50 physicians using SAPNOSCOPE and Macintosh laryngoscope.

Results:

SAPNOSCOPE and Macintosh were similar in rates of successful intubation, visualization of the glottis, intubation time and ease of intubation. visual clarity was better with SAPNOSCOPE 100% (50/50). Second attempt to intubate was 20% (10/50) in SAPNOSCOPE and 40% (20/50) in the Macintosh group. The complication of oesophageal intubation was observed only in the Macintosh group 20% (10/50).

Conclusions:

SAPNOSCOPE was in par with conventional Macintosh and can be a potential alternative to Macintosh for intubation. SAPNOSCOPE has scope to be the next game-changer in a resource-limited setting.

Title: DIAGNOSTIC ROLE OF BLIND CLOSED PLEURAL BIOPSY IN UNDIAGNOSED CASES OF EXUDATIVE PLEURAL EFFUSION

Name of Presenter: **suvarna kalli**
 Authors (or Co-authors): **Dr. M.S.BARTHWAL , Dr.TUSHAR SAHASRABUDHE**
 Institution/Author Organization: **DR.DYPATIL MEDICAL COLLEGE**

Diagnostic role of blind closed pleural biopsy in undiagnosed cases of exudative pleural effusions

Background:

Exudative pleural effusion is one of the most common clinical conditions in pulmonary medicine practice. Significant percentage of pleural effusion remains undiagnosed even after detailed pleural fluid examination and clinic-radiological correlation.

Aims and Objectives:

To evaluate diagnostic efficacy and safety of closed pleural biopsy. Methods: In this prospective study, 100 cases of undiagnosed exudative pleural effusions were subjected to a closed blind pleural biopsy. At least 3 pieces were removed in each biopsy.

Results:

Mean age of study subjects was 50.1 years; and M:F ratio was 2.125:1. The histopathological examination of biopsy tissue showed inadequate samples in 12 patients. 36/88 (40.9%) showed malignancy, 31/88 (35.23%)

TB and 21/88 (23.86%) showed Nonspecific inflammation. Complications were seen in 9% of patients (pneumothorax 4%, chest pain 3% and minor bleeding in 2%).

Conclusion:

Given low cost, easy availability and low complication rates, blind closed pleural biopsy should always be considered as an initial diagnostic tool before thoracoscopy, in the workup of exudative pleural effusions.

Title: Efficacy & Safety of Radial EBUS guided Cryo Transbronchial Lung Biopsy vs Forceps Biopsy in diagnosis of Diffuse Parenchymal Lung Disease and Peripheral Pulmonary Lesions

Name of Presenter: **Dr. Umang C Shah**

Authors (or Co-authors): **Dr. Arpan C Shah**

Institution/Author Organization: **Pranayam Lung and Heart Institute Hospital**

We reported our experience with TBLC with 1.9 mm Cryoprobe in diagnosis of 92 patients with DPLD or Peripheral Pulmonary lesion over last 2 years and to evaluate the efficacy of Radial EBUS guided TBLC vs Forceps TBLB when performed simultaneously on same patient.

Results –

Radial EBUS guided TBLC and TBLB was performed in randomized order. The size of sample obtained with TBCB was significantly higher compared with Forceps TBLB ($11.6 \pm 9 \text{ mm}^2$ vs $3.2 \pm 3.1 \text{ mm}^2$) ($P < 0.001$). Flexible Forceps TBLB was performed first and then TBLC was followed, which established histopathological diagnosis more with TBLC (73.4%) than in Conventional Forceps biopsy (37.1%) ($P < 0.001$). TBLC detected activating EGFR mutations diagnosed with NSCLC patient's was higher when compared with TBLB (34.2 % vs 14.8 %, $P < 0.001$). TBLC specimens are larger without crush artifacts and have parenchymal architecture preservation with more alveoli as compared with TBLB and higher diagnostic yield in Patients with UIP pattern of Lung Injury - Fibrotic ILD's.

Conclusion –

TBLC is safe and provide higher diagnostic yield in detection of eGFR mutation for targeted cell therapies, identification of driver mutations and first-line immune checkpoint inhibitors in T790M mutant NSCLC.

Title: ROLE OF POVIDONE IODINE IN PLEURODESIS IN CASE OF RECURRENT PNEUMOTHORAX

Name of Presenter: **DR. VINOD KURMI**

Authors (or Co-authors): **DR KUMAR GIRENDRA, DR ABHIJEET KHANDELWAL, DR GYAN PRAKESH, DR VINOD KURMI**

Institution/Author Organization: **INDEX MEDICAL COLLEGE, INDORE M.P.**

INTRODUCTION:

Pleurodesis is a procedure to achieve symphysis between two layer of pleura aimed at preventing accumulation of either air or fluid in the pleural space.

AIMS AND OBJECTIVES:

To study the effect of pleurodesis, efficacy, safety, success rate and side effects of iodopovidine in treatment of recurrent pneumothorax.

MATERIAL AND METHOD:

A prospective OBSERVATIONAL study of 30 patient of recurrent pneumothorax with age more than 18 year undergone pleurodesis with iodopovidine.

OBSERVATION:

In present study of 30 patient 24 were male (80%), and 06 were female (20%). primary pneumothorax is most common in 31-40 yr of age (37.5%), followed by COPD (22.5%), pulmonary TB (12.5%). In our study 18(60%) patient were smoker and 12(40%) were nonsmoker, out of 30 patient were studied pleurodesis was successful in 24 (80%) patients and failed in 06(20%) patients.

CONCLUSION:

in present study we conclude that pleurodesis with iodopovidine is very effective in recurrent pneumothorax with success rate of 80%, only 15% developed chest pain and fever. Iodopovidine is safe, cheaper, and efficacious agent.

Title: Etiological evaluation of Non resolving pneumonia by Fiber optic bronchoscopy

Name of Presenter: **Dr Vinodha K**

Authors (or Co-authors): **Dr T Pramodkumar, Dr M G Krishnamurthy**

Institution/Author Organization: **Gandhi medical college and hospital, Secunderabad**

INTRODUCTION

Non resolving pneumonia is a challenging clinical condition which requires more investigations. It accounts for 15% of inpatient pulmonary consultations and 8% of bronchoscopies. Delay in diagnosis and treatment may lead to rise in mortality by 3% to 5%. AIMS To evaluate the etiology in cases of non resolving pneumonia using FOB. To

determine the co-morbid conditions associated with non resolving pneumonia.

METHODOLOGY

A cross sectional study was done over a period of 18 months. Total 50 cases of non resolving pneumonia were included. Complete history was taken and clinical examination was done. All were subjected to CT chest and investigations which were required for diagnosis. FOB and guided procedures were done for all patients and samples were sent to laboratory.

RESULTS

Out of 50 cases 26(52%) were male, 24(48%) were female. The mean age of distribution was 50 years. Cough was the most common symptom(94%). Secretions(44%) was the predominant findings seen during FOB. Bacterial pneumonia(34%) was the most common cause followed by Tuberculosis(20%) and malignancy(18%). Fungal pneumonia was diagnosed in 3 cases(6%). FOB was inconclusive in 11 cases(22%).

CONCLUSION

FOB has a definitive role in establishing the etiology of non resolving pneumonia. CT guided FNAC/biopsy also has a role in peripheral lesions.

Title: STRETCHING THE LIMITS OF THORACOCENTESIS – PLEURAL MANOMETRY IN MASSIVE PLEURAL EFFUSION-DO ELASTANCE VALUES PREDICT OUTCOME ?

Name of Presenter: **Dr VISHNU K**

Authors (or Co-authors): **Dr KIRAN VISHNU NARAYAN, ASSISTANT PROFESSOR, GOVT MEDICAL COLLEGE, KOTTAYAM**

Institution/Author Organization: **Government medical college, Kottayam, Kerala**

INTRODUCTION -

Pleural manometry is a valuable tool to identify lung entrapment. Entrapment is considered if the lung does not expand completely post thoracocentesis. An objective measurement of entrapment is pleural elastance which is pleural pressure change divided by amount of pleural fluid aspirated. Normal elastance is less than 14.5cmH₂O. More than 14.5 is entrapment.

OBJECTIVES –

To identify lung entrapment in massive pleural effusion using manometry, and to assess the outcome of patients with high and low elastance.

METHODOLOGY –

79 patients with exudative massive pleural

effusion were studied. Serial pleural pressures recorded and plotted along with elastance on a pressure volume graph.

RESULTS –

Among 79 patients, 84% had malignant effusion. 72% had normal elastance and successful pleurodesis after intercostal drainage (ICD). The remaining patients had a high elastance, with 60% of them having prolonged ICD due to unexpandable lung. We avoided ICD in 40% of patients because of intraluminal obstruction in bronchoscopy. On follow up of patients with high elastance, 47% of patients expired within 6 months.

CONCLUSION –

Pleural manometry, a simple procedure effectively identifies unexpandable lung, predicts successful pleurodesis a priori and strongly cautions on avoiding ICD in effusions with high elastance.

Title: : ROLE OF FLUOROSCOPY GUIDED ULTRATHIN FLEXIBLE BRONCHOSCOPE IN RETRIEVAL OF FOREIGN BODY LODGED IN DISTAL SUBSEGMENTAL BRONCHUS

Name of Presenter: **Dr. AMUTHAPRIYA .S.M.**

Authors (or Co-authors): **Dr. V.G.VINOD, Dr. KOUSHIK MUTHU RAJA, Dr. T.DHANASEKAR ,Dr.C.CHANDRASEKAR**

Institution/Author Organization: **Sri Ramachandra Medical college and Research Institute**

INTRODUCTION: A 45 year old female, with complaints of chronic cough was referred with chest x ray finding of metallic foreign body in right lower zone. CT-thorax localized foreign body to the anterior basal segment of right lower lobe with surrounding fibrosis.

MANAGEMENT:

Flexible fiberoptic bronchoscopy was carried out under local anaesthesia. The adult FOB (outer diameter-6mm, inner channel of 2.8mm) could not be negotiated. Hence ultrathin bronchoscope (outer diameter of 2.8mm, inner channel of 1.2mm) was introduced and the anterior basal segment bronchus was reached and the subsegments were assessed. One of the subsegment's orifice was stenotic which was confirmed to have lodged the metallic FB under fluoroscopy. It was difficult to negotiate even with the ultrathin bronchoscope into the segment due to stenosis. Hence thin cup biopsy forceps was introduced into the stenotic orifice under fluoroscopy guidance, FB was grasped and removed with bronchoscope into-to. Foreign body removed was a displaced nose pin. Post removal fluoroscopy screening confirmed no retained FB.

CONCLUSION :

We propose ultrathin bronchoscope under fluoroscopy can be used for successful retrieval of foreign bodies lodged in subsegmental bronchus.

Title: TRANSSTERNAL-TRANSPERICARDIAL BRONCHOPLEURAL FISTULA CLOSURE

Name of Presenter: **Dr Avinash Dal**

Authors (or Co-authors): **Dr T Sivashankar Reddy, Dr Ajmal N K**

Institution/Author Organization: **Virinchi Hospitals, Hyderabad**

Persistent postpneumonectomy bronchopleural fistula can give major disability to the life of an individual as there is constant air leak, repeated pleural infections and dependency on chest drains. These fistulae are very difficult to cause due to the inflamed pachypleuritis, peribronchial sepsis and poor blood supply to the stump augmented by the fact that the actual stump is difficult to access and the hole that is seen on the pleural side is usually in the mediastinal pleura. Closure is therefore more likely to fail and may not heal with thoracoplasty alone. We had a patient with a fistula for 12 years which had been healed previously by endobronchial glue implantation. Due to the thickness of the pachypleuritis, the fistula was approached from the mediastinum behind the aorta and superior vena cava and long right main bronchus was staple cut to close the connection. Additional modified Alexander thoracoplasty was done and the patient had a full recovery and for the first time in years, he was discharged without a chest tube. The technique is not new but the need of using such modalities should not be shied away from.

Title: DEMONSTRATION OF A NEW SIGN IN EBUS – “THE FLUID THRILL” SIGN

Name of Presenter: **BENJAMIN EARNEST WILLIAMS**

Authors (or Co-authors): **Prof Dr. Prince James, Prof Dr. Richa Gupta**

Institution/Author Organization: **CHRISTIAN MEDICAL COLLEGE AND HOSPITAL, VELLORE**

Introduction

EBUS is a minimally invasive technique for the diagnosis and staging of lung cancer and other mediastinal pathologies. Also helpful in differentiating some cystic lesions from soft tissue structures like lymph nodes or masses. We demonstrate a new EBUS based sign called “Fluid Thrill sign” in a case of Bronchogenic cyst. History A 32-year female, hypothyroid

with 1 year of productive cough and low-grade fever for 5 months, taken empirical ATT and inhalers with partial relief. Chest X-ray showed splaying of the carina, CT images showed well defined, thick-walled cyst with the air-fluid level within in the subcarinal location in the midline. Bronchoscopy showed widened carina. EBUS done showed heterogeneous, hypoechoic, well-circumscribed fluid density lesion with prominent multiple small hyper echoic dots within the subcarinal lesion. It was observed while keeping the EBUS probe steady, that the content within the cyst exhibited a thrilling motion or “fluid-thrill sign” with each heartbeat suggesting it to be dense fluid with debris/calcium crystals rather than a firm mass (video can be attached). She underwent surgical resection of the cyst with pathology confirming it to be Bronchogenic cyst.

Learning point:

EBUS “Fluid thrill sign” is helpful in differentiating some cystic lesion from soft tissue structures like lymph nodes or masses.

Title: Bronchoscopic mucus plug removal in patient with COVID-19 on invasive mechanical ventilation & ECMO support

Name of Presenter: **Koyani Brijesh R.**

Authors (or Co-authors): **Vithalani Kamlesh G.**

Institution/Author Organization: **P.D.U MEDICAL COLLEGE, RAJKOT**

Introduction:

Bronchoscopy in critically ill patients with COVID-19 has been required to manage complications (atelectasis, hemoptysis, etc.) as well as to obtain samples for microbiological cultures and to assist in the management of artificial airways (guide intubation and percutaneous tracheostomy). Performing bronchoscopy in COVID-19 patient is challenging due to risk of viral spread.

Aims & Objectives :

To learn when and where to perform bronchoscopy or other interventional pulmonary procedures in COVID 19 patients and the care to be taken of during procedure. Methodology: A 62-year-old male patient admitted to COVID ICU at civil hospital rajkot with viral pneumonia (COVID 19 positive) & severe ARDS, intubated and on ECMO (extra corporeal membrane oxygenation) support developed sudden worsening in oxygen saturation. Urgent bedside chest xray shows complete right lung atelectasis. Bedside Bronchoscopy was performed immediately and mucus plug obstructing right main stem bronchus was removed. Patient's oxygenation improved. Post procedural chest x-ray shows right lung expansion and no signs of atelectasis.

Result:

Mucus plug obstructing right main stem bronchus was removed and patient improved dramatically. Post procedural chest xray shows complete expansion of right lung and no signs of lung atelectasis.

Conclusion:

Timely interventions are important for the better patient management in COVID 19 patient

Title: ROLE OF VIDEO-ASSISTED THORACIC SURGERY IN NON-RESOLVING PNEUMONIA

Name of Presenter: **DR KARTHIKA PRASAD**

Authors (or Co-authors): **DR SHUBHRA JAIN, DR VINOD JOSHI, DR ASHISH SINGH**

Institution/Author Organization: **SMS MEDICAL COLLEGE JAIPUR**

INTRODUCTION

Non-resolving pneumonia is the presence of persistence of clinical and radiological features even after adequate antibiotic therapy. VATS has increasingly shown a benefits for a variety of diseases nowadays. Here is a case of non-resolving pneumonia finally diagnosed as tuberculosis after VATS.

MATERIALS AND METHODS

A 37-years-old female having bronchial asthma since 8 years presented with high grade fever, non-productive cough and right middle lobe consolidation, not responding to higher antibiotics. General physical examination was normal. HRCT-chest revealed right middle lobe consolidation and bilateral nodules. Patient underwent detailed serum-urine-sputum investigations for pyrexia of unknown origin and could not be elicited. Bronchoscopy done and infective etiologies were excluded by BAL study and misdiagnosed as granulomatous polyangitis. Patient not improved with treatment. PET-CT showed FDG avid fibroconsolidative lesion in both lung. Patient underwent VATS-right middle lobectomy and histopathology revealed necrotising granulomatous inflammation which further confirmed by TB culture.

RESULTS

Patient improved clinically and radiologically after initiation of Anti-tubercular treatment.

CONCLUSION

As Tuberculosis being endemic in our country, should always be evaluated in case of non-resolving pneumonia. VATS plays an important role in diagnosis and resolution of dilemma in so many cases.

Title: PALLIATIVE TREATMENT OF MALIGNANT TRACHEAL TUMOR - A CASE REPORT

Name of Presenter: **DR ARUN N.A**

Authors (or Co-authors): **DR RENNIS DAVIS**

Institution/Author Organization: **AMALA INSTITUTE OF MEDICAL SCIENCE**

OBJECTIVE:

To evaluate the clinical result of palliative stenting followed by radiation in a patient with inoperable malignant tracheal tumor.

CASE REPORT:

A 62 years old male with history of gradually progressive breathlessness, cough & hoarseness of voice for 3 months. He had history of old papillary ca thyroid, post thyroidectomy with h/o recurrence and was on tracheostomy which was closed 5 years back. He was planned for exploration with tracheal resection which was rejected due to age related factors and high risk for procedure. On examination, spo2:94%, RR:26/min, chest: b/l rhonchi, stridor present. CT Neck suggestive of heterogenous enhancing soft tissue lesion arising from right lateral wall of trachea causing narrowing. Bronchoscopy showed polypoidal growth mid trachea of 5 cm length occluding 90% of lumen. APC debulking & single dose radiotherapy were offered. Boston scientific 6x16mm covered tracheo-bronchial stent was deployed over guide wire via FOB through ET tube of size 8mm.

CONCLUSION:

Stenting combined with radiation therapy may be clinically effective in the palliative treatment of patients with tracheo-bronchial tumors. There will be dramatic relief of dyspnea, effectiveness for both intrinsic and extrinsic obstruction, improved performance and better quality of life.

Title: Post Covid Pynopneumothorax with Left Lower Lobe Parenchymal Bronchopleural Fistula - A case report

Name of Presenter: **Pranav Modi**

Authors (or Co-authors): **Amit Nagpal, Souvik Ghosh, Bibekananda Mahapatra, Krishnarao Narayan Bhosale, Abhay Uppe**

Institution/Author Organization: **DY Patil Hospital, Navi Mumbai**

Introduction

COVID-19 has presented with a wide spectrum of complications that have yet to be fully uncovered. We discuss a unique presentation of a 61-year-old woman developing post-covid spontaneous pneumothorax with subsequent

development of a parenchymal bronchopleural fistula.

Clinical presentation

The patient presented to the ER with breathlessness for one month, diagnosed as a right sided spontaneous hydropneumothorax as a sequel to COVID-19. HRCT thorax revealed multifocal ground glass opacities and consolidation diffusely in a collapsed right lung. A chest drain was inserted that was notable for continuous air bubbling suggesting the presence of a bronchopleural fistula.

Management

The patient was provided high flow oxygen support and broad spectrum antibiotic cover in the ICU. VATS pleurodesis and fibrin glue closure was done wherein a large parenchymal air leak with bubbling was observed in the right lower lobe that was closed with 6 cc of fibrin glue, spread with 'surgicel' mesh that significantly reduced the air leak and bubbling. Two ICD tubes were inserted and the patient was mechanically ventilated for 48 hours. Two days post-procedure the patient was weaned off the ventilator with no air bubbling into the chest drain, suggesting closure of the parenchymal leak.

Title: Endobronchial Leiomyoma of The Lung

Name of Presenter: **Dr. Sharon Aruna Cathy C**

Authors (or Co-authors): **Dr. Jaya Vignesh, Dr. Koushik Muthu Raja, Dr. V.G Vinod, Dr. T. Dhanasekar, Dr. C. Chandrasekar**

Institution/Author Organization: **Sri Ramachandra Institute of Higher Education and Research**

Introduction:

A 42 year old male came with complaints of cough with expectoration, mucoid and scanty, not foul smelling, occasionally blood stained. No h/o dyspnea, chest pain, fever, loss of weight or loss of appetite. No known comorbid. On examination, Vitals were stable. Respiratory system examination revealed Trachea deviated to the left with decreased air entry in left hemithorax. Chest X ray showed reduction in left lung volume and lower lobe haziness noted. Contrast CT- THORAX showed endobronchial mass lesion in the distal left main bronchus with partial collapse of left lower lobe and obstructive pneumonitis changes in left lung

Treatment :

Right upper lobe mass debulking was done with flexible bronchoscope using cryo forceps in piecemeal fashion; with a rigid bronchoscope as a conduit. Haemostasis achieved with

fogarty balloon tamponade. Post debulking the tumour base was found to be broad and base was APC cauterised. Biopsy sent to HPE confirming Endobronchial Leiomyoma

Conclusion:

ENDOBONCHIAL LEIOMYOMA are benign tracheobronchopulmonary neoplasms accounting for 1% of respiratory tract tumors and 5-10% of resected tumors. Most of these are asymptomatic parenchymal lesions based on origin into mesenchymal, submucosal, and epithelial tumors. More than 90% of parenchymal leiomyomas are incidental findings on chest radiographs.

Title: Use of Bronchoscopy guided electrocautery and balloon dilatation as a treatment modality for a patient of benign tracheal stenosis.

Name of Presenter: **Dr. Vidhi Jobanputra**

Authors (or Co-authors): **Dr. Sunil Jadhav, Dr. Ashish Deshmukh, Dr. Hafiz Deshmukh, Dr. Shivprasad Kasat**

Institution/Author Organization: **MGM Medical College and Hospital, Aurangabad**

INTRODUCTION:

Benign tracheal stenosis following prolonged intubation is a rare but serious complication. Various Modalities for tracheal dilatation have been attempted, but most techniques are either unsuccessful, very expensive, difficult to perform and associated with complications.

HISTORY AND PRESENTATION:

15 year old boy was admitted for snake bite 2 months back for which he was intubated for a period of 9 days. A month later he started developing breathlessness and change of voice. Patient also had significant stridor at the time of presentation.

DIAGNOSIS:

CT Chest and flexible bronchoscopy was done which was suggestive of tracheal stenosis in the sub-glottic area around the third tracheal ring causing 80% compromise of the tracheal lumen. Bronchoscope could not be negotiated beyond the stenosis.

MANAGEMENT:

Using a flexible bronchoscope, electrocautery was done as Mercedes Benz sign circumferentially. This was followed by three attempts of balloon dilatation in succession resulting in successful tracheal dilation.

FOLLOW UP:

Patient was followed up after a period of one month for check bronchoscopy which revealed

almost complete dilatation of the stenosis.

Title: A RARE CASE OF INORGANIC FOREIGN BODY IN NON RESOLVING PNEUMONIA

Name of Presenter: **DR.VISHAL MALVIYA**

Authors (or Co-authors): **DR.KUMAR GIRENDRA, DR.ABHIJEET KHANDELWAL, DR.SUNIL MUKATI, DR.ROTHMAN P T, DR.KSHITIZ CHAURASIA**

Institution/Author Organization: **INDEX MEDICAL COLLEGE HOSPITAL & RESEARCH CENTRE INDORE(MADHYAPRADESH)**

INTRODUCTION

Aspiration of foreign body is generally accidental & may present as an emergency or delayed retained foreign body.either way it need prompt removal in this study a case with no history of(H/O) foreign body aspiration but recurrent signs & symptoms of bronchitis is reported which ultimately developed non resolving pneumonia.

CASE REPORTS

Patient 75 year old female with no history of foreign body aspiration but presented to the OPD with chief complaints of persistent right side chest pain and intermittent retrosternal discomfort since many months.he had H/O multiple hospital consultation including psychiatric consultation for his complaint. chest radiograph showed right lower lobe pneumonia not responding to antibiotics.on examination vitals were normal hb-11.2 gram/dl

RESULTS

Bronchoscopic examination using flexible fiberoptic bronchoscope was performed in the conscious patient under local anaesthesia and foreign body was found.Rat tooth alligator forceps was used to successfully retrieve the foreign body patient was relieved all symptoms and followup chest radiograph was normal and BAL fluid culture showing klebsiella infection.

DISCUSSION

It's Rare,more common in children(Less in adults) present with chronic symptoms -cough,repeated infection or non resolving pneumonia.foreign body can either organic (peanut, peas) & inorganic (pins, nails, teeth).

CONCLUSION

High incidence of suspicion Foreign body aspiration kept in patient with non resolving pneumonia(maybe,asymptomatic).it's mimics malignancy in elderly age.

Title: TRACHEOESOPHAGEAL FISTULA AS A

COMPLICATION OF TRACHEOSTOMY

Name of Presenter: **AMENA TAHSEEN**

Authors (or Co-authors): **HIDAYATH HUSSAIN**

Institution/Author Organization: **SHADAN INSTITUTE OF MEDICAL SCIENCES**

INTRODUCTION:

A tracheoesophageal fistula is an epithelialized tract between the esophagus and the trachea. Fistulas can be a result of benign or malignant causes . Acquired tracheoesophageal fistula are most commonly due to malignancy. Of the non malignant reports of acquired tracheoesophageal fistula ,75% are the results of endotracheal cuff related trauma in patients subjected to prolonged ventilation. Secondary erosion of the tracheal and esophageal walls occur with a 0.3% -3% incidence in mechanically ventilated patients. Tracheostomy doesn't appear to reduce the risk of developing an acquired tracheoesophageal fistula as a consequence of mechanical ventilation.

HISTORY:

Here is the case of 64 year old male tracheostomised for 20days with increased oral secretions and aspiration of ryle's tube feeds through tracheostomy tube. DIAGNOSIS: Under sedation bronchoscopy performed and trachea was visualised where increased secretions and a linear laceration seen on the posterior wall of trachea.

MANAGEMENT:

Surgical intervention remains the first choice of treatment for these patients but major surgery is not possible. Rapid and minimally invasive closure of the fistula to stop repeated aspiration are of utmost importance (airway stents, endoscopic ablation).

Title: A forgotten foreign body in bronchus (self expectorated) leading to bronchiectasis

Name of Presenter: **Dr AMIT JAIN**

Authors (or Co-authors): **Dr Ashish kumar Prakash, dr Anand jaiswal, Dr Pinky goyal, Dr Sandeep mittal, Dr Roopanshi Jain**

Institution/Author Organization: **MEDANTA-THE MEDICITY**

Background-

Foreign body and its removal by bronchoscopy has always been interesting for interventional pulmonologist. Many a times inert foreign bodies are inhaled but remaining in lung for several years is rare entity. Most important is that if it is self expectorated after several years mere with antibiotics and inhaled medicine is very exciting.

Case –

This is a case of 20 year old female student who was a known case of childhood asthma and non compliant with the treatment takes only occasional anti-histaminic tablets. She came to our OPD with complaint of chronic cough over 3-4 year and fever one week. On auscultation occasional ronchi and localized crackles heard at right infrascapular and interscapular region. All routine investigations were normal apart from leucocytosis (TLC was 14790/mm³). Patient was given antibiotics and inhaled bronchodilator HRCT chest advised showed localised bronchiectasis mucus impaction in right lower lobe. ABPA was ruled out and planned to do bronchoscopy when patient give consent. After antibiotics treatment fever was resolved and one around month of regular bronchodilator patient expectorated one plastic tip of pen. HRCT after expectoration showed improvement in? Mucus impaction but residual dilatation of bronchus was persisting.

Conclusion-

We concluded this case as a forgotten foreign body in bronchus leading to bronchiectasis. Patient has self expectorated the foreign body after inhaled bronchodilator and inhaled corticosteroids.

Title: Unusual case of Right lung Endobronchial mass

Name of Presenter: **Dr. G. Anand Raja MD Respiratory medicine II-Yr Post-graduate**

Authors (or Co-authors): **Dr. B. Rajesh Kumar MD,DNB, Dr. V. P. Arivudai Nambi MD,MRCP, Dr. R. Prabhakaran MD**

Institution/Author Organization: **Govt. Rajaji Hospital, Madurai Medical College, Madurai, Tamil Nadu, India**

INTRODUCTION

Endobronchial mass is rare in adolescents. Most endobronchial lesions are predominantly non-neoplastic lesions, such as granulomatous infection, pyogenic granulomas, granulation tissue, hamartomas etc. Other endobronchial tumors include hemangiomas, myofibroblastic tumors, bronchial carcinoid, adenoid cystic carcinoma, mucoepidermoid carcinoma, mucous gland adenoma etc.

HISTORY & PRESENTATION

A 16-years old boy came with complaints of cough with expectoration for 3 weeks, haemoptysis, chest pain and shortness of breath for 1 week.

On evaluation, Chest Xray was normal and CT chest showed Right lower lobe air trapping and

an intraluminal mass with calcification in right intermediate bronchus. Bronchoscopy showed a fleshy, pink, pedunculated mass in right intermediate bronchus.

DIAGNOSIS & MANAGEMENT

Bronchoscopic biopsy was inconclusive. Bronchoscopic cauterization debulking was done which revealed Foreign body, a plastic bullet, which was removed by open thoracotomy and bronchotomy.

CLINICAL IMPLICATIONS

Although rare, neglected airway foreign body should always be considered as a differential diagnosis in adolescents with endobronchial mass, i.e. granulation tissue mimicking mass.

Title: FOREIGN BODY ASPIRATION: AN UNUSUAL PRESENTATION AND OUTCOME

Name of Presenter: **DR ARAVIND SAI KALINGA**

Authors (or Co-authors): **DR VENKATESHWARA REDDY TUMMURU**

Institution/Author Organization: **SVS MEDICAL COLLEGE AND HOSPITAL MAHABOONAGAR TELANGANA**

BACKGROUND:

Foreign body inhalation is commonly seen in children who need to be treated immediately or it leads to complications. It can only enter the air passage if there is some interference with normal reflexes such as sudden inspiration while eating, playing, fright or laughter. It remains in trachea when its size is greater than the lumen and may lead to asphyxia. Sometimes patient may not have symptoms or may present with recurrent chest infections.

CASE REPORT:

A 2-year-old baby presented to ER with history of dyspnea, cough and fever since 5days. O/E SpO₂ 92%RA, PR- 112bpm, decreased movements and absent breath sounds on right hemithorax. CXR: Loss of lung volume on right side. FOB- foreign body at right main stem bronchus. Rigid bronchoscopy done and foreign body retrieved with rigid forceps. Presence of purulent secretions made the retrieval difficult. Suctioning of secretions done and foreign body was retrieved.

CONCLUSION:

Tracheobronchial foreign bodies, especially in children and infants are fraught with respiratory obstruction and can even lead to death. They are mostly found in proximal airways, probably due to smaller bronchial tree diameter in this age group. Preoperative

radiological assessment followed by rapid intervention by pulmonologists usually results favorable outcome.

Title: Unusual foreign body with a bizarre entry path

Name of Presenter: **Dr Bhumika Madhav**

Authors (or Co-authors): **Dr Jeenam Shah,Dr Jayalakshmi.T.K**

Institution/Author Organization: **Apollo hospitals Navi mumbai**

Introduction

Foreign body in the bronchus is usually ingested or aspirated. Entry of a bronchial foreign body through the neck via a rent in the trachea is rare. We report a case of large metallic foreign body from heavy metal equipment lodged after an accidental neck injury.

Case Report

A 58 year old male patient presented with traumatic neck injury which occurred while overseeing crane operations in a steel plant. On arrival he was hemodynamically stable with a deep lacerated wound in the neck. HRCT chest revealed wound over the neck puncturing the trachea with a pneumomediastinum with large jagged foreign body lodged in right main bronchus. Patient was considered for open surgery by thoracic surgeon. A fiber optic bronchoscopy was planned with standby rigid bronchoscopy in an attempt to avoid thoracotomy. Skillful Fiber optic bronchoscopy with use of snare helped to remove a large irregular metallic foreign body of size 2.5cm long and 1.3 cm wide and thus an open thoracotomy was avoided

Conclusion

Foreign body in the lungs can also be via open penetrating wounds in the neck or chest and can be removed by bronchoscopy avoiding complex surgical procedure.

Title: Diagnostic predicament of a case of Spontaneous Transudative chylothorax

Name of Presenter: **Damini Somayaji**

Authors (or Co-authors): **Akshada Vernekar, Uday C. Kakodkar**

Institution/Author Organization: **Goa Medical College and Hospital**

Introduction

Chylothorax is defined as accumulation of chyle in the pleural space. Typically chylous effusion is exudative. However in very rare situations it can be transudative. We present one such

case of a transudative chylothorax in view of unusual presentation. The relevant literature has been reviewed. Case History A 62 year old female presented with progressive exertional dyspnea since 12 months along with swelling of bilateral legs. She was diagnosed as a case of Rheumatic mitral Stenosis along with left ventricular systolic dysfunction 4 months ago. She was also detected with a right breast lump 3 years ago which was not investigated further. On examination she had signs of a right sided pleural effusion. CECT abdomen and thorax revealed bilateral pleural effusion and ascites with no lung parenchymal or other visceral abnormality. Pleural fluid analysis yielded transudative lymphocyte predominant chyle.

Management

Patient was started on diuretics and therapeutic thoracocentesis was done to drain the fluid which gave rise to clinical and symptomatic improvement in the patient. Clinical Implications Patients with congestive cardiac failure may present with transudative chylothorax. Diuretics and therapeutic thoracocentesis may be preferred in such patients as opposed to intercostal tube insertion.

Title: Cholethorax

Name of Presenter: **Dasari Keerthana**

Authors (or Co-authors): **Rangaraya Medical College**

Institution/Author Organization: **Rangaraya Medical College**

Background / Introduction

Cholethorax or bilious effusion in the thorax, is a rare condition in which bile passes into the pleural space from the abdominal cavity, necessitating urgent treatment. Postoperative pleural effusion is more frequent in patients who undergo hepatobiliary surgery. In this article, we present a case of cholethorax as a complication of laparoscopic cholecystectomy (LC)

Aims / Objectives

Treat Cholethorax occurring as a consequence of hepatobiliary surgeries including LC due to diaphragmatic.

Methodology

The use of Thoracocentesis procedure associated with removal of fluid or air from the pleural space for diagnostic or therapeutic purposes. Results Significant improvement and stability has been observed in patients who underwent Thoracocentesis procedures for Cholethorax.

Conclusion

Cholethorax may occur post hepatobiliary surgeries including LC due to diaphragmatic injury and can be successfully managed by thoracocentesis.

Title: An Interesting Case of Non Resolving Pneumonia in Adult: A Case Report

Name of Presenter: **Dr Mobeen Quadri- 3rd Year Post Graduate**

Authors (or Co-authors): **Dr Yugandhar- Prof & HOD of Dept of Respiratory Medicine**

Institution/Author Organization: **ALLURI SITARAMARAJU INSTITUTE OF MEDICAL SCIENCES, ELuru, 534005**

Background:

The term Non- Resolving Pneumonia is not an uncommon entity and has been used interchangeably to refer the persistence of radiographic abnormalities beyond expected time limit. The common causes of Non Resolving Pneumonia in Adults are Incorrect diagnosis, Inadequate antibiotic therapy, Impaired Host defence, atypical organisms, Resistant pathogens, Non infectious causes, tuberculosis, Endobronchial lesions, Endobronchial Foreignbodies e.t.c.

Case Report:

A 38 year old Female patient came to our OPD for first time with Cough & Expectoration since 2 months and Shortness of breath since 2 months. She gave history of similar complaints in the past and used symptomatic medication for those

complaints. Patient denied history of any aspiration when asked specifically. On Examination Vitals were Normal & Respiratory system shows Leftside Normal Vesicular breathsounds and Rightside with Coarse Inspiratory crests present in Infra Axillary & Infrascapular areas. Investigations like Blood parameters were Normal, Sputum for AFB and Sputum for CBNAAT were Negative, CXR PA view shows Right Mid & Lowerzone. Non Homogenous Opacity, HRCT Chest shows Cystic Bronchiectasis in Right Middle Lobe & Basal segments of Right Lower Lobe with dependent airfluid levels. Diagnostic Fiberoptic Bronchoscopy was done and showed a piece of tea sachet lodged in right intermediate bronchus and removed it in toto along with bronchoscope with cupped biopsy forceps. After removal, patient is symptomatically improved and doing well know.

CONCLUSION:

Fiberoptic bronchoscopy remains the procedure of choice for all cases non resolving

pneumonia.

Title: DROP IN AIR FLUID LEVEL IN THE POST PNEUMONECTOMY SPACE – IS CHEST TUBE PLACEMENT ALWAYS A NECESSITY?

Name of Presenter: **Muniza Bai**

Authors (or Co-authors): **Pratap Upadhyya, Dharm Prakash Dwivedi, Vinod Kumar Saka**

Institution/Author Organization: **Jawaharlal Institute of Postgraduate Medical Education and Research**

INTRODUCTION

A drop in the air-fluid level within the post pneumonectomy space in an upright chest radiograph should raise the suspicion of a possible bronchopleural fistula. Similar radiologic picture in the absence of bronchopleural fistula and associated infection points towards a lesser known entity, benign emptying of pneumonectomy space (BEPS). It is a rare condition which is often misdiagnosed and mismanaged. We herein report a case of benign emptying of pneumonectomy space and briefly touch upon the dos and don'ts.

CASE DETAILS

A 28-year young woman, admitted in view of management of diabetic ketoacidosis had no respiratory complaints. Her history revealed that she was diagnosed to have sputum smear-positive pulmonary tuberculosis with left-sided secondary spontaneous pneumothorax in august 2017. She was treated with left sided tube thoracostomy, category 1 ATT and declared cured. In view of left lung persistent pleuroparanchymal fibrosis, she underwent left-sided pneumonectomy in July 2018. She was discharged without chest tube or any complications. A chest radiograph taken in her follow up visit two weeks after discharge demonstrated the expected fluid increase in the post pneumonectomy space. However, a routine chest radiograph taken during this admission revealed a drop in the air-fluid level in the left hemithorax. This incidental finding raised the alarms of a possible bronchopleural fistula. But surprisingly, she was afebrile with normal white blood cell count and sterile pleural fluid culture. Given the ongoing COVID pandemic, a virtual bronchoscopic reconstruction was done from CT thorax which revealed an intact bronchial stump with no fistula. She was conservatively managed and duly discharged. Repeat chest radiograph after two weeks revealed reaccumulation of fluid in the postpneumonectomy space.

CONCLUSION

Clinicians should keep BEPS among the differential diagnosis in case of a drop in the air-fluid level of the post pneumonectomy

space. A right diagnosis of BEPS, when clinched early, will spare a good number of patients from unnecessary, costly, and morbid surgical procedures. Mahatma Gandhi once said, 'A correct diagnosis is three-fourths the remedy'.

Title: CASE SERIES : ROLE OF STREPTOKINASE IN COMPLICATED PARAPNEUMONIC EFFUSION AND EMPYEMA

Name of Presenter: **Dr.S.Muthulakshmi**
 Authors (or Co-authors): **Dr.R. Jayakumar**
 Institution/Author Organization: **PSG INSTITUTE OF MEDICAL SCIENCE & RESEARCH**

INTRODUCTION:

Pleural effusions are seen in approximately 35-40% of patients with bacterial pneumonia. Especially from stage 5 [complex complicated effusion] due to presence of fibrous septations and high fluid viscosity, Intrapleural fibrinolytic therapy has been proven successful in numerous trials. In this case series , we present four cases that were successfully treated with intrapleural streptokinase.

CASE REPORT:

A 53 year old male, presented with complaints of left sided chest pain for 1 week. USG chest - multiloculated effusion in left infrascapular and infraaxillary area with internal septations.

A 57 yrs old male, presented with complaints of breathlessness, chest pain for 3 days duration. He is known case of CML, chronic bilateral pleural effusion on dasatinib.CTPA showed bilateral effusion[R>L], pleural thickening with loculations on right.

A 41 yeras old male, presented with complaints of weight loss, loss of appetite for 1 month and breathlessness,chest pain of 1 week . USG chest showed right moderate effusion with internal septations and left minimal effusion.

A 47 year old male presented with complaints of productive cough for 10 days,breathlessness and left side chest pain for 3 days duration. USG chest showed moderate effusion with two loculations.

Pleural fluid analysis of 3 cases showed low ADA, neutrophilic predominant, exudative effusion and negative for genexpert. And another case suggestive of TB empyema. All above cases were treated with intercostal drainage and Inj. Streptkinase. 2 cases showed complete resolution , whereas TB empyema and chronic effusion with secondary infection showed partial resolution.

CONCLUSION:

Instillation of streptokinase additional to chest tube drainage is safe, improves outcome, and

reduces the rate of surgical referrals.

Title: BRONCHOBILIARY FISTULA- A CASE REPORT

Name of Presenter: **DR VITHALA SAI NAVYA**
 Authors (or Co-authors): **DR GANAPATHI REDDY, DR MEHABOOB KHAN**
 Institution/Author Organization: **GOVERNMENT AND GENERAL CHEST HOSPITAL, ERRAGADDA HYDERABAD TELANGANA**

Introduction

Bronchobiliary fistula is a very rare complication of liver abscess that presents with biliptysis with chronic cough.

Case report

A 47 year old diabetic male presented with 3 months of cough with greenish sputum with intermittent fever. He had history of pulmonary tuberculosis with chronic liver disease with portal hypertension with loculated abscess of right lobe of liver with chronic pancreatitis. Sputum for bile pigments was positive. Chest X ray showed right midzone and lowerzone fibrosis suggestive of old pulmonary tuberculosis. CT chest confirmed the same. FOB showed greenish secretions in right middle lobe bronchus. Bronchial washings are positive for bile pigments. MRCP showed strictures in CHD. ERCP with CBD cannulation was done. Cholangiogram showed leak of contrast in right intrahepatic biliary radicals above diaphragm on fluoroscopy.

We diagnosed the case as bronchobiliary fistula secondary to portobiliopathy.

Discussion

A bronchobiliary fistula is mostly caused by hepatic/ subphrenic abscesses, resulting from different conditions. Any patient presenting with chronic cough after CBD cannulation should be evaluated to rule out BBF. It can be treated endoscopically or surgically.

Title: Recurrent Haemoptysis treated with Bronchial Artery Embolization in a known case of Chronic Cavitory Aspergillosis - A case report

Name of Presenter: **Pranav Modi**
 Authors (or Co-authors): **Abhay Uppe, Dharmik Bhuvu, Girija Nair**
 Institution/Author Organization: **DY Patil Hospital, Navi Mumbai**

Introduction

Current literature supports the use of BAE for chronic recurrent haemoptysis as a safe and effective minimally invasive procedure. We

discuss a case of a 63-year-old male, post right upper lobe lobectomy, presenting with chronic recurrent haemoptysis treated with BAE.

Clinical presentation

The patient presented with complaints of cough and breathlessness for 15 days associated with recurrent haemoptysis for 1 year. Past medical history revealed the patient to be a known case of treated pulmonary tuberculosis and chronic cavitory aspergillosis. Right upper lobe lobectomy was done in view of unresolving haemoptysis 1 year ago. HRCT thorax (P+C) was indicative of a loculated right hydropneumothorax, right bronchopleural fistula and fibrobrochiectatic changes with pleural thickening in the right middle lobe. Multiple branching centrilobular nodules with patchy consolidation were seen in the right lower lobe and left upper lobe. Sputum examination and other laboratory parameters were unremarkable.

Management

The patient underwent bronchial artery angiography that revealed abnormal blush in upper and middle branches of the right bronchial artery, right intercostal artery and right internal mammary artery that were embolized using gel foam and PVA particles. COVID-19 infection was ruled out and there were no further episodes of haemoptysis post-procedure.

Title: LOCULATED PNEUMOTHORAX MASQUERADING AS VANISHING LUNG SYNDROME(VLS)

Name of Presenter: **DR. SHAIK RAFIYA SULTHANA**
 Authors (or Co-authors): **DR. ASHFAQ HASAN, DR. SYED MAHMOOD, DR. ALEEMUDDIN NAVEED**
 Institution/Author Organization: **DECCAN COLLEGE OF MEDICAL SCIENCES, HYDERABAD.**

INTRODUCTION:

Loculated pneumothorax is a rare form of pneumothorax and is mainly seen in ARDS, pleural malignancy, chronic pleural or subpleural infections like TB or after undergoing thoracic surgery. Mimics as giant bulla, tension pneumothorax. VLS represents rare form of irreversible damage to the pulmonary parenchyma often due to COPD. VLS may mimic the presentation of pneumothorax with worsening dyspnea, hypoxia, and chest radiograph revealing an absence of pulmonary markings. However, in the case of a true pneumothorax, a white line representing visceral pleura that has separated from the chest wall is often seen.

CASE HISTORY:

A 28 year old male known case of smear negative, rifampicin sensitive PTB on anti-tuberculous drugs since 4 months currently in continuation phase of treatment.

PRESENTATION:

Patient presented to EMD with worsening of shortness of breath and left sided chest pain since 2 days with chronic cough, weight loss since 7 months. Chest radiography revealed emphysematous changes involving bilateral upper lobes with large lucent area in left lower thorax with mediastinal shift and deep sulcus sign.

DIAGNOSIS:

CT scan of chest showed Giant bullae in left upper lobe with partial collapse of left lung and emphysematous changes in both lungs with patchy fibrosis and nodular opacities. However there was second school of thought considering it to be loculated pneumothorax.

MANAGEMENT:

Since management of both diseases is different, loculated pneumothorax requires intercostal tube drainage and VLS requires thoracotomy with bullectomy. Post ICD, lung expanded and CT scan of chest post ICD showed no bullae. There by concluded as loculated pneumothorax.

LEARNING POINTS:

Loculated pneumothorax is rare and can mimic bullous disease. Careful diagnosis by CT scan is important and cardio thoracic surgery consultation should be promptly sought in these cases for better management of patient.

Title: LOCULATED PNEUMOTHORAX MIMICKING AS BULLOUS LUNG DISEASE

Name of Presenter: **DR. SHAIK RAFIYA SULTHANA**

Authors (or Co-authors): **DR. ASHFAQ HASAN, DR. SYED MAHMOOD, DR. ALEEMUDDIN NAVEED, DR. FAHAD ABDULLAH**

Institution/Author Organization: **DECCAN COLLEGE OF MEDICAL SCIENCES, HYDERABAD.**

Loculated pneumothorax is a rare form of pneumothorax and is mainly seen in ARDS, pleural malignancy, chronic pleural or subpleural infections like TB or after undergoing thoracic surgery. It mimics as giant bulla, tension pneumothorax, atypical pneumothorax. We present a case of 30 year old who presented with secondary loculated pneumothorax resolved by ICDT placement mimicking as

bullous lung disease. Bullous disease mimics the presentation of pneumothorax with worsening dyspnea, hypoxia, and a chest radiograph revealing an absence of pulmonary markings. However, in the case of a true pneumothorax, a white line representing visceral pleura that has separated from the chest wall is often seen. Clinical concern for pneumothorax should be immediately evaluated with an urgent CT scan of the chest. around 1% of patients with active tuberculosis present with secondary spontaneous pneumothorax. A bronchopleural fistula may occur spontaneously during the natural history of the disease leading to pneumothorax and chronicity of the disease leads to loculated pneumothorax. It is important to differentiate between a pneumothorax and a bulla because inadvertently placing a chest tube into a bulla will almost always produce a pneumothorax which may be difficult to re-expand.

Title: PNEUMOTHORAX MASKING BULLA- A CASE REPORT

Name of Presenter: **RENJANA ANIRUDHAN**

Authors (or Co-authors): **Dr.Fathima Zehra Razvin,Dr.Aruna S,Dr.N.Meenakshi,Dr.Nisha Ganga**

Institution/Author Organization: **Chettinad Hospital and Research Institute,Kelambakkam,Tamil Nadu**

INTRODUCTION:

Primary spontaneous pneumothorax(PSP) occurs in young thin males without underlying lung disease which is managed conservatively. However recurrence in PSP need detailed workup to unmask secondary causes of pneumothorax. We present a case of young female initially diagnosed as PSP with recurrence and final work up revealed bullous lung disease requiring surgical intervention. HISTORY: A 24 year married woman presented with complaints of significant weight loss(20 kgs in 1 year),no other respiratory complaints.She was diagnosed to have left sided PSP,treated with ICD twice in past and presented to us with left sided ICD in situ with residual pneumothorax and air leak.

PRESENTATION:

Patient low BMI, tachypnoea, tachycardia and SPO2 92% in room air and no marfanoid features, absent breath sounds with hyper resonant note left hemithorax.

DIAGNOSIS:

Chest X-ray showed left sided residual pneumothorax with ICD in situ, hyperlucency suggestive of bulla. HRCTchest- large giant bullae occupying 90% left lung with small residual pneumothorax.

MANAGEMENT:

In view of recurrent pneumothorax and underlying bullae patient referred to cardiothoracic surgeon,bullectomy performed. Post-operative chest Xray-resolution of pneumothorax with complete lung expansion. Patient stable and under followup.

CLINICAL IMPLICATIONS:

Primary spontaneous pneumothorax is managed conservatively however patients with recurrent pneumothorax should be evaluated to rule out secondary causes for optimum management.

Title: A RARE CAUSE OF UNILATERAL HAEMOPNEUMOTHORAX

Name of Presenter: **SUMIT KUMAR JAIN**

Authors (or Co-authors): **VINOD JOSHI, SHUBHRA JAIN**

Institution/Author Organization: **SAWAI MANSINGH MEDICAL COLLEGE, JAIPUR, RAJASTHAN**

Introduction-

Hemothorax is presence of significant amount of blood in pleural space, with haematocrit $\geq 50\%$ of peripheral blood. Etiology includes traumatic, iatrogenic and non-traumatic like malignancies, pulmonary embolism, anticoagulants, catamenial, spontaneous and hemorrhagic fever.

Case report-

A 46yr old male presented with 5 days history of high grade fever, chills, hemoptysis followed by right sided chest pain with breathlessness since 1 day. On respiratory examination- diminished right side chest movements and change in percussion note from hyper-resonant to stony-dull in 5th intercostal space with shifting dullness. Chest radiograph confirmed right hydropneumothorax. On intercostal drainage tube (ICDT) insertion, fluid was hemorrhagic, lymphocytic, exudative with pleural fluid: blood haematocrit >0.5 , confirming haemopneumothorax. No history of trauma and anticoagulant use. Blood investigations revealed thrombocytopenia (10,000c/mm³). Positive NS1 antigen and IgM antibody confirmed dengue. Patient was given blood and platelets (SDP) transfusion. CECT thorax showed hydropneumothorax with collapsed lung. VATS was performed and blood clots evacuated leading to intra-operative lung expansion. After 10 days, ICDT was removed and patient improved.

Conclusion-

Dengue haemopneumothorax is life

threatening. Timely diagnosis and management can save the life of patient. Therefore, physicians must be aware of this rare diagnostic possibility in non-traumatic haemopneumothorax, especially in endemic areas in monsoon.

Title: DOUBLE ESOPHAGEAL PERFORATION BY INGESTED FOREIGN BODY CAUSING ACUTE MEDIASTINITIS

Name of Presenter: **VARDHELLY RAMESH**

Authors (or Co-authors): **C N Prasad, K Ravinder Reddy, C Suman, P Praveen.**

Institution/Author Organization: **PRATHIMA INSTITUTE OF MEDICAL SCIENCES**

INTRODUCTION:

Esophageal perforation is a rare and has high mortality rate. Ingested foreign bodies are responsible for 9-35% of ruptures and can cause mediastinitis and sepsis. HISTORY: A 50-year-old male presented to ER with right sided chest pain, breathlessness and fever. There was a history of alcohol binge, heavy food intake followed by vomiting 10 days back.

PRESENTATION:

Tachycardia, tachypnea, SpO₂ of 98% in room air, PaO₂ of 50 mm hg at presentation. CHEST X-RAY : Bilateral pleural effusions.

CT CHEST WITH ORAL CONTRAST AND RECONSTRUCTION: Foreign body and contrast extravasations in distal third of esophagus into mediastinum with right esophagopleural fistula and bilateral pleural effusions and pneumomediastinum. UPPER GI

ENDOSCOPY: A long chicken bone (2.5 cm) impacted transversely with perforation of esophagus at both ends noted. Foreign body extracted and Endoscopic clipping done.

INTER COSTAL DRAINAGE: Chest drain was placed on both sides. Purulent material drained. DIAGNOSIS: Esophageal rupture with mediastinitis with sepsis and bilateral empyema with type 1 respiratory failure.

MANAGEMENT:

NBM, I.V antibiotics, endoscopic clipping, mechanic ventilation and supportive management.

COMPLICATIONS:

Prolonged leak from perforated site, controlled by surgical management.

CLINICAL IMPLICATIONS:

Suspect esophageal rupture in an adult with alcohol binge, vomiting and chest pain.

Title: Comparison of Safety, Efficacy and Diagnostic value of Bronchoalveolar Lavage, Brush Cytology vs Endobronchial Lung Biopsy in Lung Masses.

Name of Presenter: **Dr. Akhilesh Tiwari**

Authors (or Co-authors): **Prof. J. K. Mishra, Prof. Amrita Ghosh Kar, Dr. Deepak Shah**

Institution/Author Organization: **Institute of Medical Sciences, BHU**

Human life is priceless. In order to understand and preserve its importance, early detection of some diseases like lung cancer is necessary. Lung cancer is one of the most severe diseases among all cancer related diseases. It is observed that the outcome of Lung cancer is sturdily associated with the stage of cancer at the time of diagnosis, that's why it requires early management. At present in India the death rate of lung cancer is continuously increasing. Evaluating the importance of management of lung cancer in human life, we have emphasized on 'Lung Mass' cases in our work. On the basis of CT scan findings, if lesion is more than 3cm in size, then that lesion is referred to as Lung Mass. In this study Lung mass are diagnosed using three sample techniques namely Bronchoalveolar Lavage, Bronchial Brush Cytology, and Bronchial Biopsy. All these three techniques are taken by OLYMPUS bronchoscope. We have considered patients having age more than 40 years. In this work we have observed that all lung mass cases are not malignant, they may be infective lesion like TB, Lung Abscess, Aspergilloma, Thymoma, or Inflammatory mass.

Keywords:

Lung cancer, lung mass, Brush Cytology, Bronchial Biopsy.

Title: Role of transbronchial lung biopsy in the diagnosis of diffuse parenchymal lung diseases

Name of Presenter: **Dr. Ashwini Pednekar**

Authors (or Co-authors): **Dr. Uday Kakodkar**

Institution/Author Organization: **Goa Medical College**

Background:

Diffuse Parenchymal Lung diseases (DPLDs) are a diverse group of disorders which involve more than 200 clinical entities. The common feature in DPLDs is inflammation and fibrosis of the lung parenchyma which produces derangement of the alveolar architecture. The approach to diagnosis is multidisciplinary involving clinical, radiological and pathological findings. Although open lung biopsy is considered the gold standard for diagnosis, it is associated with higher morbidity and longer hospital stay. Transbronchial lung biopsy (TBLB)

is a relatively safer procedure which can be used to obtain a biopsy sample from the lung. There is no prior study in Goa where TBLB has been used to diagnose DPLDs. Hence we undertook this study to evaluate the utility and safety of TBLB in the diagnosis of DPLDs.

Materials and Methods:

A prospective study on 45 patients presenting to the Department of Pulmonary Medicine, Goa Medical College with radiological features suggestive of diffuse parenchymal lung disease.

Results:

The overall tissue yield of TBLB was 44% and the diagnostic yield was 31.1%. The most common histological patterns found were carcinoma, followed by tuberculosis and sarcoidosis. There was no mortality associated with the procedure. Iatrogenic pneumothorax occurred in three patients (6.6%).

Conclusion:

TBLB is a safe and effective tool in the diagnosis of DPLD, however the rate of diagnosis varies. It is a useful test when the radiological diagnosis is uncertain.

Title: ROLE OF BRONCHOALVEOLAR LAVAGE EXAMINATION CLINICALLY AND RADIOLOGICALLY SMEAR NEGATIVE PULMONARY TUBERCULOSIS

Name of Presenter: **CHETANKUMAR KARSANBHAI PRAJAPATI**

Authors (or Co-authors): -

Institution/Author Organization: **BJ MEDICAL COLLEGE AHMADABAD**

Introduction:

Tuberculosis is major health problems world wide with variable clinical presentation in india more than 40% population infected early diagnosis of active pulmonary tuberculosis is critical for tb control. the diagnosis and treatment of these patients relies on clinical symptoms but 20% are asymptomatic the physician is seeking to prove tuberculosis. Clinical and radiological based diagnosis can lead to either over or under diagnosis of tuberculosis. Fibreoptic Bronchoscopy can provide an early confirmative diagnosis . Among bronchoscopic material bronchoalveolar lavage is the best diagnostic material for diagnosis of ptb

Methodology:

Patient who came to opd pulmonary medicine department b.j .medical college was evaluated for respiratory symptoms and radiographic finding. After initial sputum smear negative, patient asked to go through sputum induction.

If smear negative after sputum induction then fiberoptic Bronchoscopy done for bronchoalveolar lavage.

Result:

in our study total 168 patients are clinically and radiologically suspected for tuberculosis in which 77%patient'BAL is positive for tuberculosis after exclude initial induction sample AFB is positive.

Conclusion:

fiberoptic Bronchoscopy is superior then sputum induction for diagnosis of tuberculosis in smear negative patient and also to rule out condition other than tuberculosis

Title: A STUDY OF YIELD OF MEDICAL THORACOSCOPY IN UNDIAGNOSED PLEURAL EFFUSION – A RETROSPECTIVE STUDY

Name of Presenter: **DR. DEEP RAJENDRABHAI KOTHARI**

Authors (or Co-authors): -

Institution/Author Organization: **A.M.C MET MEDICAL COLLEGE AHMEDABAD**

INTRODUCTION:

Undiagnosed pleural effusions despite thoracentesis remain a diagnostic challenge. Thoracoscopy remains gold standard in providing diagnosis and management of these cases. Medical Thoracoscopy is minimally invasive procedure that allow visualization of pleural space. Medical thoracoscopy is considered in patients where tuberculous and malignant pleural effusion are clinical possibility but pleural fluid analysis inconclusive.

Aims and objectives:

- To find Diagnostic yield of medical thoracoscopy in cases of undiagnosed pleural effusion.
- To find complication rate in these patients.

METHODOLOGY:

This is a retrospective study of undiagnosed cases of pleural effusion in whom medical Thoracoscopy was performed. Data is collected and Results are analyzed.

• OBSERVATION AND CONCLUSION: In present study total 40 patients of undiagnosed pleural effusion enrolled for medical thoracoscopy There were 77.50% male and 22.50% female with male to female ratio of 4.5:1..

• 87.50% patients had exudative followed by 12.50% patients had transudative pleural effusion.

• Most common thorascopic finding was variable sized nodules over pleural surface in 57.57% patients..

• After thoracoscopy majority of the patients diagnosed malignant pleural effusion (75%). Tuberculous pleuritis diagnosed in 12.5% of patients.

• Diagnostic yield of thoracoscopy is 87.50%.

Title: DIAGNOSTIC UTILITY OF ULTRASOUND GUIDED PERCUTANEOUS TRANSTHORACIC CORE NEEDLE BIOPSY IN PERIPHERAL LUNG MASSES

Name of Presenter: **Dr.DHANISHA. C.P**

Authors (or Co-authors): **Dr.M.SRAVAN KUMAR,Dr.PHANI KUMAR,Dr. R. SURESH**

Institution/Author Organization: **KAKATIYA MEDICAL COLLEGE. WARANGAL. TELANGANA.**

INTRODUCTION

Image guided Trans thoracic needle biopsy (TTNB) is used for the diagnosis of countless thoracic diseases. CT is the most common imaging modality used for guidance followed by ultrasound for peripheral lung masses.

AIMS AND OBJECTIVES

To Evaluate diagnostic utility of ultrasound guided percutaneous TTNB in peripheral lung masses.

METHODOLOGY

Lesion location was achieved by scanning the intercostal spaces by ultrasound, and Doppler scan was used to bypass the vessels from the biopsy path. Biopsy site was then disinfected, and local anesthesia was given. The biopsy was performed using a GUN BIOPSY needle under real-time guidance with Ultrasound. The biopsy sample was preserved in a formalin jar and sent for histopathology.

RESULTS

The majority of patients were in the mean age group of 50 to 59 years. Of the 40 cases, 23(57.5%) were males and 17 (42.5%) were females. Most common presenting complaint was cough 31(77.5%) Most common lesion observed in left upper lobe (34.3%) .90% were diagnosed as malignancy, 10% were benign lesion. adeno carcinoma 16(44.4%) was the most common malignancy observed. most common complication were pneumothorax(5%).

CONCLUSION

Ultrasonographically guided TTNB is safe, less expensive, less time consuming, less invasive diagnostic tool and no radiation toxicity to peripheral lung lesions.

Title: STUDY ON EVALUATION OF NON-RESOLVING PNEUMONIA IN PATIENTS

ATTENDING TERTIARY CARE CENTER.

Name of Presenter: **DR.DHARANEESWARA REDDY D**

Authors (or Co-authors): **DR.LAKSHMI SHALINI M, DR.D.CHAKARDHAR,DR.T.ARUN**

Institution/Author Organization:

SANTHIRAM MEDICALCOLLEGE AND GENERALHOSPITAL,NANDYAL

INTRODUCTION:

NON-RESOLVING PNEUMONIA IS DEFINED AS A CLINICAL CONDITION WHEREIN THERE IS RADIOLOGICAL INFILTRATES (FOCAL OR DIFFUSE, UNILATERAL OR BILATERAL, PARENCHYMAL OR INTERSTITIAL) BEGIN WITH A CLINICAL ASSOCIATION OF ACUTE PULMONARY INFECTION AND WITH A MINIMUM 10 DAYS OF STANDARD ANTIMICROBIAL THERAPY, PATIENTS EITHER FAIL TO IMPROVE OR WORSEN , OR RADIOLOGICAL OPACITIES FAIL TO RESOLVE BY 50% AT TWO WEEKS OR LESS THAN COMPLETE CLEARING AT FOUR WEEKS.

AIMS AND OBJECTIVES:

TO STUDY THE CLINICO RADIOLOGICAL PROFILE, MICROBIO-PATHOLOGICAL ETIOLOGY AND THE DIAGNOSTIC YIELD OF FOB IN NON-RESOLVING PNEUMONIA.

METHODOLOGY:

60 PATIENTS WHO THE CASE DEFINITION OF NON-RESOLVING PNEUMONIA, SATISFYING THE INCLUSION AND EXCLUSION CRITERIA AND GAVE WRITTEN INFORMED CONSENT WERE ENROLLED IN STUDY.

RESULTS:

AMONG 60 PATIENTS 48 WERE MALE, 12 WERE FEMALES.THE LOBES INVOLVED WERE ASSESSED BY CT, LUL INVOLVEMENT WAS 25%,RUL 21.6%,DIFFUSE 21.6%,LLB 13.3%,RL 11.6%,RML 6.6%.OF THE 60 CRACKLES WERE FOUNFIN 80%,WHEEZE 15%, DECREASED BREATHE SOUNDS 15%.BAL FOR GENE XPERT, MTB DETECTED IN 41.6%.BAL FOR CULTURE POSITIVE IN 9%.THE ETIOLOGY OF NON-RESOLVING PNEUMONIA WAS DIAGNOSED IN 90%.

CONCLUSION:

NON-RESOLING PNEUMONIA WAS MORE COMMON IN MALES,MC PRESENTING SYMPTOM IS COUGH,FOB FOUND TO BE SAFE AND USEFUL PROCEDURE WITH YIELD OF 71%.TB WAS THE MOST COMMON IN AROUND 41.6%,BACTERIAL PNEUMONIA AND MALIGNANCY THE NEXT.

Title: ROLE OF MEDICAL THORACOSCOPY IN EVALUATING PLEURAL EFFUSION

Name of Presenter: **DVN Rakesh Reddy**

Authors (or Co-authors): **Srinivas Reddy**

Institution/Author Organization: **Alluri Sitarama Raju Academy of medical science**

INTRODUCTION:

Medical thoracoscopy is a minimally invasive ambulatory procedure performed under local anaesthesia or moderate sedation which allows for direct visualization of biopsy targets as well as simultaneous therapeutic interventions. Thoracoscopy has received increasing attention over the past decade as a result of the considerable advances that have been made in the development of endoscopic instruments.

METHODS:

This study is a hospital-based, prospective DESCRIPTIVE study conducted at Alluri Sitarama Raju Academy of Medical Sciences.

RESULT:

Out of 40 patients Malignancy(54%) was the most common diagnosis. 24% were diagnosed as Tuberculosis. 16% were Suppurative and Non Specific Inflammatory and 6% were Inconclusive. Among malignancy, 12 patients had Adenocarcinoma(NSLC), 1 patient had Squamous cell carcinoma(NSLC). Overall Diagnostic yield was 94%.

CONCLUSION:

Medical thoracoscopy is safe and valuable tool for diagnosis of pleural effusion of unknown origin as it helps in obtaining biopsy under direct vision with low complication rate.

Title: TO STUDY DIAGNOSTIC YIELD OF MEDICAL THORACOSCOPY IN MODERATE TO MASSIVE PLEURAL EFFUSIONS IN A TERTIARY CARE CENTER IN TELANGANA.

Name of Presenter: **DR.E.RAJU**

Authors (or Co-authors): **PROF & HOD DR. MAHABOOB KHAN**

Institution/Author Organization: **GOVERNMENT GENERAL & CHEST HOSPITAL/ OSMANIA MEDICAL COLLEGE**

INTRODUCTION;

Medical thoracoscopy has received renewed interest in recent past for diagnostic as well as therapeutic uses. In this study, we describe our experience with thoracoscopy for moderate to massive pleural effusions.

MATERIALS AND METHODS;

The study was conducted in department of Pulmonary medicine- Osmania medical college, Hyderabad. A total of 31 patients presenting with pleural effusion were evaluated with all necessary investigations and are being taken for the procedure. Thoracoscopic guided

pleural biopsy was performed in these patients and is sent for analysis.

RESULTS;

A total of 31 patients underwent thoracoscopy. Overall diagnostic yield of thoracoscopic pleural biopsy was 96.7% in these patients. Many of them were diagnosed as malignancy followed by tuberculosis. There were no major complications, only few had minor complications like prolonged Air leak.

CONCLUSION;

Thoracoscopy is a safe, simple and a valuable diagnostic tool in the diagnosis of undiagnosed exudative pleural effusions with minimal complication rates.

Title: Bronchoscopy: A diagnostic tool in sputum negative/non-producing patients

Name of Presenter: **Dr. Harsh Yadav**

Authors (or Co-authors): **Dr. Vishal Chopra, Dr. Nidhi Girdhar**

Institution/Author Organization: **Government Medical College, Patiala**

Introduction:

Diagnosis of sputum/smear-negative pulmonary tuberculosis patients can be very challenging. Bronchoscopy can help provide a microbiologically confirmed diagnosis in such patients. Objective: To evaluate the role of bronchoscopy in sputum smear negative or sputum non-producing patients with clinical or radiological suspicion of tuberculosis.

Methods:

This study included 119 patients with clinical or radiological suspicion of pulmonary tuberculosis. Sputum smear and CBNAAT were negative. They were subjected to bronchoscopy. Bronchoalveolar lavage (BAL) was taken and was sent for AFB, CBNAAT, fungal stain, cytology and culture and sensitivity. Results: Of the 119 suspected, 92(77.3%) were diagnosed using bronchoscopy. Out of these 45(48.9%) were diagnosed as pulmonary tuberculosis (1 patient as multi-drug resistant tuberculosis), 9(9.7%) as nonspecific inflammation, 18(19.6%) as pneumonia, 19(20.7%) as atypical cells suggestive of malignancy, 1(1.1%) as Klebsiella in BAL culture.

Conclusion:

Bronchoscopy is a reliable and safe procedure for microbiological diagnosis of pulmonary tuberculosis. Bronchoscopy samples also facilitate the diagnosis of other diseases and also prevent irrational and overtreatment of TB.

Title: Aetiology and clinical profile of spontaneous pneumothorax in adults in a tertiary care hospital

Name of Presenter: **Dr. Kovvada Aswini**

Authors (or Co-authors): -

Institution/Author Organization: **Post graduate , Dept of TBCD, AMCGHCCD,VISAKHAPATNAM**

Introduction:

Pneumothorax is defined as presence of air in the pleural cavity. It is classified into spontaneous and traumatic. Spontaneous pneumothorax is subdivided into primary spontaneous and secondary spontaneous pneumothorax.

Aim and objective of the study:

To study aetiology and clinical profile of spontaneous pneumothorax in adults.

Methodology:

It is a retrospective study conducted in patients admitted with diagnosis of spontaneous pneumothorax in GHCCD, Visakhapatnam.

Results:

30 patients included in the study group, 26 were male and 4 female, 22 were smokers 12 were non smokers. With age between 19 and 68 years. 27 had secondary spontaneous pneumothorax, 3 had primary spontaneous pneumothorax. The aetiology of secondary spontaneous pneumothorax were COPD(45%), pulmonary tuberculosis (27.5%), Asthma(7.5%), Bronchiectasis(7.5%) pneumonia(5%). Dyspnoea was the most common symptom in 87.5% patients and was associated with pleuritic chest pain in 70%. More patients (65%) had right sided pneumothorax.

Conclusion:

In our study group pneumothorax was most common in men. Secondary spontaneous pneumothorax is more common than primary spontaneous pneumothorax. Most common cause of secondary pneumothorax was found to be COPD, followed by tuberculosis.

Title: Bronchoalveolar lavage cellular analysis in conjunction HRCT chest imaging as a diagnostic intervention for patients with suspected ILD.

Name of Presenter: **Dr.Lakshmi**

Authors (or Co-authors): **Dr.Sravan Kumar, Dr. Phani Kumar**

Institution/Author Organization: **Kakatiya Medical College**

Introduction

Bronchoalveolar lavage (BAL) has gained acceptance for diagnosis of Interstitial lung disease (ILD). The advent of high-resolution computed tomography (HRCT) has reduced the clinical utility of BAL. This work has utilized the recommendations of the American Thoracic Society (ATS) to optimize BAL and the findings have been associated with clinical examination and HRCT to precisely narrow down the cause of ILD.

Materials and Methods:

BAL was performed on ILD suspects at the target site chosen based on HRCT. The procedure, transport, processing, and analysis of BAL fluid were performed as per the ATS guidelines.

Results:

The BAL procedure was optimized as per the recommendations of the ATS. In a cohort of 50 patients, Idiopathic pulmonary fibrosis, (10) hypersensitivity pneumonitis, (22) connective tissue disorder, (18) were diagnosed. Statistically significant variation in differential counts was found in different ILDs.

Clinical Significance:

BAL along with clinical and HRCT findings improved the diagnostic accuracy by incorporating, the acute or chronic nature of the disease and the cause for acute exacerbation, which helped in the better management of ILDs.

Title: ROLE OF MEDICAL THORACOSCOPY IN UNDIAGNOSED EXUDATIVE PLEURAL EFFUSIONS

Name of Presenter: **LAKSHMI SHALINI M**

Authors (or Co-authors): **D DHARANEESWAR REDDY**

Institution/Author Organization: **SANTHIRAM MEDICAL COLLEGE AND GENERAL HOSPITAL**

INTRODUCTION:

Accurate diagnosis of pleural effusion is always a challenge. It often needs histological analysis. Gold standard is Medical thoracoscopy is minimally invasive procedure done in conscious sedation where we can visualise the visceral and parietal pleura and take pleural biopsy from suspicious areas under vision

AIM OF THE STUDY:

To ascertain the diagnostic value of flexible thoracoscopy in undiagnosed exudative pleural effusion
METHODOLOGY: This is a prospective study conducted at Santhiram medical college & general hospital, Nandyal between

oct 2019 to oct 2020. Those cases which failed to achieve diagnosis by initial pleural fluid analysis and malignant cytology undergone thoracoscopy

RESULTS:

Out of 40, 11 cases were diagnosed as malignancy, of which 5 cases were metastatic malignancy, 4 adenocarcinoma, 2 metastatic renal cell carcinoma, 2 metastatic deposits primary GI tract, 2 small cell carcinoma, 2 pleural lymphoma. Out of 29 nonmalignant cases, 18 cases were diagnosed as tuberculosis. Others came as chronic nonspecific inflammation. 76.9% of haemorrhagic effusion came as malignancy, that is out of 13, 10 came out as malignancy. Of the 27 straw coloured effusion 2 came out as malignancy. So the overall yield of thoracoscopy in the diagnosis of TB and malignancy is 72.5%.

CONCLUSION:

Medical thoracoscopy is a valuable and safe tool in evaluating undiagnosed exudative pleural effusion

Title: DIAGNOSTIC YIELD OF FIBRE OPTIC BRONCHOSCOPY IN SUSPECTED CASES OF LUNG CANCER

Name of Presenter: **NARABOINA SRAVANA SANTHI**

Authors (or Co-authors): **Dr. K. RAJENDRA KUMAR**

Institution/Author Organization: **RANGARAYA MEDICAL COLLEGE KAKINADA**

INTRODUCTION

Flexible bronchoscope is useful in the diagnosis and management of inflammatory, infectious and malignant diseases of the chest and has revolutionized the diagnosis and therapeutic approach in respiratory diseases. bronchial biopsy of visible bronchogenic cancer is positive in 73-96% cases, and 3-5 biopsies are needed to reach 90-100% sensitivity. the specificity of bronchial biopsy for lung cancer reported to be 62-95%.

AIMS AND OBJECTIVES

To study the usefulness

Title: The Role of Medical Thoracoscopy done at the Government Medical College, Kota, Rajasthan; In cases of Haemorrhagic Pleural Effusions

Name of Presenter: **DR NEERAJ KUMAR NAGAR**

Authors (or Co-authors): **DR ANIL SAXENA, DR SATYAM AGARWAL**

Institution/Author Organization: -

INTRODUCTION

The technique of medical thoracoscopy (or pleuroscopy) involves passing an endoscope through the thoracic cage and allows direct visualization and biopsies from the pleura. It is both a diagnostic and therapeutic procedure. More than 15% of transudative and more than 40% of all types of exudative pleural fluids are blood tinged which means they have pleural fluid RBC counts between 5,000 and 100,000/mm³. Hemorrhagic pleural effusions are considered to be secondary to malignancy unless otherwise proved.

OBJECTIVES

The Role of Medical Thoracoscopy done at the Government Medical College, Kota, Rajasthan; In cases of Hemorrhagic Pleural Effusions

METHODOLOGY

This present study will be conducted in the Department of Respiratory medicine, New Medical college, Kota on 50 patients and irrespective of their sex who presented with clinical and radiological sign and symptoms suggestive of hemorrhagic pleural effusions.

RESULTS:

The results of the role of thoracoscopic biopsy performed in 50 cases of hemorrhagic pleural effusions who satisfied the inclusion and exclusion criteria, done at a tertiary care hospital in Kota Rajasthan.

CONCLUSION:

Malignancy and tuberculosis were the two leading causes of hemorrhagic effusions in this study. The complication rate was negligible.

Title: YIELD OF FIBEROPTIC BRONCHOSCOPY IN SPUTUM SMEAR NEGATIVE PATIENTS OF PULMONARY TUBERCULOSIS

Name of Presenter: **PRASHANT MISHRA**

Authors (or Co-authors): **Dr. RAJENDRA PRASAD, SYED AHMED HUSSAIN KAZMI**

Institution/Author Organization: **ERAS LUCKNOW MEDICAL COLLEGE**

INTRODUCTION:

Pulmonary tuberculosis is a major health issue in developing countries with 10 million people affected globally and 2.69 million in India. Sputum AFB is a reliable diagnostic tool but in some cases sputum smear for AFB comes negative. Diagnosis of sputum/smear-negative pulmonary tuberculosis patients is challenging and time consuming with many patients being put on empirical anti-tubercular treatment. Fiberoptic bronchoscopy may provide a confirmative and early diagnosis in such

patients. AIM: Yield of fiberoptic bronchoscopy in sputum smear negative patient of pulmonary tuberculosis.

MATERIAL AND METHODS:

The study was conducted on 63 suspected sputum smear-negative pulmonary tuberculosis cases. Fiberoptic bronchoscopy was performed and bronchoalveolar lavage, bronchial aspirate, transbronchial needle aspiration and transbronchial lung biopsy was done.

RESULTS:

A final diagnosis of sputum smear-negative pulmonary tuberculosis was made in 63 patients. Bronchoalveolar lavage (BAL) for acid fast bacilli was positive for 29/63 patients (46.03%). BAL was sent for Genexpert which was positive in 28/63(44.44%)patients. Endobronchial biopsy showed caseating granuloma in 3/7(42.85%)patients. Total yield of bronchoscopy in diagnosis of sputum smear negative pulmonary tuberculosis was 49.20% (31/63).

CONCLUSION:

Our study suggests that fibreoptic bronchoscopy can provide excellent material for diagnosis of suspected cases of Pulmonary Tuberculosis in patients whose Sputum smear was negative for AFB.

Title: TO ASSESS THE DIAGNOSTIC YIELD AND SAFETY OF BRONCHOSCOPIC LUNG CRYOBIOPSY IN RADIOLOGICALLY DIAGNOSED MASS LESIONS OF LUNG

Name of Presenter: **Dr Shafin Babu PS**

Authors (or Co-authors): **Dr CDS Katoch, Dr Vikas Marwah, Dr Yadvir Garg, Dr T Ajai Kumar, Dr Gaurav Bhati, Dr Deepu K**

Institution/Author Organization: **ARMED FORCES MEDICAL COLLEGE-ARMY INSTITUTE OF CARDIO THORACIC SCIENCES, PUNE**

Introduction:

Bronchoscopic lung cryobiopsy is a novel flexible bronchoscopic technique of obtaining lung biopsy. It results in significantly higher diagnostic yield. A study was conducted to assess the diagnostic yield and safety of Bronchoscopic cryobiopsy in radiologically diagnosed mass lesion lung. Radiological definition of mass lesion lung is a focal pulmonary lesion greater than 3 cm in diameter.

Objective:

To assess the diagnostic yield and safety of bronchoscopic lung cryo biopsy in

radiologically diagnosed mass lesion lung.

Materials and Methods:

A descriptive study was carried out in our centre on 35 patients diagnosed radiologically as mass lesions of lung in CT scan chest who underwent bronchoscopic cryobiopsy. The Clinico-radiological and histo-pathological correlates were assembled together by multidisciplinary discussion and diagnostic yield of bronchoscopic cryobiopsy was established. The diagnostic yield was confirmed by whether a pathological diagnosis was obtained or not.

Results:

We established the final pathological diagnosis without major complications for 34 cases with diagnostic yield of 97.14%. In 01 case, the pathological diagnosis was indeterminate and we interpreted that there is no diagnostic yield in that case.

Conclusion:

The diagnostic yield and safety of bronchoscopic lung cryobiopsy is higher as compared to other conventional bronchoscopic lung biopsy techniques.

Title: APPROACH TO LUNG CANCER

Name of Presenter: **DR SURESH BABU**

Authors (or Co-authors): -

Institution/Author Organization: **APOLLO MAIN HOSPITAL ,CHENNAI**

Introduction:

This study was done to study the utility of various biopsy techniques in diagnosing lung cancer and also to study clinical/ pathological and radiological features of lung cancer.

Materials and Methods:

This is a prospective and cross sectional study, conducted in Apollo Main Hospital, in which confirmed cases of lung carcinoma were included in the study. Data like demographics ,smoking status, histopathological type, Radiological features and clinical stage of the disease were obtained.

Results:

31 patients undergone bronchoscopy with narrow band imaging in which findings were, 13 patients showed endobronchial growth, 7 showed extrinsic growth, no abnormal gross appearance in 11 patients, 11 were NBI negative and 20 were NBI positive. 23 patients had undergone bronchial biopsy in which 14 showed malignancy in HPE and no evidence of malignancy in 8 patients. 28 patients undergone CT guided lung biopsy, in which 27

patients tested positive for malignancy . Out of the 49 patients, the most common lung cancer is adenocarcinoma 32.7%, poorly differentiated carcinoma of 10.2%, Squamous cell carcinoma 8.2% and small cell carcinoma of 6.1%.

Conclusions:

The result of the study demonstrates that CT guided lung biopsy is an effective procedure with an accuracy of 96.4%.

Title: Efficacy of AFB Culture and Gene Expert MTB / RIF Assay in diagnosis of Mycobacterium Tuberculosis on EBUS TBNA

Name of Presenter: **Dr. Umang C Shah**

Authors (or Co-authors): **Dr. Arpan C Shah**

Institution/Author Organization: **Pranayam Lung and Heart Institute, Vadodara, Gujarat**

Tuberculosis and Sarcoidosis are two clinical entity that share same clinical, radiological and pathological features and differentiating between the two might be an arduous task. Retrospective analysis of randomly selected 100 patients were done.

Of 100 patients with intrathoracic granulomatous lymphadenitis, 83 with tuberculous lymphadenitis and 17 with sarcoidosis were identified. Necrotising granulomas were found in 26 / 83 (31.32%) while Non-necrotising granulomas were found in 57 / 83 (68.67%) patients diagnosed with Tuberculosis. Mycobacterium TB Culture was performed in 72 patients diagnosed with Tuberculosis and was positive in 11 patients – 09 / 26 Necrotising Granuloma vs 02 / 57 Non-necrotising Granuloma (34.61% vs 3.5%, P = 0.010).

Gene Xpert MTB / RIF Assay were performed in 20 / 83 patients diagnosed with Tuberculosis and was positive in 4 patients – 01 / 07 Necrotising Granuloma vs 03 / 13 Non-necrotising Granuloma (14.30% vs 23.10%, P = 0.547) Positive Xpert MTB / RIF Assay with very low MTB detection, but culture negative results should be read cautiously and well correlated with clinical history since Gene Xpert Assay amplifies DNA, of live or dead bacilli and to avoid false positive results. TB detection is higher in necrotic part of LNs or caseating granulomatous lesion with high bacterial burden of AFB bacilli

Title: Experience of CLABSI prevention measures in a medical ICU in a tertiary care hospital

Name of Presenter: **Mahendran A J**

Authors (or Co-authors): **Dr. Shibsas**

Chakrabarthy, Dr. Rajni Gaiind, Dr. Nitesh Gupta, Dr. Pranav Ish

Institution/Author Organization: **Safdarjung Hospital**

Aims:

To reduce the of CLABSI rate in medical ICU
Methods: Baseline data was collected for the first 6 months. Health care workers were trained at fixed intervals for implementation of 5 bundles of CLABSI prevention.

Results:

There was a significant fall (25.3 Vs 8.1) in CLABSI rate soon after every educational programme conducted but was ill-sustained. There was no overall improvement in CLABSI rate after the intervention part (18.4 Vs 19.5). However, outbreak of flu season in the second part of the year in the intervention phase made the population incomparable, with more ARDS cases in the second half with high APACHE score. CLABSI rate comparison between ARDS population containing months in the first half and the second half was done, which showed 15.5% reduction. Also there was a significant increase in hand hygiene rate($p < 0.05$).

Discussion:

CLABSI rate in the months soon after the educational programme reduced but it was ill-sustained. Also overall comparison did not yield significant reduction as the two populations were heterogeneous. However, reduction in CLABSI rate in the ARDS population showed intensive and continuous educational efforts can make significant improvements.

Conclusion:

Intensive and continuous teaching programmes can cause significant reduction in CLABSI in resource limited settings.

Title: PREVALENCE OF VENOUS THROMBOEMBOLISM IN PATIENTS WITH ACUTE EXACERBATION OF COPD

Name of Presenter: **Aiswarya Thambi**

Authors (or Co-authors): **Thomas George P,MuralyC.P,ManiO.K,Elizabeth,Parvathi Rajendran**

Institution/Author Organization: **GOVERNMENT MEDICAL COLLEGE,**

THRISSUR

Images File

Title: OUTCOME OF NON-INVASIVE VENTILATION IN COVID-19 PATIENTS

Name of Presenter: **CHETANA GONDI**

Authors (or Co-authors): **Dr.B.Bhanu Rekha , Dr.K.Kalyani Sri**

Institution/Author Organization:

Dr.pinnamaneni siddhartha institute of medical sciences and research foundation

INTRODUCTION:

In covid-19, significant number of patients develop severe respiratory symptoms and Acute Hypoxemic Respiratory Failure(AHRF) that require increasing interventions. Initially treatment included early intubation and invasive ventilation. But Non-invasive ventilation(NIV) has proven to be effective bridging adjunct in early part of disease process and may prevent the need for invasive mechanical ventilation, which also decreases the risks to health care workers.

METHODS & MATERIALS:

This prospective study included 84 patients of covid-19 admitted in Dr.PSIMS & RF from May 2020 to November 2020 .Correlation and outcomes were studied.

RESULTS:

Out of 84 patients; initially 22(26.1%) were kept on HFNO of which 12(54.5%) were upgraded to NIV. 23(27.3%) were on CPAP of which 16(69.5%) recovered, 7(30.4%) death. 39(46.4%) were on BIPAP of which 23(58.9%) recovered, 16(41%) death. 19 were mechanically ventilated.

CONCLUSION:

Although there is a role for NIV in covid -19 related AHRF, severity at the time of presentation, presence of multiple co-morbidities, advanced age, raised inflammatory markers(C-reactive protein, Ferritin), appropriate patient selection, adequate knowledge regarding the usage of NIV and early institution effect the outcome.

KEY WORDS:

NIV, COVID-19, AHRF

Title: AWAKE PRONE NIV IN PATIENTS TREATED WITH SEVERE COVID-19 PNEUMONIA AT TERTIARY CARE CENTRE

Name of Presenter: **K SURENDAR REDDY**

Authors (or Co-authors): **DR ARUNA KUMARI, DR NARAYANA, DR PRABHAKAR, DR SATYA PRAKASH**

Institution/Author Organization: **ESIC MEDICAL COLLEGE AND HOSPITAL , HYDERABAD**

INTRODUCTION:

WHO has declared SARS-CoV-2 as pandemic, which mainly presented with respiratory symptoms. Prone position was used in acute respiratory distress syndrome(ARDS) to improve oxygenation and prevent barotrauma in ventilated patients. Awake proning is used as an investigational therapy in COVID-19 to defer invasive ventilation, improve oxygenation and outcomes.

MATERIALS AND METHODS:

A study of 140 patients from 1/06/2020-1/11/2020 admitted in COVID-ICU at our hospital was conducted to look for benefits of awake proning with oxygen therapy and NIV in non-intubated patients. INCLUSION CRITERIA: Patients hemodynamically stable and $SpO_2 < 90\%$

EXCLUSION CRITERIA:

Patients with cervical spondylitis, rheumatoid arthritis, obesity and cardiac arrhythmias

DISCUSSION:

Oxygen was administered through face mask, non-rebreathing mask and non-invasive ventilation to patients as per requirement. Patients were encouraged to maintain prone position for 10-12hr/day on high flow oxygen therapy and 3-4 hrs./day on prone NIV position. SpO_2 and P/F ratio in supine and prone position was observed. Primary target was $SpO_2 > 95\%$ and $P/F > 200$ mmHg, along with COVID protocol

RESULTS:

The mean SpO_2 at admission was 80% at room air. Out of 140, 70 patients put on high flow + prone, 50 patients were on prone+NIV, 20 were mechanically ventilated, of which 15 died and 5 recovered.

CONCLUSIONS:

Prone ventilation helped in preventing the

need of invasive ventilation as most of the patients clinically improved with prone plus non invasive ventilation

Title: To analyze demographic profile of covid ARDS deaths in a tertiary centre

Name of Presenter: **Dr Kovuri Venkatesh**

Authors (or Co-authors): **Dr Dhruva Chaudhry, Dr Pawan kumar Singh**

Institution/Author Organization: **PGIMS Rohtak**

INTRODUCTION –

Currently we are experiencing COVID pandemic which has infected millions across all age groups. A few of them develop ARDS which has a high mortality rate AIMS – To analyze the demographic profile of COVID-ARDS deaths in a tertiary centre

METHODOLOGY –

details of 30 patients who succumbed due to COVID-ARDS at our centre (PGIMS Rohtak) from April to September 2020 were analyzed in this study. Their detailed history, examination, blood investigations and radiography were recorded and conclusion was drawn

RESULTS –

We found COVID deaths were more in males (22/30 73%) than females (8/30 27%). Most deaths occurred in age group of 51-60 years (9/30 30%). Only few of them had a known contact history (7/30 23%). 17 of them had smoking history (57%) and 19 had comorbidities (63%); the most common being diabetes (12/30). 16, 13 and 8 patients had abnormal blood picture, deranged RFT and LFT respectively. D-dimer was elevated in 21 patients (70%) and most of the patients had abnormal chest X ray findings (28/30 93%)

CONCLUSION –

COVID related deaths were more common in elderly males, smokers and those with comorbidities. Majority had elevated d-dimer levels and an abnormal chest radiograph

Title: Optimization of Bi-level Positive Airway Pressure (BPAP) titration in patients with acute exacerbation of Chronic Obstructive Pulmonary Disease using Diaphragm Thickness Fraction (DTF) as an ultrasound index of diaphragm contractility.

Name of Presenter: **Loveleen Sharma**

Authors (or Co-authors): **Manas Kamal Sen, Jagdish Chandra Suri**

Institution/Author Organization: **Vardhman**

Mahavir Medical College, Safdarjung Hospital, New Delhi

INTRODUCTION:

Initial titration of pressures in Non invasive ventilation(NIV) in AECOPD is done arbitrarily as per the therapeutic response. This study evaluated whether utilising DTF as ultrasound index of diaphragm contractility, in addition to clinical parameters, can bring about enhanced objectivity in the titration, and result in better outcomes.

AIMS:

(a) To study the utility of DTF in optimizing BPAP titration in patients with AECOPD (b) Assessment of its impact on intubation rate, duration of ventilation, ICU and hospital stay. Gas exchange parameters were studied as secondary outcome.

METHODOLOGY:

30 patients between 40 to 80 years of age with AECOPD requiring NIV were randomised in this pilot study to undergo BPAP titration, either utilising DTF measurement or with conventional indices (respiratory rate, pulse rate, use of accessory muscles) alone. Clinical and gas exchange parameters were evaluated at the end of 1 and 4 hours.

RESULTS:

At the end of titration, both groups (15 each) received comparable airway pressures. 5 patients failed NIV in either group. Duration of NIV use, ICU and hospital stay were statistically similar. Overall, both groups showed similar pattern of improvement.

CONCLUSION:

Diaphragm ultrasound, utilising DTF, yields similar outcomes as in conventional NIV titration among patients with AECOPD.

Title: EFFECTIVENESS OF NON INVASIVE POSITIVE PRESSURE VENTILATION IN PULMONARY TUBERCULOSIS SEQUELAE

Name of Presenter: **AJITHER P A**

Authors (or Co-authors): -

Institution/Author Organization: **S. M. S MEDICAL COLLEGE, JAIPUR**

Introduction

Post tuberculosis sequelae (PTS) is the state with various secondary complications after healing of Tuberculosis (TB). Hypercapnic respiratory failure (HRF) is commonly encountered in acute exacerbation of PTS patients and BiPAP (Bilevel positive airway pressure) may be required for the management.

Aims & Methodology

Aim was to assess the effectiveness of BiPAP for management of HRF secondary to PTS. Patients were included with arterial pH 7.25 to 7.35 and PaCO₂ >45mmHg on arterial blood gas analysis (ABG). Patients were given BiPAP along with standard treatment and serial monitoring with ABG analysis were done.

Results

The 60 patients consisted (mean age: 58.6±11.1) of 40 males and 20 females. ABG on admission showed mean pH of 7.28±0.029 and mean PaCO₂ of 73.81±10.58 mmHg. The BiPAP success rate was 85%. A significant improvement in arterial pH, PaCO₂ and respiratory rate (RR) were found in patients with successful outcome. Significant difference were found in ABG parameters between success and failure groups.

Conclusion

Application of BiPAP found to be effective in management of HRF secondary to TB and may decrease morbidity and mortality by avoiding endotracheal intubation. Factors associated with failure include history of mechanical ventilation, low initial pH, high PaCO₂, low serum potassium level and high blood leucocyte count.

Title: OUTCOMES OF HIGH FLOW NASAL CANNULA AND NON-INVASIVE VENTILATION IN PATIENTS WITH COVID-19 -A RETROSPECTIVE OBSERVATIONAL STUDY

Name of Presenter: **Dr. P. ALEKYA REDDY**

Authors (or Co-authors): **Dr. A. PREM KUMAR MD**

Institution/Author Organization: **Andhra medical college**

INTRODUCTION:

COVID-19 is potentially fatal infection caused by novel severe acute respiratory syndrome coronavirus-2(SARS-COV-2).The use of HFNC and NIV in patients with covid-19 is debated. AIM: To assess outcomes of HFNC and NIV in patients with covid-19.

METHODOLOGY:

A retrospective study was done in 18 and 24 covid-19 patients confirmed by RTPCR who used HFNC and NIV as first line therapy respectively from july-august 2020.

RESULTS:

Mean age in HFNC and NIV group was 62 and 58 respectively .There was no difference in disease severity , comorbidities proportion,

oxygenation level between 2 groups. Among 18 patients who used HFNC as a first line therapy 5 experienced HFNC failure and used NIV as rescue therapy. Among 24 patients with NIV as first line therapy 3 used HFNC as rescue therapy due to NIV intolerance. The median duration of HFNC+NIV (7 vs 8 days), intubation rate (16% vs 20%) & mortality (11% vs 16%) did not significantly differ ($p > 0.01$) in patients who used HFNC and NIV as first line therapy respectively.

CONCLUSION:

In critically ill patients with covid-19 who used HFNC and NIV as first line therapy duration of HFNC+NIV, intubation rate and mortality did not differ between 2 groups.

Title: Pneumonia severity index compared to CURB-65 in predicting the outcome of community acquired pneumonia - a prospective study.

Name of Presenter: **DR.RISHNA RAVINDRAN**

Authors (or Co-authors): **DR.MANOJ D.K , DR.RAJANI.M**

Institution/Author Organization:

GOVERNMENT MEDICAL COLLEGE KANNUR

INTRODUCTION:

Community-acquired pneumonia (CAP) is a leading cause of morbidity and mortality worldwide. Pneumonia Severity Index (PSI) and CURB 65 are the two most widely used scoring systems to prognosticate pneumonia.

OBJECTIVES:

To compare the efficacy of PSI and CURB 65 scoring systems in prognosticating the outcome in cases of CAP.

METHODS:

This is a prospective study conducted over a period of 1 year on 150 patients who presented with community acquired pneumonia in our institution under the Department of respiratory Medicine. The patients were classified as per CURB 65 and PSI system and their outcome compared.

RESULTS:

We studied 150 patients with community-acquired pneumonia (114 men, 36 women). In our study 100 % of patients in CURB 65 class 4 and 5 required ICU admission and death was 84.6% and 100% respectively. Majority of patients of PSI class 4 and 5 needed ICU admission 67% and 96% respectively and death was 16% and 58% respectively.

CONCLUSION:

CURB-65 seems to be the preferred method to predict mortality and need for ICU admission in patients with community-acquired pneumonia. CURB-65 is much easier to implement and better as a severity scoring system in CAP in developing countries with limited resources.

Title: Association of relationship between initial hypoxia and BNP in patients with severe COPD exacerbation requiring NIV (A case control study).

Name of Presenter: **Dr Ritamvara Oli**

Authors (or Co-authors): **Prof.Dr.JK Mishra, Prof.Dr.GN Srivastava, Dr.Deepak Shah, Dr.Saurabh Mishra**

Institution/Author Organization: **Institute of Medical Sciences, Banaras Hindu University (BHU)**

Background/Introduction:

B-type natriuretic peptide (BNP) is a biomarker of heart failure. Various literature states that an increased BNP in COPD was due to hypoxia. We aimed to determine its co-relation.

Aims/Objectives:

To establish the relation between initial pO₂ and BNP levels in severe COPD exacerbation requiring non-invasive ventilation.

Methodology:

142 patients were enrolled for the study. It is a case control study. 81 patients in case group had COPD exacerbation with Type II respiratory failure. 61 patients were in control group had COPD exacerbation. ABG and Serum BNP levels were measured at the time of admission.

Results:

In our study there was slight male predominance 52.1% (n=74). Mean age of the study group was 63.53±9.021. In our study we found a significant elevation of BNP in the case group compared to the control group. In the case group 28.4% (n=23) had BNP levels >500 while in the control group 72.1% (n=44) had BNP levels below 100. There was no significant correlation between the PO₂ and BNP because ($p = .825$) which is greater than (0.05) significant.

Conclusion:

Our study showed that there is no co-relation between initial hypoxia and raised BNP. Our study showed that BNP levels were higher in patients with more severe exacerbation.

Title: Significance of monitoring Pro bnp levels in acute exacerbation of various respiratory diseases in patients without

underlying left ventricular dysfunction

Name of Presenter: **Dr.Saktheesh R**

Authors (or Co-authors): **Dr Sudhir Chaudhri, Dr Anand Kumar, Dr Avdesh Kumar, Dr Sanjay verma, Dr Anurag Shukla**

Institution/Author Organization: **GSVM MEDICAL COLLEGE, KANPUR**

Background & introduction:

BNP and NT-pro-BNP, are established biomarkers of heart failure. These are stress hormones which are expressed when there is a stress on ventricular myocardium that can occur even in a respiratory disease like COPD may be due to hypoxic vasoconstriction. We conducted this study with the aim to study the level of PRO-BNP in patients of various primary respiratory diseases and its value as a prognostic marker.

MATERIAL & METHODS:

This was a cross-sectional & observational study. Patients admitted with acute respiratory distress because of respiratory diseases were studied. All patients were managed according to their primary diagnosis. Along with routine investigation required for the management, pro BNP was done at the time of admission. we observed correlation of proBNP with final outcome of the patients. Results: 50 patients admitted with various respiratory illness were studied. The mean PRO-BNP value of was raised in all the patients irrespective of the etiology and mean PRO BNP was 1430.0 pg/ml. Pro BNP was significantly different among survivor and non survivors. For survivors the mean value was 519.93 pg/ml and non survivors it was 4223.51 pg/ml, and it was closely associated with worsening hypoxemia at admission. PRO-BNP value of 473.0 to be the cutoff point for predicting mortality with a sensitivity of 65% and specificity of 63%.

Conclusion:

PRO-BNP bio marker, done at the time of admission in respiratory causes of dyspnea can be a good prognostic marker for survival

Title: Comparison of 3 prediction scores for diagnosis of Pulmonary Embolism

Name of Presenter: **SHONA ARLIN CHRISTOPHER**

Authors (or Co-authors): **Dr. Richa Gupta, Dr. D.J. Christopher**

Institution/Author Organization: **CHRISTIAN MEDICAL COLLEGE, VELLORE**

Introduction:

Pulmonary embolism (PE) is frequently missed or misdiagnosed, and this could be

fatal. Its clinical signs and symptoms mimic several other respiratory and cardiac diseases. Therefore, we compared 3 clinical probability scores in predicting PE, not previously reported.

Methods:

This was a prospective observational study. All patients with clinical suspicion of PE were recruited. Modified Well's score, Revised Geneva score and the clinical probability score based on the Pisa model were calculated for all participants and compared with CT pulmonary angiogram confirmation.

Results:

In all, 222 PE suspects were recruited of which 127 were confirmed to have diagnosis of PE. The positive predictive values of the high probability scores were: Modified Well's score 76.3%, Revised Geneva score 70.2% and Pisa model 85.7% and the negative predictive values for the low probability category were: 60.7%, 63.6% and 59.4% respectively. The differences between the 3 ROC curves were not significant ($P = 0.172$).

Conclusion:

All 3 scores were equally effective in predicting the presence/ absence of pulmonary embolism, although the Pisa model had an edge over the others.

Title: A STUDY OF CLINICAL, RADIOLOGICAL AND MICROBIOLOGICAL PROFILE OF VENTILATOR ASSOCIATED PNEUMONIA WITH SPECIAL REFERENCE TO RISK FACTORS FOR INFECTION WITH MDR BACTERIA

Name of Presenter: **DR SWETA NANDY**

Authors (or Co-authors): **DR (PROF) ARUNABHA DATTA CHAUDHURI, DR. (ASSOC. PROF) SUMIT ROY TAPADAR**

Institution/Author Organization: **R. G. KAR MEDICAL COLLEGE & HOSPITAL**

Introduction:

VAP is defined as pneumonia that develops in patients after 48 h of endotracheal intubation. Common pathogens include Pseudomonas, Acinetobacter species, Klebsiella, and E.coli. "MDR" pathogens are gram-negative bacilli expressing ESBL and AmpC β -lactamases.

Aims & objectives:

To study the clinico-radiological & microbiological profile of VAP, to evaluate the reliability and validity of modified CDC criteria, identify risk factors & to formulate an antibiogram.

Methods:

It is a descriptive, observational, cross sectional study conducted over a period of 18 months, where 50 consecutive patients in whom VAP has been clinically suspected according to modified CDC criteria are included and evaluated.

Results:

Most common organism to be isolated was Paeruginosa. 72% of the patients had late onset VAP. ESBL producing MDR Paeruginosa and Acinetobacter were commonest to be isolated in late onset VAP. Most common risk factor to be associated for MDR infection was history of antimicrobial therapy in preceding 3 months. Most common radiological finding was consolidation (66%).

Conclusion:

Modified CDC criteria is found to be very useful and appropriate method for early diagnosis of VAP. This study will guide us for early institution of empirical therapy according to the antibiogram.

Title: SERUM COPEPTIN AND SERUM ALBUMIN AS MARKERS OF SEVERITY OF COMMUNITY ACQUIRED PNEUMONIA

Name of Presenter: **DR.VAIBHAV C PADASHETTI**

Authors (or Co-authors): **DR.MAHESH PA,DR,JAYRAJ BS,DR.CHAYA SK,DR.LOKESH KS,DR.NANDAKISHORE**

Institution/Author Organization: **JSSH, MYSURU**

Introduction-

Pneumonia is known as "captain of the men death" and is major case of mortality and morbidity worldwide.

Aims -

Serum Copeptin and Serum albumin as marker of severity of community acquired pneumonia(CAP).

Methodology-

The study subjects were recruited from the Department of Respiratory pulmonology, JSSH, after obtaining informed consent,a total of 100 patients of community acquired were included in the study.patients were divided into 3 groups based on PSI scoring (group1-PSI class 3,group 2-PSI class 4,group 3-PSI class 5).

Results –

Serum copeptin was elevated in community

acquired pneumonia patients and was highest in group 3 patients and lowest in group 1 patients and group 2 patients had intermediate values

Serum albumin was low in community acquired pneumonia patients and was lowest in group 3 ,group 1 had highest and group 2 had intermediate values.

erum copeptin and serum albumin for predicting severity of CAP obtained from the ROC curve were 23.7ng/ml and 3.24g/dl respectively.

Conclusion-

Serum copeptin levels were significantly elevated in patients with CAP coincided with severity of pneumonia

Serum albumin were low in patients with CAP and coincided with severity of pneumonia levels of serum copeptin and albumin are independent of sex and age

Title: SIGNIFICANCE OF pH AND pCO2 IN DETERMINING THE OUTCOME OF NON-INVASIVE VENTILATION IN ACUTE EXACERBATION OF COPD

Name of Presenter: **Dr Vipin chandra**

Authors (or Co-authors): **Dr Bidyalakshmee**

Institution/Author Organization: **JLN MEDICAL COLLEGE AJMER**

INTRODUCTION

Acute exacerbations of COPD (AECOPD) are largely responsible for the increasing mortality and morbidity associated with the disease. GOLD had recommended a trial of NIV in all patients. NIV may negate the need for intubation and associated complication specially Ventilator Associated Pneumonia (VAP) which is associated with worst outcome. There are studies showing that noninvasive ventilation (NIV) is a safe and effective tool in hypercapnic respiratory failure.

AIM

To study the value of pH and pCO₂ in determining outcome of non-invasive ventilation in acute exacerbation of COPD.

STUDY DESIGN

A prospective observational study conducted at Department of respiratory medicine,JLN Medical College, Jaipur.114 COPD cases with acute hypercapnic respiratory failure were included. Uncooperative or Unconscious patient, pH<7.2, Hemodynamically unstable,Patients contraindicated for Non Invasive Ventilation,Other respiratory comorbidities,Severe Systemic Illness, were excluded.

RESULTS

The overall mean age of patients was 60.6±8.6 years. Success rate was slightly lower in patients with pH ≤7.25 as compared to pH-7.25-30 and pH-7.31-35 (40.7% vs. 86.6% and 85.7% respectively) (p<0.001). The subjects with successful outcome of NIV showed gradual increase in mean pH from 7.29 at start to 7.32 after 3 hours (P<0.001), whereas patients with NIV failure showed significant decrease in mean pH from 7.259 to 7.25 after 3 hours (P<0.05). Mean PaCO₂ of the study was 71.90± 10.89 mm Hg. The subjects with successful outcome of NIV showed gradual decrease in mean pCO₂ from 69.07 cmH₂O to 64.19 cmH₂O after 3 hours. Patients with NIV failure showed significant increase in mean pCO₂ from 80.57 to 84.54 cmH₂O after 3 hours (P<0.001). Success rate was markedly reduced in patients with PaCO₂ >80 mm Hg as compared to patients with lower PaCO₂ (p=0.011).

CONCLUSION

Patients who have high initial PaCO₂ [>80 mm Hg] and low pH <7.25 have poorer outcomes with NIV. Out of the 114 patients, 86 patients were successfully treated with NIV, giving a success rate of 75.4% .

Title: Acute Pancreatitis: A Mystical Subsequence of Upper GI bleeding in case of COPD with Acute Exacerbation.

Name of Presenter: **Dr Arjun Bhatnager**

Authors (or Co-authors): **Dr Rohit kumar , Dr Shibdas Chakrabarty**

Institution/Author Organization: **VMMC and Safdarjung Hospital , New Delhi**

Introduction

Upper GI bleeding from duodenum as a complication of stress ulceration and subsequently leading to complication of acute pancreatitis is very rare occurrence. Stress ulcer causing bleeding and clot formation in second part of duodenum and blockage of major duodenal papilla subsequently causing acute interstitial pancreatitis is extremely rare occurrence, demands complete workup and is a diagnosis of exclusion. Hereby reporting such a rare case.

Case report

67 year old chronic reformed smoker with known case of COPD, GOLD group D with systemic hypertension and non alcoholic was on systemic corticosteroid therapy for more than 4 months and nebulization therapy with LABA + ICS. Patient presented with high grade fever, shortness of breath worsened from

MMRC grade 3 to 4 and increase in cough with purulent expectoration for 12 days. Later developed melena and massive hematemesis with abdominal pain and tenderness, xray abdomen ruled out any perforation. Hemoglobin dropped from 11.4 to 8.2 g / dl with rise in serum amylase (1062 IU / ml) and lipase (986 IU / ml). UGI endoscopy showed lower esophageal area full of hematoma. CT abdomen revealed duodenal inflammation in D1 and D2 areas, large duodenal intraluminal hematoma (HU 64) and acute interstitial pancreatitis. Patient was kept nil per orally, infusions of pantoperazole, octreotide and dextrose for next three days. Two units of packed RBCs were transfused. Patient improved symptomatically by decrease in hematemesis, melena and pain per abdomen. Thirty days later followup upper gastrointestinal endoscopy revealed normal esophageal and duodenal mucosa, absence of any clots, stricture, ulcer or mass.

Discussion

Upper GI bleed results in substantial morbidity and mortality. It should be differentiated into ulcerative, vascular, mass or traumatic lesions. IDHs are commonly found in the second and third portions of the duodenum . Most often, IDH develops after blunt abdominal trauma, which results from child abuse in children younger than 15 years of age in over 60% of cases . In adults, nontraumatic IDH due to anticoagulant therapy or blood abnormalities is common, and cases of iatrogenic IDH due to duodenal biopsy or endoscopic retrograde cholangiopancreatography have recently been reported. Compared with traumatic IDH, which usually occurs at the subserosal layer of the duodenum, nontraumatic IDH is mostly underneath the duodenal mucosa or submucosa. often initially presenting with abdominal pain and vomiting, and sometimes causing symptoms of dehydration with severe vomiting and jaundice due to biliary stenosis. Laboratory data show progressive anemia and an increased inflammatory response. Gastrointestinal tract radiography has long been the gold standard.

Title: A rare case report of association of pneumonia with Posterior Reversible Encephalopathy Syndrome (PRES).

Name of Presenter: **Dr.Ashutosh singh**

Authors (or Co-authors): **R.D.Gradi Medical College**

Institution/Author Organization: **Dr.Harshit Shrivastava, Dr. Arti Julka, Dr. Ajeet Singh, Dr. Sunil Yadav**

Introduction:

Posterior reversible encephalopathy

syndrome(PRES) characterized by headache ,confusion seizures, and visual loss. It can occur due to number of causes predominantly malignant hypertension, eclampsia etc. Symptoms tend to resolve after period of time although visual changes may remain. Diagnosis is typically made clinically and supported by magnetic resonance imaging of brain.

Aim & Objectives:

A case report of association of pneumonia with PRES Syndrome.

CASE REPORT:

A 28year/female came with complain of cough with purulent sputum, breathlessness, hemoptysis since 8 days. Her PR-90/MIN.,B.P.-140/90,SPO₂-98%,on auscultation bilateral crepitation was present which was more on right side .X ray chest shows upper and mid zone heterogeneous opacities with air bronchogram . After 2 days of admission patient complaint of sudden onset visual loss with a B.P. of 170/100 and SPO₂ was 60%, general condition was poor and patient was intubated urgently. CT brain done which shows infarct in occipital region.

Observation:

She was diagnose as PRES and treatment has started .

Conclusion:

Patient was managed with antibiotics , corticosteroids, antiepileptic and supportive treatment .Patient shows improvement and vision became normal.

Title: VENTILATORY SUPPORT WITH THE USE OF NIV, NON-REBREATHABLE MASK AND PRONE VENTILATION IN A COVID PATIENT

Name of Presenter: **Dr ATHUL C ANGJA**

Authors (or Co-authors): **Dr TRINATH DASH, Dr. K ARUN VISHNU**

Institution/Author Organization: **JLNHRC ,BHILAI**

Ventilatory Support Has Been Gaining Importance And Momentum In The Past Due To Respiratory Illness Like Copd, Asthma And Also In The Present In View Of The Current On Going Pandemic ,Where Maintaining The Respiratory Function With Optimum Oxygenation In A Patient Has Been A Lot of Challenges Due To Various Risk Factors. i am here to Discuss About A Case Of severe Covid 19 And Later Developed Post-covid Fibrosis. He Was Managed With Various Modes Of Ventilatory Supports with A Prolonged Icu

Stay With Out Invasive Ventilation, And Later Discharged. Here In Our Patient, Initially He Was Found To Be Responding Well To Treatment And Later Was Found Deterioating. Early And Timely Intervention With Non-invasive Ventilation Has Shown That The Need For Intubation Can Be Reduced. In my Case, Niv Support Was Well Tolerated. In Shifting To Nonbreathable Mask Ventilation Too, His Response Was Well-noticed... Providing Mechanical Ventilation With Intubation Can Never Be Replaced By Non-invasive Ventilation. Coming To Prone Ventilation, although A Little Cumbersome To Patient It Proves As An Effective, Low Cost Method To Implement As A cial Outcome In A Limited Ventilatory Support To Provide A Bene Resource Setting.

Title: SEPTIC PULMONARY EMBOLISM WITH TRICUSPID VALVE ENDOCARDITIS IN A CASE OF INTRAVENOUS DRUG ABUSER WITH BROKEN FAMILY BACKGROUND

Name of Presenter: **Dr. D. SURESH KUMAR (JUNIOR RESIDENT)**

Authors (or Co-authors): **Prof . Dr. SOMENATH KUNDU (HOD)**

Institution/Author Organization: **IPGME & R , KOLKATA -20.**

INTRODUCTION

Septic pulmonary embolism(SPE) is an uncommon disorder of high morbidity with insidious onset and difficult to diagnose without clinical suspicion. Evolving pulmonary lesions in presence of potential embolic source and extrapulmonary embolic manifestations clinches diagnosis.

HISTORY & PRESENTATION

30-year male from rural Kolkata, driver by profession admitted with fever and chills, pleuritic chest pain and breathlessness for past 1.5 months. Patient had two episodes of pneumonia in the past 4 months.

On provoking he revealed that he smoked ganja and used to take iv drugs (heroin, Chlorpheniramine maleate & talc) for the past 9 months. He came from broken family with multiple affairs.

DIAGNOSIS

On examination he had thrombosed vein in left forearm. HRCT chest showing bilateral multiple nodules with few nodules shows cavitation. ECHO showed tricuspid valve vegetations. Repeated blood culture results were negative. HIV serology was negative.

MANAGEMENT

Patient responded clinico-radiologically after

prolonged broad-spectrum Intravenous antibiotics including vancomycin, aminoglycosides and carbapenems for 2.5 months. Patient finally benefited from psychiatry rehabilitation.

LEARNING POINTS

1. SPE can manifest as recurrent episodes of pneumonia which can be missed without eliciting adequate clinical history.
2. Tricuspid valve endocarditis is a dreaded complication that need prolonged antibiotic treatment and even valvular surgery.
3. Timely management can prevent mortality.
4. For iv drug abusers psychiatry rehabilitation is an integral part of management for successful outcome.

Title: VIPER BITERS LUNG

Name of Presenter: **Dr.KARTHIK K**

Authors (or Co-authors):

Dr.KRISHNAMOORTHY, Dr.MUTHUKUMAR,Dr.MATHAN, Dr.RAHMAN SHAHUL HAMEED

Institution/Author Organization: **TIRUNELVELI MEDICAL COLLEGE AND HOSPITAL**

INTRODUCTION:

viper bite, the commonest venomous snake bite in India is associated with significant morbidity and mortality. Specific anti-venom is not available for Viper bite which is usually managed with supportive treatment. pulmonary hemorrhage is rare manifestation of viper bite. HISTORY: 24 years old male non-smoker, non-alcoholic presented with alleged h/o viper bite on right foot, H/o breathlessness H/o hemoptysis and epistaxis.

PRESENTATION:

on examination patient drowsy, dyspneic and tachypneic spo2-60%@R.A air entry reduced on both sides.

DIAGNOSIS:

clinically and Hemoglobin fall, Chest x-ray revealed B/L alveolar infiltrates

MANAGEMENT:

patient was intubated and connected to mechanical ventilation. Bleeding from the endotracheal tube is noted. Because of life-threatening situation, he was treated with methylprednisolone pulse therapy. There was rapid improvement of hypoxia and resolution of x-ray changes he was extubated after 3days successfully.

COMPLICATIONS:

Respiratory failure treated with mechanical ventilation.

LEARNING POINTS:

This case highlights the importance of suspecting pulmonary hemorrhage in a patient with desaturation and alveolar infiltrates following VIPER snake bite. Early and timely treatment with systemic steroid can be life saving in such patients.

Title: ACUTE STROKE IN SEVERE COVID-19 DISEASE

Name of Presenter: **Dr karthik tipparapu**

Authors (or Co-authors): **DR.TRINATH DASH (GUIDE & SR.CONSULTANT)**

Institution/Author Organization: **J.L.N HOSPITAL &RC,BHILAI,CHATTISGARH**

COVID-19 EVOLVED QUICKLY INTO A GLOBAL PANDEMIC WITH MYRIAD SYSTEMIC COMPLICATIONS WE REPORT A CASE OF ACUTE CEREBRO-VASCULAR ACCIDENT (INFARCT) WITH HEMORRHAGIC TRANSFORMATION OF COVID-19 INSPITE OF PROPER ANTICOAGULATION THERAPY. A 62YRS MALE WITH SIGNIFICANT COMORBIDITIES PRESENTED WITH RESPIRATORY COMPLAINTS OF 2 DAYS DURATION.HE WAS DIAGNOSED TO BE POSITIVE FOR COVID-19,TREATED WITH ANTIVIRALS,BROADSPECTRUM ANTIBIOTICS,HIGH DOSE OF STEROIDS,ANTIPLATELETS,INJ.HEPARIN, NUTRITIONAL SUPPLEMNTS AND ORAL ANTICOAGULANTS. HIS HRCT-CHEST IS S/O SEVERE COVID DISEASE. HIS BLOOD INVESTIGATIONS SHOWED ELEVATED WBC COUNTS,ELEVATED INLAMATORY MARKERS LIKE SR.LDH,SR.FERRITIN ,IL-6 AND D-DIMER LEVELS.PATIENT WAS PROVIDED NIV SUPPORT AND PROPER ANTI-COAGULATION PATIENT DEVELOPED ACUTE CVA-(INFARCT) WHICH LATER HAD HEMORRHAGIC TRANSFORMATION. INSPITE OF BEST SUPPORTIVE CARE PATIENT COULD NOT SURVIVE AND EXPIERDE ON DAY 20 OF HOSPITAL STAY. ENTIRE DETAILS AND IMAGES WILL BE PROVIDED ON ACCEPTANCE OF PRESENTATION.

Title: Transfusion-related acute lung injury revisited: A case report

Name of Presenter: **Dr Keerthi N S**

Authors (or Co-authors): **Dr Manu Mohan K, Dr Aswini Kumar Mohapatra**

Institution/Author Organization: **Department of Respiratory Medicine, Kasturba Medical College, Manipal, Manipal Academy of Higher Edu**

Introduction

Transfusion-related acute lung injury (TRALI) is a type of noncardiogenic pulmonary oedema, complicating transfusion of any blood components occurs within six hours usually. But acute lung injury can happen till 72 hours post-transfusion.

History

A 25-year-old male presented with bleeding per rectum and severe anaemia. He was having Grade 3 haemorrhoids and underwent haemorrhoidectomy with partial sphincterotomy which was uneventful. He received six units of packed red blood cells during the intraoperative and postoperative period. Presentation The patient became dyspnoeic and hypoxic on the second postoperative day. Diagnosis Chest radiograph revealed features suggestive of pulmonary oedema. A diagnosis of TRALI was made.

Management

The patient recovered with oxygen supplementation and supportive care. Complications Our patient did not develop any complications.

Clinical implications/ Learning points

The risk of TRALI is around 1 in 5000 units of packed red blood cells. Critically ill patients, massive transfusion and mechanically ventilated patients are at risk of TRALI. The proposed mechanism is human leukocyte antigen (HLA) antibodies, commonly found in female donors, mediated pulmonary microvasculature damage. The mortality rate in TRALI ranges from 5-10%. There is no specific treatment. Prevention is the best practise with HLA antibody

Title: Acute pulmonary artery thrombosis, pneumatocele and pneumothorax as Post COVID-19 sequelae

Name of Presenter: **Dr. Kiran Ashok Balani**
 Authors (or Co-authors): **Dr. M S Barthwal, Dr. Tushar Sahasrabudhe**
 Institution/Author Organization: **Dr. D. Y. Patil medical college, hospital and research centre**

Introduction-

Since the outbreak of novel coronavirus (2019-nCoV) in November 2019, the focus is now gradually shifting to various post-COVID19 pulmonary and vascular sequelae. We hereby report a strange combination of acute pulmonary thrombosis, pneumatocele and pneumothorax, that presented during COVID-19 convalescence.

Clinical course-

A 29-year old male presented with complaints of acute onset breathlessness and right sided chest pain for 5 days. He had Covid-19 confirmed by RT-PCR, 3 weeks prior to this presentation. He was hospitalized then, received Inj Remdesivir, steroids and prophylactic LMWH and was discharged after clinical resolution. Clinical and radiological examination revealed right sided pneumothorax for which emergency tube thoracostomy was done. No significant clinical improvement was observed in dyspnea though the lung was expanding. HRCT thorax with CT pulmonary angiography was therefore done which showed partial thrombosis in left upper lobar branch of pulmonary artery, bilateral diffuse GGO's UL, Left sided pneumatocele, right pneumothorax and ICD in situ. Patient was treated with enoxaparin followed by warfarin. He responded well.

Conclusion-

Spontaneous pneumothorax and Pneumatocele are a rare complication seen in COVID-19. Late onset arterial thrombosis is uncommon but need for post-covid19 anticoagulants may be emphasized.

Title: A RARE CASE WITH COEXISTENT MULTIPLE POST-COVID COMPLICATIONS

Name of Presenter: **Dr MEGHA S MANGAL**
 Authors (or Co-authors): **Dr MANMADHA RAO T., Dr LATHA SARMA, Dr RAMANA PRASAD, Dr. MOHAMMED NAWAZ, Dr. ALEKHYA LAKKAM, Dr ABIDNI AASHIS, Dr SINDHU, Dr KRANTHI KUMAR, Dr ROHIT PATHANIA**
 Institution/Author Organization: **KRISHNA INSTITUE OF MEDICAL SCIENCES, SECUNDERABAD, TELANGANA**

INTRODUCTION:

Incidence of Post COVID complications has been on an increasing trend. About 1 in 6 people have reported involving multiple organ systems.

CASE:

59 yr male Post COVID status on LTOT was evaluated for new onset GTCS seizures. CT Brain showed multiple SOL, he had multiple involuntary movements, came to our hospital for further evaluation and management. MRI Brain showed Ring enhancing lesion in both cerebral & left cerebellar hemisphere s/o cerebral abscess? Pyogenic/Fungal. PET CT whole body to r/o mets was negative. S. Galactomanan was Positive, treated accordingly and discharged. He was advised to continue IV Antibiotics, antifungals, prophylactic anticoagulants & O2 support &

R/W MRI Brain. Later he presented again after 1 month with sudden onset SOB. MRI Brain was done showed moderate decrease in size of lesions. CTPA showed Saddle thrombus in main pulmonary Artery, extending to right & left pulmonary artery, their lobar and segmental branches s/o PTE. Thrombolysis was done with TPA. Pt was discharged in stable condition with home O2 support.

CONCLUSION:

Not just the clinical course of COVID, Postcovid complications have been very evident & common. It is indeed necessary to look into the patients for longer duration to monitor further manifestations and complications.

Title: Pulmonary thromboembolism presenting as lung abscess - an unusual presentation

Name of Presenter: **Dr MUKESH KUMAR RAIGAR**
 Authors (or Co-authors): **Dr. narendra khippal ,Dr javed quaresi**
 Institution/Author Organization: **SMS medical college Jaipur**

INTRODUCTION:

Pulmonary embolism rarely presents with infarction and cavitation. When it does, mimics common conditions like tuberculosis, malignancy, necrotizing pneumonia, cavitary fungal lesions, GPA etc that creates a diagnostic dilemma. A high degree of suspicion is needed while dealing with nonresponding lung abscess.

CASE REPORT:

A 48-year-old male presented with complaints of high grade fever for 15 days & shortness of breath, haemoptysis, chest pain for 5 days. On General examination patient was febrile, tachycardic, tachypneic with desaturation. On respiratory examination decreased chest wall movements and air entry noted on right side. Chest X ray showed right sided lower zone cavity and he was managed on intravenous antibiotics according to Sputum pyogenic culture (Coagulase Negative Staphylococci). ECG revealed right axis deviation. 2D-ECHO diagnosed cor pulmonale and pulmonary hypertension. CECT chest revealed complete filling defect in Left main pulmonary artery. CT pulmonary angiography & USG DOPPLER confirmed Large pulmonary embolus seen occluding left main pulmonary artery & left sided chronic DVT respectively. Patient was started on Injection enoxaparin and tablet apixaban with clinical improvement.

CONCLUSION:

Infected cavitary pulmonary infarct is a rarely diagnosed entity. Due to similar clinical and radiographic findings differentiation between conditions mimicking it can pose a real challenge. High index of suspicion, early diagnosis and treatment can make a huge difference in the mortality and morbidity of these patients.

Title: An Unfortunate Triple Threat - Pulmonary Embolism, Pulmonary Tuberculosis and Probable Pulmonary Aspergillosis

Name of Presenter: **Rahul Kumar Gupta**

Authors (or Co-authors): **Mihir R.**

Gangakhedkar, Arjun

Institution/Author Organization: **AIIMS Rishikesh**

Introduction:

Pulmonary tuberculosis remains a top differential for Indian patients presenting with hemoptysis, especially with a clinical background of a diabetic with fever. Tuberculosis has also been shown to infrequently make the patient prone to developing a pulmonary embolism by inducing a hypercoagulable state with its effect on Factor V. A clinical conundrum occurs when such a hypercoagulable state exists alongside hemoptysis, where both the conditions are potentially life-threatening. Add a possibility of invasive fungal disease and the situation becomes even more complicated.

Case summary:

In this report we discuss a similar complex case, where a young male diabetic presented with smear positive tuberculosis, cavitary lung disease, pulmonary thrombo-embolism, a suspected vascular aneurysm and suspected invasive fungal disease. A plan involving interventional radiology and thoracic surgery was put in place while observing the patient in the intensive care unit under pulmonology. However with the difficult obstacle course the patient could not survive. With the experience, we discuss the possible scheme of tackling such difficult situations and review similar reported events in the past.

Conclusion: A multi-disciplinary assessment involving pulmonary medicine, interventional radiology and thoracic surgery is of importance in such cases with simultaneous antithetic conditions.

Title: ACUTE RESPIRATORY FAILURE- FIRST MANIFESTATION OF ANA NEGATIVE AUTOIMMUNE DISEASE

Name of Presenter: **Dr. Ramya Priya**

Authors (or Co-authors): **Dr Saka Vinod Kumar, Dr Manju Rajaram, Dr Vishnukanth, Dr Madhusmita Mohapatra, Dr Dharm Prakash Dwivedi, Dr Pratap Upadhy, Dr Mahesh Babu, Dr Sivaselvi**

Institution/Author Organization: **Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER)**

INTRODUCTION:

Anti-synthetase syndrome is an autoimmune disease characterized by autoantibodies against one of many aminoacyl transfer-RNA (tRNA) synthetases with clinical features like interstitial lung disease (ILD), non-erosive arthritis, myositis, Raynaud's phenomenon, unexplained fever and/or mechanic's hands. The targets of many myositis-specific autoantibodies are mostly cytoplasmic antigens which often are under-reported during anti-nuclear antibodies (ANA) staining by immunofluorescence (IFA) method.

CASE DETAILS:

A 57 year-old home-maker with no known comorbidities presented with complains of breathlessness of mMRC grade II and cough with whitish mucoid expectoration for 2 months. Her saturation was 70% in room-air, 96% with 6 lit-O₂. HRCT thorax findings were consistent with probable usual interstitial pneumonia pattern in the absence of other alternate diagnosis. ANA-IFA was negative. Detailed history revealed that patient had difficulty in getting up from squatting position suggestive of proximal muscle weakness for which Extractable Nuclear Antigen (ENA) assay was sent. It stained positive for Ro-52 and Jo-51. During hospital stay, patient had continuous fever spikes (all cultures were negative). Dermatologists opined presence of tortuous capillaries in right index and middle fingers and bilateral mechanic's hands changes. Diagnosis of anti-synthetase syndrome was made. After two cycles of cyclophosphamide (planned for 6 cycles) and systemic steroids (1mg/kg), patient is symptomatically better and is maintaining saturation in room-air.

CONCLUSION:

A negative ANA result does not rule out possibility of autoimmune diseases. Thorough history and specific antibody testing will help clinching diagnosis.

Title: Post Covid 19 GBS (Guillain-Barre Syndrome)

Name of Presenter: **Dr. Rucha Sane**

Authors (or Co-authors): **Dr. Shiraj Kane, Dr. Bharat Dhadeshwar**

Institution/Author Organization: **MGM Medical Collage and Hospital, Navi Mumbai**

INTRODUCTION:

Covid-19 is the cause of the current pandemic and there is an alarming rise in cases day by day. Coronaviruses can cause multiple systemic infections. There is a speculation regarding the association of covid-19 with GBS. GBS is an acute immune-mediated disease with classic clinical manifestation as progressive, ascending, symmetrical flaccid limbs paralysis.

HISTORY:

A 62 year Male brought by relatives to fever opd with complains of quadriparesis. Patient was RT-PCR positive 14 days back. Repeat RT-PCR came negative and patient was sent to green zone. No other evidence of any opportunistic infection in due course.

PRESENTATION:

Patient presented with symptoms of acute progressive symmetric ascending quadriparesis.

CSF studies showed albuminocytological dissociation and serum Autoantibodies came positive which proved the diagnosis of GBS.

MANAGEMENT:

Plasmapheresis was done which improved the power of the limbs.

COMPLICATION:

Due to progressive GBS, patient in due course developed respiratory muscle paralysis and was intubated for the same.

CINICAL IMPLICATION:

This case contributes to raise awareness of the possible association between GBS and SARS-CoV-2 infection. Therapy with IVIG or plasmapheresis should be initiated along with antiviral treatment if GBS suspected.

Title: A RARE CASE OF ARDS ASSOCIATED WITH PULMONARY TUBERCULOSIS

Name of Presenter: **Dr.S.GOWTHAM**

Authors (or Co-authors):

Dr.S.RAGHU, Dr.P.RANJIT BASHA

Institution/Author Organization: **GUNTUR MEDICAL COLLEGE, GUNTUR**

INTRODUCTION:

ARDS is an important cause of morbidity and mortality in ICU's. Tuberculosis commonly causes RF in patients with extensive pulmonary parenchymal involvement but it is a rare cause of ARDS. CASE REPORT: 50 yrs old female had

15 days h/o productive cough & fever with dyspnea (grade 2) for 7 days .no other cardinal symptoms. No previous h/o ATT.Pt k/c/o DM &HTN on regular treatment. CBP showed lymphocytosis.RFT & LFT normal.ESR elevated. Sputum culture, GS, FS were negative. CXR shows bilateral UZ infiltration. Sputum CBNAAT positive for Mtb.Pt was put on ATT & discharged. After 2 days of discharge, pt presented with dyspnea (grade 4), spo2 75% Room air, Bilateral diffuse crepitations on auscultation, CXR showed bilateral diffuse infiltration not fully explained by pleural effusion, collapse, nodules. ABG revealed severe hypoxemia with PAO2/FIO2 ratio of 216, no e/o cardiac failure & volume overload. blood culture report negative. Pt shifted to icu and NPPV with CPAP PSV started. ATT was continued. After 3 days of MV, pt clinical condition improved and weaned off from the ventilator.

DISCUSSION;

TB is an uncommon cause of ARDS. Predisposing factors for ARDS includes malnutrition, diabetes, alcoholism, HIV, Pregnancy, chronic liver disease and corticosteroid therapy. Lipoarabinomannan, a component of mycobacterial cell wall acts similar to antigen in bacterial sepsis to activate inflammatory cascade.

CONCLUSION;

Though TB is an uncommon cause of ARDS, in regions where TB is common or in patients with ARDS of obscure etiology, TB should always be kept a possibility of ARDS for early and effective management.

Title: Gullain Barre syndrome (GBS) along with pulmonary embolism as late sequelae of Covid-19

Name of Presenter: **Dr K.Srihitha**

Authors (or Co-authors): **Dr Tushar**

Sahasrabudhe

Institution/Author Organization: **Dr D.Y.Patil medical college and hospital**

INTRODUCTION:

As the case mortality is gradually coming down since the onset of Covid pandemic, the focus is now shifting to various post-Covid sequelae as a result of vascular, neurological and lung damage. We hereby present a combination of DVT, pulmonary embolism and GBS during post Covid period.

CLINICAL COURSE:

A 67 year old male with diabetes mellitus presented to us with complaints of acute onset breathlessness and right calf pain for 7 days.

He was diagnosed with Covid-19 confirmed by RT-PCR, 4 weeks prior. He was hospitalized then but discharged without preventive anticoagulants. He had clinical DVT that was confirmed by venous doppler. CT Pulmonary Angiography showed pulmonary embolism. Additionally, CNS examination revealed bilateral diminished ankle jerk along with bilateral Babinski flexion reflex, though he had no significant neurological complaints. Nerve conduction studies revealed AMSAN variant of GBS. He was treated with enoxaparin followed by rivaroxaban for thromboembolism and with intravenous immunoglobulins for GBS. He responded well to treatment.

CONCLUSION:

Late occurrence of Pulmonary Thromboembolism emphasizes need for post covid anticoagulant treatment. Gullain-Barre syndrome is a rare COVID-19 sequelae reported from India.

Title: ALTERED SENSORIUM IN ICU WHICH RESPONDED TO BENZODIAZEPINES : A CASE STUDY

Name of Presenter: **Dr Vipul Prakash**

Authors (or Co-authors): **Dr Mayank Mishra, Dr Prakhar Sharma**

Institution/Author Organization: **AIIMS Rishikesh**

Introduction-

Altered sensorium is frequently encountered phenomenon in ICU which has very long list of differentials. Some times even after extensive workup It's not possible to precisely delineate the cause. Undiagnosed altered sensorium leads to increase in mortality and morbidity. Our case represents a rare clinical scenario where thorough history and trial of treatment lead to diagnosis.

Aim-

To present a unique case

Methodology-

Its a case study. Patient had undergone extensive workup for the disease.

Case study and result -

A 60 year old female who was a known case of psychotic depression, was on multiple psychotropic drugs, came with 5 days history of fever, 3 days history of diarrhoea and 1 day history of altered sensorium. Apart from blood investigations including B12 level and CPK levels patient had undergone CSF analysis brain imaging and EEG, but her altered sensorium was undiagnosed. After reviewing

history she was clinically suspected to be a case of catatonia and given a trial of lorazepam which lead to dramatic improvement. She was extubated and discharged in stable condition.

Conclusion-

Catatonia should be considered as a differential diagnosis in unconscious patient who have history of psychiatric illness and had used antipsychotic and antidepressants.

Title: A CASE SERIES OF PULMONARY THROMBOEMBOLISM

Name of Presenter: **Dr.Wanbor Sungoh**

Authors (or Co-authors):

Dr.K.Anbananthan,Dr. A. Ramasamy, Dr. A Maniraman

Institution/Author Organization: **THANJAVUR MEDICAL COLLEGE**

BACKGROUND:

Acute pulmonary thromboembolism is one of the commonest causes of vascular death after myocardial infarction and cerebrovascular accident. It is one of the preventable causes of death in hospitalised patients.

CASE DETAILS:

We report 3 rare presentation of pulmonary thromboembolism in Thanjavur Medical College

1. pulmonary thromboembolism with hyperhomocysteinemia
2. pulmonary thromboembolism with protein S deficiency
3. Idiopathic acute pulmonary thromboembolism

All three patients presented with breathlessness with elevated D-dimer First patient with Procoagulant, anticoagulant assay showed hyperhomocysteinemia. ECG - sinus tachycardia, CT CHEST showed bilateral ill defined nodules , pleural based lesion - right lower lobe coincided with CT pulmonary angiography findings. Second patient presented with hemoptysis and protein S deficiency. ECG -S1q3T3 pattern. CT angiography showed right descending pulmonary artery-partial filling defects, left pulmonary artery bifurcation partial thrombus .

Third patient ECG showed S1q3T3 pattern, ECHO - RA/RV dilatation, severe pulmonary hypertension. CT chest - ground glass haziness over left base coincided CT pulmonary angiography findings. All three patients were treated with anticoagulants, other supportive measures. Patients were stable and discharged.

CONCLUSION:

Pulmonary thromboembolism is a life threatening condition and timely diagnosis can prevent complications and provide a better quality life for the patient.

Title: Comparison of CURB-65 and Pneumonia Severity Index for predicting duration of hospital stay – A cross sectional study in tertiary care centre.

Name of Presenter: **Dr. ANU KUMARI**

Authors (or Co-authors): **Dr. Uday C Kakodkar**

Institution/Author Organization: **GOA**

MEDICAL COLLEGE

Background:

PSI is one of the first to be used to determine severity of illness. However in busy hospital setting, it is difficult to calculate such elaborate scores. CURB 65 not only helps in deciding about the admission but can also help us to assess severity of illness and length of hospital stay.

Aims and objectives:

to determine the usefulness of CURB 65 score in predicting the duration of hospital stay at admission. This cross sectional study included patients with community acquired pneumonia above 18 years of age. Patients with immunodeficiency, aspiration pneumonia and HAP were excluded. At admission, we calculated CURB65 score and PSI score of inpatients.

Results:

There was significant statistical association with CURB65 and increased hospital stay. Mean hospital stay was 3 days for CURB 65 score of 1, 41 days for CURB 2 and for score 3 was 56 days.

Conclusion:

CURB-65 was on par with PSI score to determine the hospital stay and severity and can be used even at community and primary health center level.

Title: INTRAVENOUS METHYLPREDNISOLONE AS A PULSE THERAPY FOR HOSPITALIZED SEVERE COVID-19 PATIENTS IN A TERTIARY CARE: OUR EXPERIENCE.

Name of Presenter: **ARAVIND SAI KALINGA**

Authors (or Co-authors): **DR**

VENKATESHWARA REDDY TUMMURU

Institution/Author Organization: **SVS**

MEDICAL COLLEGE AND HOSPITAL

MAHABOBNAGAR TELANGANA

INTRODUCTION:

Acute Respiratory Distress Syndrome (ARDS) being the main reason for death in COVID-19 patients with no efficient specific treatment, glucocorticoids and immunosuppressive treatments can reduce the inflammation of respiratory system and prevent cytokine storm and ARDS induction. Hence in this study we investigated methylprednisolone pulse effects as a glucocorticoid therapy on the treatment, clinical symptoms and lab signs of hospitalized severe COVID-19 patients.

MATERIALS AND METHODS:

A study of 20 patients from 1/06/2020-1/11/2020 admitted in COVID-ICU at our Centre was conducted to look for the benefits of pulse therapy of IV Methylprednisolone in non-intubated severe COVID-19 patients.

INCLUSION CRITERIA:

1. Age > 18 years 2. Confirmed COVID-19 with SpO₂ < 90%, Elevated CRP (> 10), IL-6 (> 6) and CORADS-6 at early pulmonary phase of disease. 3. Agreed to give informed consent.

EXCLUSION CRITERIA:

Pregnant or lactating women, SpO₂ < 75%, uncontrolled Hypertension, Type 2 Diabetes mellitus, bleeding diathesis, active malignancies, heart failure, gastrointestinal bleed, receiving any immunosuppressive agents.

RESULTS:

Out of 20 patients who received pulse therapy of methylprednisolone at the beginning of early pulmonary phase of illness, 14 patients had remarkable improvement in pulmonary, oxygen saturation, Shortness of breath, heart rate, respiratory rate, temperature and inflammatory markers like CRP and IL6. 4 landed in mechanical ventilation and 2 were dead.

Title: EFFECTIVENESS OF REMDESIVIR IN PATIENTS WITH COVID -19 IN ICU AT A TERTIARY CARE CENTRE.

Name of Presenter: **ARAVIND SAI KALINGA**

Authors (or Co-authors): **DR.S.LAXMA REDDY**

Institution/Author Organization: **SVS**

MEDICAL COLLEGE AND HOSPITAL

MAHABOBNAGAR TELANGANA

INTRODUCTION:

Severe Acute Respiratory Syndrome Corona virus-2 (SARS-CoV-2) is identified on 7/01/2020 in China, Wuhan. No specific antiviral drug has been proven effective for treatment of patients with severe corona virus. Remdesivir,

a prodrug, that inhibits viral RNA polymerase with broad spectrum activity against several viruses including SARS-CoV-2. It is effective in treating MERS-CoV & Ebola. In this study we report clinical outcome of patients with Covid-19 treated with Remdesivir.

MATERIALS AND METHODS:

Inclusion criteria: At the time of admission all patients had SARS-CoV-2 infection confirmed by RT-PCR and severe respiratory failure who require ICU admission. Exclusion criteria: 1. Patients who died 48hrs after ICU admission 2. CrCl < 30ml/min 3. Serum levels of ALT/AST > 5 times the ULN 4. Patients requiring inotropic support.

METHOD:

All patients are given 1st dose of Remdesivir 100mg/BD followed by 100mg/OD for 5 days.

RESULTS:

Males were more effected. Commonest age group in males 56-65yrs and in females 66-75yrs. Diabetes in males and HTN in females are major risk factors. Mortality is more in males than females.

DISCUSSION:

Although several approved drugs have shown some antiviral activity against SARS-CoV-2 in invitro settings, there are no antiviral therapies proven beneficial. Thus, Remdesivir decreases mortality rate in ICU patients.

Title: Cardiac Troponin I as an indicator for non-invasive ventilation as a treatment modality in acute exacerbation in COPD patients

Name of Presenter: **Dr ASHWINI NAIK**

Authors (or Co-authors): **Dr Durga Lawande**

Institution/Author Organization: **GOA**

MEDICAL COLLEGE

INTRODUCTION

Cardiac troponin I is a preferred marker for cardiac injury. Serum troponin is also raised in acute exacerbations of COPD and it reflects its severity. Non-invasive ventilation as a modality in such patients is known to improve morbidity. Its estimation as a marker for indication for initiating NIV therapy in these cases was studied and is being presented.

OBJECTIVES

to evaluate cardiac troponin I levels and correlate it with requirement for NIV in patients of COPD during exacerbation

METHODOLOGY

A cross sectional study with 109 patients admitted to hospital in acute exacerbation of COPD were included and cardiac troponin I levels were measured. Levels >0.016 ng/dl were considered significant. Patients were monitored for requirement of NIV.

RESULTS

Out of 109 patients 63 had raised troponin I of which 69.8% of patients required NIV which was statistically significant (P value<0.001). where else only 17.4% required NIV whose troponin I was not raised.

CONCLUSION

Elevated cardiac troponin I levels can be used as an indicator for starting patients on NIV thereby reducing ICU stay and in hospital mortality.

Title: A STUDY OF INDICATIONS AND OUTCOME OF INVASIVE MECHANIOCAL VENTILATION IN A RESPIRATORY CARE UNIT OF A TERTIARY CARE HOSPITAL IN KOLKATA

Name of Presenter: **Dr.BALAJI DASIRI**

Authors (or Co-authors): **ASSOC PROF.**

Dr.SUMIT ROY TAPADAR , PROF.

Dr.ARUNABHA DATTA CHAUDHURI

Institution/Author Organization: **R G KAR MEDICAL COLLEGE AND HOSPITAL**

INTRODUCTION:

In 1960, volume-targeted ICU ventilators began to appear. There have been four generations of ventilators. The main modes of ventilator settings are controlled mode, ACV mode (VCV, PCV), PSV, SIMV, spontaneous mode.

AIMS AND OBJECTIVES:

The primary aims and objectives of this study are to study the indications and outcome of patients undergoing IMV.

MATERIALS AND METHODS:

This is a clinical, observational study with cross-sectional study design done over a period of 18 months. 80 patients admitted in RCU were included in this study. Data analysis was performed considering factors present over the course of IMV.

RESULT AND ANALYSIS:

12 patients had type 1 respiratory failure and 68 patients had type 2 respiratory failure. 4(33.3%) patients with type 1 respiratory failure survived and 8(66.7%) patients died. 40(58.8%) patients with type 2 respiratory failure survived and 28(41.2) patients died. The important factors that were significantly associated with the outcome of the study-

Pneumonia, ARDS, NMD, IHD, GCS, PEEP, TV, PaO₂/FiO₂ RATIO, ARF, RA, MA, SOFA SCORE, length of stay on IMV, Type of weaning, type of extubation.

CONCLUSION:

This study concludes that factors present before the initiation of IMV and factors developed during IMV play an important role in the outcome of the patient.

Title: RETROSPECTIVE ANALYSIS OF CASES DIAGNOSED WITH PULMONARY THROMBOEMBOLISM IN A TERTIARY CARE MEDICAL COLLEGE CENTRE

Name of Presenter: **Dr.Dinakaran**

Umashankar

Authors (or Co-authors): **Dr.K.Anupama**

Murthy

Institution/Author Organization: **PSG Institute of Medical Science and Research**

Introduction:

Incidence of Pulmonary Thromboembolism (PTE) is estimated to be approximately 60 to 70 per 100,000. Clinical diagnosis of PTE is difficult and can be fatal if untreated. Evaluation of clinical, haematological and radiological features provides early diagnosis and treatment which has significant prognosis in PTE.

Objective:

To evaluate and co-relate clinical, haematological and radiological parameters of cases of PTE.

Methodology:

We retrospectively evaluated 25 PTE patients between August 2019 to October 2020 in Respiratory Medicine Department of PSG IMSR.

Results:

Mean age of patients: 57.2 years, Female: Male ratio: 2:3.

Most common presenting symptom was breathlessness followed by cough.

Most common risk factor/co-morbidity was diabetes mellitus followed by chronic obstructive pulmonary disease.

In radiology, unilateral and involvement of both segmental and sub-segmental branches of pulmonary artery were more common.

According to revised Geneva guidelines, 3 patients had low probability (score- 0-3) for PTE, 22 had intermediate probability (score- 4-10) and only 2 patients had high probability (score- >/11) for PTE.

Conclusion:

The evaluation of clinical, laboratory and radiological findings is important in PTE. High index of suspicion is needed in patients admitted for respiratory complaints in spite of low/intermediate probability for PTE.

Title: Study the utility of Tocilizumab in ICU admitted seriously ill COVID-19 patients.

Name of Presenter: **Kamaljeet Singh**

Authors (or Co-authors): **Anand Agrawal, Sunaina Kharb, Rishi Rana, Punit Singla**

Institution/Author Organization: **BPS GMC(W), KHANPUR KALAN, SONEPAT, HARYANA.**

Introduction:

Management of cytokine storm in COVID 19 Pneumonia/ARDS is still challenge. Tocilizumab has been proposed as one of the most promising drugs to be used for the treatment of covid-19 induced cytokine storm as well as to reduce mortality.

Aims and Objectives:

To assess the efficacy and utility of Tocilizumab in the treatment of ICU admitted Covid-19 patients with pneumonia/ARDS.

Material and Methods:

Retrospective Observational Study was conducted in the Department of Respiratory Medicine at BPS GMC(W), Khanpur Kalan, Sonapat designated as tertiary care Covid center of the state. Patients who were put on Tocilizumab with standard treatment were included in the study to evaluate the efficacy of drug in terms of treatment outcome, hospital stay and mortality. Statistical analysis was done by using SPSS version 23.

Result:

Total 2992 COVID 19 positive case were admitted in the center, out of them 459 patients were admitted in COVID ICU and 17 were put on Tocilizumab in whom IL6 & CRP increase exponentially, maintaining oxygen saturation on HFNO/NIV, 13(76.47%) patient successfully discharged though 4 (23.52%) died during course of treatment after switching on mechanical ventilator. QSOFA as well as PaO₂/FiO₂ also improved significantly after administration of Tocilizumab. Mean Hospital Stay as well as dependency on oxygen also reduced compare to other survivors of severe COVID 19 patients, where Tocilizumab was not incorporated in standard regimen.

Conclusion:

Tocilizumab is an effective drug to reduce mortality in severely ill COVID 19 patients under

cytokine storm if used timely.

Keywords:

Tocilizumab, COVID-19, viral pneumonia, ARDS, Cytokine storm.

Title: Convalescent Plasma Therapy In COVID 19 Acute Respiratory Distress Syndrome

Name of Presenter: **NEENU N**

Authors (or Co-authors): **DR.KETAKI UTPAT, DR. UNNATI DESAI, DR. J. M.JOSHI, DR. R.N.BHARMAL**

Institution/Author Organization: **TOPIWALA NATIONAL MEDICAL COLLEGE & B Y L NAIR CH HOSPITAL, MUMBAI, MAHARASHTRA**

Introduction

Convalescent plasma (CP) therapy has emerged as a promising therapy for COVID-19 disease on the background of non-availability of a vaccine or drugs of proven efficacy. Aim To assess safety and potential efficacy of CP therapy in our study group.

Methodology

20 COVID 19 laboratory confirmed patients, hospitalized under the department of pulmonary medicine of our tertiary care hospital, receiving CP therapy on compassionate basis were included in study. Clinical data of patients like demographic data, symptoms, comorbidities and treatment details like antivirals, steroids and immunomodulators were recorded. Outcomes were assessed by relief of dyspnea, improvement in oxygen saturation, laboratory values specifically Interleukin-6, requirement of steroids and oxygen at discharge. Result Mean age was 42.6 years with M: F ratio of 2.33:1. Cases were categorized as per severity of ARDS into mild 5(25%) cases, moderate 9(45%) cases, and severe 6(30%) cases. Average hospitalization days was 9.05 (6.41%). Post CP therapy, there was clinicoradiological improvement and reduction in IL6 levels which was statistically significant (paired t test, p=0.0013). All patients were discharged successfully with no deaths recorded.

Conclusion

Convalescent Plasma therapy has a potential to reduce the mortality, hasten the clinicoradiological improvement and is safe.

Title: Prevalence of hyponatremia and its effects on outcome in COVID-19 : An experience from a tertiary care hospital

Name of Presenter: **Richie George**

Authors (or Co-authors): **Mehta Asmita A,**

Haridas Nithya, Kunoor Akhilesh, Shafi Tajik M, Nidhi Sudhakar

Institution/Author Organization: **Amrita Institute of Medical Sciences, Amrita Vishwa Vidyapeetham**

Background:

SARS-CoV-2 (COVID-19) invades human cells through binding angiotensin I converting enzyme 2 (ACE2) which plays principal role in the control of blood pressure and electrolyte balance. Even diarrhoea and vomiting common in COVID-19 may also lead to hyponatremia.

Aim:

Prevalence of hyponatremia in COVID-19 and factors associated with it.

Methods:

All patients with confirmed diagnosis of COVID-19 admitted during the study period were included after excluding patients on long-term diuretics or CKD. Chi square test was used for univariate analysis.

Results:

Total 71 patients were included in the study. The prevalence of hyponatremia was 24(34%). The mean sodium (Na) was 135±6.3(101-143). Univariate analysis showed hyponatremia was associated with age >57(0.011), male sex (0.029), d dimer >1 (0.002), ferritin >300 (0.001) and co morbidity DM and hypertension (0.03) while it was found to be non significant for LDH and potassium and time to negative COVID-19. Age, D dimer and ferritin were strongly associated with hyponatremia in multivariate analysis.

Conclusion:

Hyponatremia occurred in almost third of the patients with COVID-19. Factors like age, ferritin and D dimer were strongly associated with hyponatremia. It did not affect time to negative COVID conversion.

Title: Pulmonary embolism in COVID-19 patients- The real killer

Name of Presenter: **Dr Robin Choudhary**

Authors (or Co-authors): **Dr Vikas Marwah**

Institution/Author Organization: **Army Institute of Cardiothoracic Sciences, Pune**

Introduction

Coronavirus disease-19 (COVID-19) has spread like wildfire since the beginning of 2020 and has also made its way into our country, affecting the lives of more than 5 million and killing many. Declared as a pandemic in March

2020 by WHO, understanding of the disease has been evolving. COVID-19 is caused by a beta coronavirus, Severe acute Respiratory Syndrome Coronavirus 2 (SARS-CoV2) and has a multitude of clinical manifestations. Apart from COVID pneumonia and acute respiratory distress syndrome (ARDS), thrombotic complication like pulmonary embolism (PE) has been identified as a prime cause of morbidity and mortality.

Aims and Objectives

To study the incidence of Pulmonary thromboembolism in COVID-19 patients admitted at tertiary care hospital in western Maharashtra

Methodology

Retrospective analysis of Clinic-radiological characteristics of COVID-19 patients diagnosed with Pulmonary thromboembolism admitted at tertiary care hospital

Observation

A total of 13 patients were identified to have developed clinically significant pulmonary embolism. The mean age of patients who developed pulmonary embolism was 48.58 years (Standard deviation of 11.45 years, Age range 34-70 years). Only 01 female, who was also the youngest of our sample population (34 years), was diagnosed with PE. At presentation severe COVID was observed in 7 patients (58.33%), and rest 5 (41.6%) had moderate disease. Dyspnoea was the predominant symptom in our study population, which was seen in 10 patients (76.90 percent). CTPA diagnosis of pulmonary embolism was made in 8 patients (61.53 percent). Clinical, CUS and other supporting tests (ECG, Colour flow doppler) were used to identify PE in the rest 5 patients as they were unfit to be shifted.

Conclusion

Pulmonary embolism has proven itself as one of the deadliest complications of COVID 19. Our study shows that when complicated with COVID pneumonia, it usually has a fatal outcome. Every physician should keep an increased vigilance for PE to enable early detection and to prevent its development. It is also to be emphasised that all suspected patients should be subjected to CTPA and if not possible, all other investigations should be carried out to exclude the diagnosis.

Title: FACTORS PREDICTING THE OUTCOME OF NON-INVASIVE VENTILATION IN ACUTE RESPIRATORY FAILURE SECONDARY TO COPD EXACERBATION.

Name of Presenter: **Dr.S.Pugazhendhi**

Authors (or Co-authors): **Dr.S.Subramaniyan**
 Institution/Author Organization: **SRM Medical College Hospital and Research centre**

Introduction:

Non-invasive ventilation is a better alternative for treating respiratory failures compared to invasive ventilation. Various factors influence the outcomes of patients treated with Non-invasive ventilation in acute respiratory failure secondary to COPD.

Aim: To determine the possible early predictors and associated factors influencing the outcome of Non-invasive ventilation in acute respiratory failure due to COPD Patients.

Methods:

Our study is a hospital-based observational study. 42 COPD patients with type 2 respiratory failure admitted in respiratory medicine ward requiring NIV were included in the study. Data of patient's ABG parameter, HR, BP, and RR baseline values were noted and at an interval of 1hr, 6hrs, and every 24hrs were recorded. The outcome was divided into two categories depending upon whether patients improved or required invasive ventilation.

Results:

Of 42 patients, 30 patients (71.42%) were treated successfully with NIV, while 12 (28.57%) patients were declared NIV failure. Among the patients, it was observed that patients with mean age >60 years, BMI>26.5, baseline pH <7.2, PaCO₂>78, Heart rate>120, respiratory rate>40, comorbidities and infective exacerbation were requiring invasive ventilation.

Conclusions:

The baseline pH, PaCO₂, HR and RR before initiation of NIV predicts outcome. Also, age, BMI, associated comorbidities and mode of NIV predicts the outcome.

Title: OUTCOME OF NON INVASIVE VENTILATION IN PATIENTS WITH RESPIRATORY FAILURE INCLUDING COVID 19 AND FACTORS DETERMINING THE OUTCOME

Name of Presenter: **Dr.Sahana.K**

Authors (or Co-authors): **Dr.Meenakshi.N , Dr.Aruna.S , Dr.Fathima Zehra Razvin**

Institution/Author Organization: **CHETTINAD HOSPITAL AND RESEARCH INSTITUTE**

Introduction:

Respiratory failure is a life threatening emergency and the management of respiratory failure includes invasive or non-

invasive ventilation based on the various clinical parameters. Hence the present study was conducted to assess the outcome of NIV in patients with respiratory failure and to determine the factors predicting the outcome.

Material and Methods:

This Prospective observational study had included a total of 104 subjects with certain inclusion and exclusion criteria for analysis. The demographic details, clinical examination, vitals and arterial blood gas levels at 0, 1, 4 and 24 hours were analyzed among study subjects. Descriptive analysis was carried out that include mean and standard deviation for quantitative variables, frequency and proportion for categorical variables. Data was also represented using appropriate diagrams like bar diagram, pie diagram. Parametric statistics used were paired t test and ANOVA. Non parametric statistics used were Chi square test. At 95% Confidence interval, p value of <0.05 was considered to be statistically significant. Multivariate Regression analysis was done to predict the factors determining outcome of NIV. The data was entered in excel sheet and analyzed using SPSS (Version 16).

Results:

The mean age of the study population was 52.88±16.58 years. The age and outcome was found to be statistically not significant (P value 0.45). Majority of the subjects were male with 73.1%, and female were 26.9%. According to the gender, 70.78% success rate was found among males and 29.23% success rate was found among females. The difference between gender and outcome was not statistically significant (P value 0.49). There was no statistically significant association observed between BMI and outcome of NIV (p value 0.84). Higher rate of success was seen among subjects with COPD (43.37%) followed by COVID 19 patients (18.07%), acute pulmonary edema and pneumonia (9.64% each), ARDS (8.43%). In the study, the difference between etiological diagnosis and outcome was found to be statistically significant in ARDS (P value 0.02), pneumonia (P value 0.04) and COPD (P value 0.007). Patients with Glasgow coma scale < 8, 12% were successful and Glasgow coma scale >8, 78.48% were successful. The difference between Glasgow coma scale and outcome was found to be statistically significant (P value <0.0001). All ABG parameters at 0, 1, 4 and 24 hours (except PaCO₂ at 4 and 24 hours) were statistically significant to predict outcome of NIV.

Conclusion:

A successful outcome of 62.5% was observed in the subjects initiated on NIV for respiratory

failure, COPD being the major etiological diagnosis and the factors determining NIV were based on etiological diagnosis, GCS and Arterial Blood gas parameters.

Title: CHEST XRAY SCORING IN COVID-19: CORRELATION WITH DISEASE SEVERITY AND SHORT TERM OUTCOME

Name of Presenter: **SAMRUDDHI DHANAJI CHOUGALE**

Authors (or Co-authors): **ANITA ANOKAR, NISHANT AGARWAL, PRASHANT JEDGE**

Institution/Author Organization: **BHARATI VIDYAPEETH MEDICAL COLLEGE, PUNE**

Background:

Chest CT is the most effective method for detecting lung abnormalities in COVID-19 pneumonia. To improve the risk stratification for COVID-19 patients, a Brixia chest X-ray scoring system was developed which grades lung abnormalities on 18-point severity scale.

Methods:

This is a retrospective study carried out over 4 months. We took baseline x-ray of consecutive COVID-19 patients admitted to ICU with severe disease. They were scored & correlated with the final outcome in terms of death and discharge/recovery. The lungs were divided into six zones and each zone was scored from 0 to 3. Chi-Square test used for categorical variables.

Results:

130 patients were included. The mean CXR score calculated was 12.13 with SD of 2.50 and 11.18 with SD of 2.30 in death and discharged patients, respectively. These scores were compared with the outcomes, t-value was found to be 2.20 and p-value was calculated as 0.03, with 95% of confidence.

Conclusion:

High Brixia score was associated with high risk of death due to COVID-19. It provides the point information for bedside clinical assessment of COVID-19 patients. Considering difficulty in shifting of patients with severe disease for CT, reliance on CXR is the need of time for COVID-19 management in ICU.

Title: Comparison between CRB 65 score, Neutrophil-Lymphocyte Ratio, Absolute Neutrophil Count and Total Leukocyte Count as severity parameter to predict mortality in hospitalised patients of Community Acquired Pneumonia

Name of Presenter: **Dr. Shivam Priyadarshi**

Authors (or Co-authors): **Dr. Adesh Kumar, Dr. Ashish Kumar Gupta, Dr. Aditya Kumar Gautam**

Institution/Author Organization: **Uttar Pradesh University of Medical Sciences, Saifai, Etawah**

Background:

CRB65 score is widely used as severity parameter to decide admission in patients of community acquired pneumonia(CAP) alongwith predicting mortality. Recently, Neutrophil-Lymphocyte Ratio(NLR) has emerged as a promising mortality indicator in CAP.

Aim:

The present study aims to compare CRB65 score, NLR, Absolute Neutrophil Count(ANC) and Total Leukocyte Count(TLC) as predictor of mortality in hospitalised patients of CAP at UPUMS, Saifai, Etawah(U.P.)

Methodology:

A prospective observational study was done on 125 hospitalised CAP patients. ROC curve was plotted for each parameter and Area under curve (AUC) was calculated using SPSS software version 24.

Results:

Mean age was 50.5±17.2 years with 80 males and 45 females. When graph was plotted between CRB65 score(X axis) and NLR(Y axis), Pearson Correlation Coefficient 'r' came out to be 0.432 while 'r²' was 0.187 (p value < 0.001). 5 patients expired out of 125. ANC (AUC=0.975) was the single best predictor of mortality in CAP patients (cut-off value≥16.62×10⁹/L) followed by TLC (AUC=0.963), NLR (AUC = 0.925) and CRB65 score (AUC=0.922).

Conclusion:

NLR was better than CRB65 score in predicting mortality while ANC was the single best predictor of mortality in CAP. However, larger sample size is required to further confirm the findings.

Title: Prevalence and Characteristics of Venous Thromboembolism in Severe Exacerbation of Chronic Obstructive Pulmonary Disease

Name of Presenter: **DR. SOIBAM PAHEL MEITEI**

Authors (or Co-authors): **Dr. Sudheer Tale, Dr. Arjun Negi, Dr. Ruchi Dua, Dr. Rohit Walia, Dr. Sudhir Saxena**

Institution/Author Organization: **All India Institute of Medical Sciences, Rishikesh**

INTRODUCTION:

Acute exacerbation of chronic obstructive pulmonary disease (AECOPD) carries a high risk of venous thromboembolism (VTE). Pulmonary embolism (PE) and AECOPD increase the mortality and morbidity risk associated with each other. Racial and ethnic differences in VTE risk have been documented in multiple studies. However, there is a dearth of reliable Indian data on the same.

AIMS:

The study was planned to find the prevalence of VTE in severe AECOPD and to identify the clinical characteristics of VTE in severe AECOPD.

METHODOLOGY:

A total of 156 consecutive patients admitted with severe AECOPD were recruited. Thorough workup was done including ABG, serum D dimer, ECG, compression ultrasound of lower limbs, 2-D echocardiography, and CT Pulmonary Angiography as indicated. Results were analyzed using SPSS version 23.

RESULTS:

Sixteen (10.3%) patients had VTE, 15 (93.75%) of them isolated PE. Female gender, higher cumulative past exposure to corticosteroid, higher alveolar-arterial gradient, right ventricular dysfunction, and higher mean pulmonary artery pressure were associated with increased risk for VTE.

CONCLUSION:

Prevalence of VTE in AECOPD is high in India. The absence of deep vein thrombosis of lower limbs does not rule PE in the setting of AECOPD.

To determine etiology and factors associated with acute and acute on chronic breathlessness, predictive roles of dyspnoea scales and outcome measures.

Methodology:

Observational prospective cross-sectional study among 64 adults hospitalized in Respiratory Medicine Department of a Tertiary hospital due to acute change in dyspnoea scale (mMRC, Borg, Visual Analogue Scale) over preceding 24 hours. Clinical examination, laboratory tests, imaging, and outcome assessment were performed with relevant statistical analysis.

Results:

- i. Cases with underlying chronic lung disease were associated with worsening clinical parameters and outcome.
- ii. SARI due to COVID-19 and acute exacerbation of COPD were the commonest cause of acute and acute on chronic breathlessness, respectively.
- iii. Age, prior hospitalization, cyanosis, respiratory failure, isolation of microorganisms, Visual Analogue score at 72 hours and need for assisted ventilation were the major discriminating factors.
- iv. Poor outcome was significantly related to higher mean age, longer duration of chronic breathlessness, high Borg score at presentation and persisting at 72 hours, elevated lactate, vasopressor support, longer hospital stay and need for mechanical ventilation.

Conclusion:

Dyspnoea is an important factor for predicting clinical course and outcome of patients when it evolves acutely.

Title: A study of etiology and outcome in cases of acute and acute on chronic breathlessness admitted to Respiratory Medicine Department in a Tertiary Care Hospital

Name of Presenter: **Dr. Sudipta Saha**

Authors (or Co-authors): **Prof. (Dr) Amitabha Sengupta, Dr. Surajit Chatterjee, Prof. (Dr) Somenath Kundu**

Institution/Author Organization: **Institute Of Postgraduate Medical Education And Research, Kolkata**

Background:

In contrast to chronic breathlessness, acute breathlessness is understudied.

Aims/Objective:

Title: lung cancer in non smokers - A clinicopathological analysisName of Presenter: **APARNA SURESH**Authors (or Co-authors): **DR.G.N. SRIVASTAVA**Institution/Author Organization: **institute of medical sciences,banaras hindu university****Introduction**

With the overall rates of lung-cancer and tobacco smoking declining, lungcancer in nonsmokers has been noted to be increasing and has become of clinical interest.Lungcancer in non-smokers is different from both biologic and epidemiological perspective such that it should be looked at as a complete distant clinical-entity.

Objectives

To study the clinical,radiological,histopathological profile of lung-cancer among non-smokers.

Methods

This retrospective study carried out over a period of 1 year included 80 non-smokers diagnosed with lung-cancer .Details about patient demographics,clinicalpresentation,radiological &histopathological reports were collected from patient records and analysed. Results The common age-group was between 40-60yrs with male/female ratio being 1:3. The most common risk-factor being biomass fuel exposure followed by secondhand smoke. Cough was the commonest symptom followed by dyspnea,chest pain.Commonest radiological presentation was pleural effusion (52%).Adenocarcinoma (64.4%) was the commonest histopathological type followed by squamous(31.4%) &smallcell -carcinoma (4.2%).

Conclusion

Adenocarcinoma was the most frequent histopathological type with biomass fuel exposure being the major risk-factor. Most of our patients presented with advanced stages of the disease emphasizing the unmet need of new guidelines for screening ,awareness programmes,patient education about lungcancer in non-smokers for better clinical-outcome.

Title: CLINICO-PATHOLOGICAL PROFILE OF MALIGNANT PLEURAL EFFUSIONName of Presenter: **ARYA RAMACHANDRAN**Authors (or Co-authors): **VIJAYAKUMAR****MD,SURYAKUMARI MD**Institution/Author Organization: **ANDHRA MEDICAL COLLEGE****INTRODUCTION**

Carcinoma of any organ can metastasize to the pleura.Lung carcinoma is most common followed by breast carcinomas.

AIMS

To find the aetiology and clinical course of malignant pleural effusion.

METHODOLOGY

Hospital based prospective study of 40 cases of malignant pleural effusion admitted in our hospital from December 2019 to July 2020.

RESULTS

Out of 40 cases,major primary cancer were lung cancer(17,43%),lymphoma(7,15%), breast cancer(4,10%),cancer of female genital tract(3,8%) and others(3,8%),unknown primary(6,15%).A majority of patients had symptoms of cough(36,90%),loss of appetite(34,85%),dyspnoea(32,80%),loss of weight(33,84%),chest pain(22,55%), haemoptysis(5,12%).The mean duration of symptoms is 2 months.Out of 40 cases 22 were right sided,14 were left sided and 4 were bilateral.Chemical pleurodesis done in 32 cases of which 22 cases responded completely,4 cases showed incomplete response and 6 cases failed to show any response.In hospital mortality was 4 and 36 cases referred to higher centre for chemotherapy.

CONCLUSION

Malignant pleural effusion commonly complicates an underlying malignancy most common being lung cancer followed by lymphomas and breast cancer. The presence of pleural effusion adversely affects the prognosis of primary cancer.

Title: To study the utility of Serum LDH : Pleural fluid ADA ratio in identifying Exudative Pleural EffusionsName of Presenter: **DEEPANSHU CHAWLA**Authors (or Co-authors): **BABAJI GHEWADE**Institution/Author Organization: **Jawahar Lal Nehru Medical College Sawangi**

The study evaluated the diagnostic ability of serum LDH : pleural fluid ADA ratio (Cancer Ratio) in patients of exudative pleural effusion. Tubercular, malignant effusion are the two most common exudative pleural effusion

encountered. These can present with similar clinical and radiological features. There is no diagnostic tool that can differentiate between them on time.

Methods:

This is prospective observational study enrolling 82 patients.

Results:

LDH levels in serum and ADA levels in pleural fluid, their ratio is utilized to discriminate exudative effusions. Pleural fluid ADA is taken as a surrogate marker for tubercular effusion. Pleural fluid ADA is assumed to be negatively correlated with malignant effusion, on the other hand serum LDH with serum LDH: pleural fluid ADA ratio to be positively linked with malignant pleural effusion. Cancer ratio less than 10 predicts tubercular effusion and more than 20 predicts malignant pleural effusion with high sensitivity and specificity.

Discussion:

Serum LDH: pleural fluid ADA ratio will distinguish tubercular from non-tubercular and malignant effusion. This can be done very early after admission or on outpatient basis and can yield result as early as within one hour of admission. This is one of the pioneer study in India.

Title: A PROSPECTIVE STUDY TO EVALUATE ADVANCE LUNG CANCER INFLAMMATION INDEX (ALI) AS A PROGNOSTIC MARKER TO PREDICT SURVIVAL OUTCOME IN PATIENTS WITH LUNG CANCERName of Presenter: **JITENDRA KUMAR BAIRWA**Authors (or Co-authors): **Narendra khippal, Mohammed Javed**Institution/Author Organization: **SMS MEDICAL COLLEGE****Background:**

Systemic inflammation has been linked with cancer development, cancer cachexia and poor outcome. The aim of this study was to explore the relationship between ALI- advanced lung cancer inflammation index and the prognosis of lung cancer in Indian scenario.

Material methods:

60 patients of NSCLC who diagnosed at our institution in 2019-2020 were included. The ALI is based on BMI, serum albumin/neutrophil to lymphocyte ratio. Patients were divided

into low inflammation (ALI \geq 18) and high inflammation (ALI < 18) groups.

Results:

Among 60 patients mean age was 60.17 \pm 9.87 years, 90% were male, 53.33% had Squamous cell carcinoma. Patients with an ALI score of <18 suggesting high systemic inflammation more likely to have more than 2 sites of metastasis, have poor performance status and less likely to receive any chemotherapy. Their mean overall survival was 69.91 \pm 52.375 days and 179.04 \pm 5.004 days in patients with ALI >18 (P < 0.001).

Conclusion:

ALI (<18) at diagnosis is an independent marker of poor outcome in patients with advanced NSCLC

Title: SOCIAL AND CLINICAL FACTORS ASSOCIATED WITH NON-SMALL CELL LUNG CANCERS- A HOSPITAL BASED OBSERVATIONAL STUDY

Name of Presenter: **POTLURI BABY SWETA**

Authors (or Co-authors): **Dr. Somnath Das, Dr. Seshagiri Rao, Dr. Kondala rao**

Institution/Author Organization: **GSL Medical College and Hospital**

INTRODUCTION –

Cigarette smoking is most common cause of lung cancer but there has been a growing incidence of Non-small cell lung carcinomas in never smokers.

AIM AND OBJECTIVES –

To identify the social and clinical factors associated with the occurrence of non-small cell lung carcinomas in patients in the Godavari region of Andhra Pradesh.

PATIENTS AND METHODS-

It is a hospital based observational study. All patients who were diagnosed with non-small cell adenocarcinoma were taken into the study. Their clinical presentation, occupation, smoking history, staging of cancer were studied.

OBSERVATION –

Out of total 108 patients enrolled, 48 are smokers and 60 were never smokers. Most patients are in the age group of 50-70 years. Cough and dyspnea are most common symptoms, both patients had right upper lobe predominance of cancer involvement and most patients presented in third and fourth stage of cancer. Adenocarcinoma is the most common type of NSCLC.

CONCLUSION –

In our study on non-small cell lung carcinoma patients, we can conclude that adenocarcinoma is more common in non-smokers and farmers. Right upper lobe predominance of cancer involvement was observed and most patients presented in third and fourth stage of cancer.

Title: IMPACT OF LUNG ONCOLOGY MULTI-DISCIPLINARY TEAM (MDT) MEETINGS ON THE MANAGEMENT OF PATIENTS WITH LUNG TUMOURS IN A TERTIARY CARE CENTRE IN SOUTHERN INDIA.

Name of Presenter: **PRIYA N**

Authors (or Co-authors):

BARNEY ISAAC, BALAMUGESH THANGAKUNAM, CHRISTOPHER DJ, RICHA GUPTA, ANJANA JOEL, JENNIFER JEBBA, SUBASHINI JOHN, BIRLA ROY GNANAMUTHU, APARNA IRODI, LEENA RV

Institution/Author Organization: **CHRISTIAN MEDICAL COLLEGE, VELLORE**

Background:

many countries around the world Multidisciplinary team decision(MDT) for lung tumours, though accepted worldwide, there is a potential gap in the strategy. Very few studies in India have given standardized data for MDT meetings and about its impact in patient management.

Objectives:

To describe the spectrum of lung tumours discussed in MDT, the reason for discussing, the impact of MDT meetings on clinicians' management plans, implementation of the MDT decisions and to determine whether the mandatory elements were documented.

Study design: Retrospective analysis of MDT electronic records over 5 years. The meeting will be considered to have an impact on management plans if \geq 1 of the following changes were detected: tumor stage, histology, treatment intent or treatment modality, or if additional investigations were recommended.

Results:

Of the 75 discussions analysed, Adenocarcinoma was the predominant variant 56%(n=41), 17% of discussions were for diagnostic dilemma and 83 % for therapeutic decisions. The impact of the MDT decisions making a change in management decision was noted in 48%(CI 34-62%; P<0.005), 76%(n=57) of the MDT decisions were implemented. However the recommended data elements (ECOG, staging, decisions documentation) were complete in only 63%.

Conclusion:

MDT meetings significantly impact on the management plans for lung oncology patients and in important decision making.

Title: Assisted Detection of Lung Nodules from Chest Imaging using Artificial Intelligence

Name of Presenter: **SUTHIRTH VAIDYA**

Authors (or Co-authors): **Abhijith Chunduru, Krishna Chaitanya, Vidur Mahajan, Vasanthakumar Venugopal**

Institution/Author Organization: **Predible Health**

PURPOSE

Up to 20% of lung nodules are missed on chest imaging due to their small subtle appearance. In this study, we develop and validate an artificial intelligence-based algorithm for the detection of lung nodules from chest CT imaging, against a panel of 3 radiologists.

METHOD AND MATERIALS

A software solution (LungIQ) using deep convolutional neural networks was developed by Predible Health using 2000 chest CTs labelled by radiologists. The software identifies nodule candidates, their size, volume, texture and calcification. A dataset of 165 CT scans was collected and annotated by three independent radiologists. A consensus of 2 of 3 radiologists was required to consider the lung nodule as a true candidate. The results of the consensus were compared with the outputs of the software for performance analysis.

RESULTS

Total of 79 unique nodules measuring between 5 and 30mm were marked. The software had a sensitivity of 93% with an average of 1 false-positive per scan.

CONCLUSION

Artificial intelligence-based software solutions for the detection of lung nodules from chest CT imaging can help improve the sensitivity of detection of early lung cancer.

CLINICAL RELEVANCE

Early lung cancer screening and incidental detection from CT can benefit from the usage of artificial intelligence

Title: To study the profile of lung carcinoma patients at a tertiary care centre: a 8 year study

Name of Presenter: **SWATI LOCHAB**

Authors (or Co-authors): **Rajesh Agrawal, Rajat Agarwal**

Institution/Author Organization: **Rohilkhand medical college and hospital, bareilly**

INTRODUCTION:

Lung cancer is one of the most common cause of cancer-related deaths worldwide. In India, it accounts for 9.3% of all cancer related deaths in both sexes. Adenocarcinoma, squamous cell carcinoma, large cell, small cell and undifferentiated carcinoma are the common histological types accounting for more than 90% of all lung cancers. AIM: The objective was to assess the histopathological pattern of primary malignant lung tumours at a tertiary care hospital over a 8 year period(2013-2020).

RESULT:

A total of 214 cases of lung carcinoma studied included 159 males and 55 females, in respiratory medicine department, rohilkhand medical college and hospital, bareilly. Cases detected by biopsy 122(57%), FNAC 54(25.23%), 38(17.75%) on pleural fluid examination. Patients diagnosed on pleural fluid analysis were excluded as their histopathological type could not be evaluated. Among 176 patients most common was Squamous cell carcinoma 86(48.8%) followed by adenocarcinoma 45(25.5%), small cell carcinoma 21(11.9%), large cell carcinoma 2(1.1%), poorly differentiated 22(12.5%). Among 100 smokers most common was squamous cell Ca 70(70%). Among 76 nonsmokers most common type was AdenoCa 30(39.5%).

CONCLUSION:

According to studies adenocarcinoma was most common histological type but at our centre squamous cell carcinoma was the most predominant type.

Lung Cancer - Oral - Interesting cases

Title: MALIGNANCY MASQUERADING AS ORGANIZING PNEUMONIA

Name of Presenter: **DR.ARTHI**

Authors (or Co-authors): **Prof.Dr.Aruna.S, Prof.Dr.Meenakshi.N, Dr.Naveen**

Institution/Author Organization: **CHETTINAD HOSPITAL AND RESEARCH INSTITUTE**

INTRODUCTION:

Organizing Pneumonia(OP) is nonspecific inflammatory disease characterized by buds of granulation tissue within the lumen of distal airspaces. It may be idiopathic or secondary to infections, drugs, connective tissue disorders & malignancy. Radiological presentation

of OP -multiple, patchy alveolar opacities peripheral, peribronchovascular distribution with reverse halo sign. We hereby report a case with clinico-radiological features of OP diagnosed as mucinous adenocarcinoma. 57 year lady presented with progressively worsening breathlessness 6 months, right sided chest pain 2 months, weight loss, anorexia, No fever/comorbidities. Clinically stable with resting tachycardia RS- B/L Air entry, crepts interscapular, infrascapular area Investigations -Routine hematology & CTD workup normal CXR – consolidation, reticulations-mid & lower zone. CT chest- B/L patchy peripheral areas of consolidation with reverse halo in lower lobes BAL Cytology- No malignant cells, GeneXpert –low detected indeterminate for TB PETCT- Mildly active multiple subpleural consolidatory changes B/L lower lobes. Other systems normal

DIAGNOSIS

Patient presented with clinical worsening of symptoms after 2 months of ATT started elsewhere. CT guided biopsy-mucinous tumor infiltration with lepidic & acinar pattern suggesting Invasive mucinous adenocarcinoma of lung.

MANAGEMENT

Suggested Immunohistochemistry and management by oncologist

CLINICAL IMPLICATIONS

Present case highlights atypical presentation of mucinous adenocarcinoma with clinico-radiological features of organizing pneumonia with minimal uptake on PETCT due to mucinous nature of adenocarcinoma.

Title: ACUTE PULMONARY THROMBOEMBOLISM IN MALIGNANCY

Name of Presenter: **Dr. S. Abinaya**

Authors (or Co-authors): **Dr. A. Mahilmaran, Dr. A. Sundararajaperumal, Dr. D. Nancy Glory, Dr. G. Allwyn Vijay, Dr. N. Murugan**

Institution/Author Organization: **Madras Medical College-600003**

INTRODUCTION:

Pulmonary Embolism is an important cause of morbidity and mortality in cancer patients. Clinical presentation range from small peripheral asymptomatic to life-threatening central pulmonary embolism with subsequent hypotension and cardiogenic shock.

CASE REPORT:

A 60 year old female patient with no known comorbidities admitted in gynaecology department with complaints of

postmenopausal bleeding for 4 days. Baseline blood investigations found to be within normal limits. Ca125-23.18, CEA-3.680. USG abdomen and pelvis showed thickened heterogeneous endometrium of 21mm. Histopathological examination of Fractional curettage revealed Endometrial adenocarcinoma type 2-papillary serous carcinoma. Staging laparotomy with TAH+BSO+B/LPLND+Infracolic omentectomy done. On second postoperative day patient developed breathlessness and desaturation. D-dimer was 55, ECG showed S1Q3T3 pattern, CTPA showed saddle embolus at bifurcation of pulmonary artery with extension noted in both right and left pulmonary artery and bilateral lobar and segmental branches. MPA:3.4cm, RPA:2.3cm, LPA:2.4cm, F/S/O acute pulmonary thromboembolism with pulmonary hypertension. Patient was treated with anticoagulants.

CONCLUSION:

The prevalence of venous thromboembolism and mortality due to pulmonary embolism is high in cancer patients. Risk stratification should be done in all cancer patients. Prompt diagnosis and management is essential to prevent fatal sequelae.

Title: RARE CASE OF SIGNET RING CELL ADENOCARCINOMA OF PULMONARY ORIGIN AND PTB CONCURRENCE IN A YOUNG MALE MISDIAGNOSED AS COVID 19 PNEUMONIA

Name of Presenter: **Dr LAKKAM ALEKHYA**

Authors (or Co-authors): **Dr LATHA SARMA, Dr MANMADHA RAO, Dr V V RAMANA PRASAD, Dr MOHAMMED NAWAZ, Dr KRANTHI KUMAR, Dr ROHIT PATHANIA, Dr SINDHU VELS, Dr ABIDNI, Dr MEGHA S MANGAL**

Institution/Author Organization: **KRISHNA INSTITUTE OF MEDICAL SCIENCES, SECUNDERABAD, TELANGANA**

INTRODUCTION:

Most lung cancers are adenocarcinomas, Primary signet ring cell (adeno)carcinoma (SRCC) of the lung represents a rare uncommon condition. The incidence varies from 0.14% to 1.9% of all lung cancers.

CASE REPORT:

A 33 year old male with c/o cough and SOB past 3 months was admitted elsewhere, treated as COVID and discharged. He later developed SOB after 2 weeks, came to our hospital for further evaluation and management. His RT PCR for COVID was negative on multiple occasions. CTPA done, negative for PTE, dense peribronchovascular consolidation in bilateral perihilar regions. Few perifissural irregular

nodules seen along the bilateral oblique fissures and upper lobes. Mediastinal Lymphadenopathy. Patchy subpleural areas of consolidation in bilateral lower lobes - initial DDs were sarcoidosis and pulmonary edema. Evaluated and treated accordingly, for which no proper improvement noted. Bronchoscopy done, nodular mucosa found. Bronchial washings done, revealed MTB detected in GeneXpert with indeterminate Rif resistance. ATT was started. Cryobiopsy done, revealed primary SIGNET RING CELL CARCINOMA of LUNG, by HPE and IHC. PET CT had no additional findings.

CONCLUSION:

Amidst COVID 19 pandemic, there had been a lot of clinical dilemma misleading the diagnosis. Hence a wide angle approach is needed for every patient, to prevent delay in diagnosis and initiation of treatment.

Title: Double Trouble

Name of Presenter: **Dr Asha Undrajarapu**

Authors (or Co-authors): **Dr Ilavarasi, Dr.K.H.Kisku**

Institution/Author Organization: **Pondicherry Institute Of Medical Sciences**

EGFR mutated lung cancers have garnered interest recently. Exon 19 deletions, exon 21L858R constitutes approximately 90% of EGFR mutations. With increasing testing, we come across rare compound mutations in EGFR.

We describe a 76-year-old gentleman, smoker with metastatic adenocarcinoma of lung with compound EGFR mutations (Exon 19 deletion & Exon 20 insertion). He was started on weekly Paclitaxel/Carboplatin in view of ECOG PS 3. He was shifted to EGFR inhibitors due to poor tolerance of Chemotherapy despite transient improvement. He was started on Gefitinib and later switched to Osimertinib after a week in view of rapid deterioration. Patient succumbed to disease progression.

Only 3 case reports have been reported involving Exon 19 deletion and Exon 20 insertions. Most studies reported TKI resistance in Exon 20 insertion 20 mutation. Good response to Afatinib was reported in one patient with variant (V769_D770insASV). Osimertinib has shown favourable activity in uncommon mutations, however data on compound mutation is unclear. The lack of information on the variant of EGFR 20 insertion mutation is a limitation. By analysing the variant information of the rare mutation, evidence for treatment response can be gathered for such rare mutations when Chemotherapy is the only viable option at present.

Title: MALIGNANCY MASQUERADING AS PULMONARY ASPERGILLOSIS

Name of Presenter: **BEERA NITHIN JOSEPH**

Authors (or Co-authors): **Dr A.Sathyaprasad, HOD Respiratory Medicine**

Institution/Author Organization: **MAMATA MEDICAL COLLEGE**

Introduction and background:

Lung cancer remains the leading cause of cancer deaths worldwide. Majority of these could be avoided with early diagnosis and treatment. Hence, apart from classical symptoms like cough, hemoptysis, weight loss, anorexia etc, uncommon presentations also must be borne in mind to avoid diagnostic delays and promote better prognosis.

Presentation:

A 55 year old male, presented with dry cough, dyspnea and left sided chest pain. Examination and chest X ray showed consolidation of left lung. Bronchoscopy showed mucous plugging in left main bronchus. Bronchial washings revealed Aspergillous sps. Patient recovered after full course of antifungals and was discharged, only to show recurrence after a month.

Diagnosis:

CT scan showed ill-defined soft tissue dense mass in left upper lobe with infiltration of lobar and main bronchus, pulmonary artery, adjacent pleura and lymph nodes. Bronchoscopy showed a mass in left main bronchus, biopsy of which, revealed SQUAMOUS CELL CARCINOMA.

Management:

Patient was staged and evaluated as SCC stage III B, planned for definitive CCRT, received Radical extended radiotherapy and at present, undergoing cycles of chemotherapy.

Learning points: Pulmonary aspergillosis, especially recurrent obstructive bronchial aspergillosis, must arise a suspicion for underlying malignancy.

Title: RESCUE "Y STENTING" FOR LIFE-THREATENING CRITICAL AIRWAY OBSTRUCTION SECONDARY TO AN AGGRESSIVE ANTERIOR MEDIASTINAL MASS

Name of Presenter: **BENJAMIN EARNEST WILLIAMS**

Authors (or Co-authors): **Prof Dr. Balamugesh T, Prof Dr. D J Christopher, Prof. Raj Sahajanandan, Dr. Badrinath.T**

Institution/Author Organization: **CHRISTIAN MEDICAL COLLEGE AND HOSPITAL,VELLORE**

INTRODUCTION

Primary mediastinal B-cell lymphoma (PMBCL) is a relatively rare lymphoma subtype affecting mainly young adults. PMBCL typically presents as a large, fast-growing anterior mediastinal tumor with invasion of adjacent thoracic structures. We describe a patient with newly diagnosed large B cell lymphoma with life-threatening airway obstruction.

CASE PRESENTATION

A 17-year-old boy with no known past medical history presented to the Emergency department with stridor and respiratory distress. He was in respiratory failure and required non-invasive ventilation. His imaging showed a large anterior mediastinal mass with severe compression of the trachea and both main bronchi. Under general anesthesia and jet ventilation, he underwent Rigid scopy intubation, balloon dilatation and Y stenting of tracheobronchial tree. Ultrasound guided biopsy of the mass was also done in the same setting. Post procedure his stridor and distress resolved significantly and he was weaned off to room air.

DIAGNOSIS

Biopsy was reported as High-grade lymphoma suggestive of PMBCL

MANAGEMENT

Started on Chemotherapy with a plan to remove stent once tumor shrinks.

CLINICAL IMPLICATIONS

Temporary stenting is a valuable strategy in chemo and radiosensitive malignancies, as it ameliorates the patient's respiratory condition until tumor-specific therapy is effective.

Title: Bronchial Carcinoid

Name of Presenter: **Dr Dharamendra Kumar Gupta**

Authors (or Co-authors): **Dr Sheetu Singh**

Institution/Author Organization: **SMS Medical College Jaipur**

Introduction -

Carcinoid tumors arise from Kulchitsky cells of the bronchial epithelium which are the stem cells having neuroendocrine activity. Carcinoids account for approximately 2% of all lung tumors and Atypical Carcinoids

are much rarer than Typical Carcinoids. Bronchopulmonary system is involved in 25%–30% of all neuroendocrine tumors.

Methodology -

A 40 year old female, non-smoker presented with complaints of shortness of breath on exertion, dry cough, right sided chest pain, low grade fever since 2 years now increased from last 2-2.5 months. On chest radiograph complete homogenous opacity was present on right side with trachea shifted towards same side. CECT chest revealed a mass lesion in right main stem bronchus with complete collapse of right lung and mild right sided pleural effusion. Fiberoptic bronchoscopy was done showing large globular growth from right main bronchus. Results - Histological features suggestive of neuroendocrine tumor possibly carcinoid. Immunohistochemistry confirms the diagnosis of Carcinoid tumor.

Conclusion -

Carcinoid tumors are commonly found in the gastrointestinal tract, followed by the tracheobronchial tree. Of the bronchial carcinoids, Typical is nearly nine times more common than Atypical. Surgery is the mainstay for the treatment. Chemotherapy may be considered for adjuvant or neoadjuvant therapy with surgery and for advanced disease.

Title: A CASE OF 35 YEAR MALE PATIENT WITH EMPYEMA THORACIS AND SOLITARY FIBROUS TUMOUR OF PLEURA

Name of Presenter: **Dr DS S V B murali krishna**

Authors (or Co-authors): **Dr R N toshniwal , Dr Manjunath.M**

Institution/Author Organization: **Dr R N toshniwal , Dr Manjunath.M**

HISTORY:

35 Year male patient came with complaints of breathlessness and cough with expectoration, non foul smelling since 3 months. Also had h/o weight loss and h/o smoking since 15 years. NO previous h/o TB and no comorbidities. Patient was diagnosed to have left sided empyema thoracis and tube thoracostomy was done. Patient was started on parenteral antibiotics and tapering low dose steroids and ATT. On physical examination breath sounds reduced on left side and vitals stable with tachypnea .No h/o chest pain,vomiting,alcohol intake

INVESTIGATIONS:

Chest xray- left middle and lower zone suspected consolidation/effusion. HRCT THORAX-multiloculated thick pleural effusion and incidental minimally enhancing

hypodense lesion 3.8*5.3cm in apical segment of left lower lobe. Fibreoptic bronchoscopy-nodules in RIGHT UPPER LOBE and RT carina and biopsy taken from LEFT UPPER LOBE. Histopathology showed tumour cells in ill defined fascicles and in peritheliomatous pattern and having dilated branching staghorn vessels suggesting solitary fibrous tumour of pleura.

DIAGNOSIS:

SOLITARY FIBROUS TUMOUR OF PLEURA.

MANAGEMENT:

Complete surgical removal using VATS and adequate follow up.

Title: A RARE PLEURAL TUMOUR WITH RARE PRESENTATION

Name of Presenter: **Dr GUNJAN SHARMA**

Authors (or Co-authors): **Dr ANIL SAXSENA, DR AISHWARYA AP**

Institution/Author Organization: **GMC KOTA**

Introduction :

Solitary fibrous tumors of pleura also known As Benign fibrous mesothelioma. Solitary fibrous tumors of pleura is a mesenchymal tumor of probable fibroblastic origin and in comparison with malignant mesothelioma the prognosis with solitary fibrous tumors of pleura is excellent. Methodology -In this patient ICTD done and with the help of thoracoscopic pleural biopsy done and obtained material also send for IHC.

Case:

A 26 yrs old female presented with c/o shortness of breath on exertion since 2 month, c/o chest pain 1 month C/o Dry cough 1 month with no previous history of asbestos Exposure No h/o Ati past H/o pleural tapping two times. Pleural fluid Hemorrhagic in colour fluid ADA is 19.4 C lymphocyte 25 percent with cytology negative for malignant cell on chest X -ray shows complete homogenous opacity oven left Side of lung field with USG thorax shows left Side moderate multi loculated septated echogenic collection with pleural thickening with CECT thorax suggestive of Eccentric soft tissue component mesothelioma. Pleural biopsy shows mesenchymal tumor composed of spindle cell arranged in fescicular pattern and ICH is Negative for CD - 34 and STAT-6 and positive for VIMENTIN and TLE-1.spinal cell: synovial sarcoma .

Result:

In this case 26 yr old female presented as pleural effusion with low ADA and pleural biopsy shows spinal cells and IHC positive for

vimentin and TLE -6 favour is a spindle cell
:synovial sarcoma of pleura

CONCLUSION:

Synovial sarcoma is very rare primary pleural tumor with affected age group 40-70 years but in this case tumour presented in Early age with pleural effusion And pleural thickning so pleural effusion in early age also look for other possibilities And diagnosed malignancy early for better prognosis.

Title: Recurrent Spontaneous Pneumothorax in a Patient with Soft Tissue Sarcoma on Pazopanib Treatment– A Rare Presentation

Name of Presenter: **DR JAANAKHI V M**

Authors (or Co-authors): **DR NARENDRA KHIPPAL, DR MOHAMMED JAVED QURESHI**

Institution/Author Organization: **SMS Hospital, JAIPUR**

INTRODUCTION:

Soft tissue sarcomas(STS) are rare heterogenous tumours originating from mesenchymal tissues. Pneumothorax secondary to malignancy develops in association with STS, germ cell tumour and primary lung metastases having incidence of 0.03%-0.05%. Pazopanib, an anti-angiogenic tyrosine kinase inhibitor introduced for patients with advanced STS reported an unexpected adverse event of pneumothorax having incidence of 14%.

CASE REPORT:

A 20years old non-smoker male with right leg STS presented with severe dyspnea and left sided chest pain for 3days. Patient who underwent surgery for STS, postoperatively was on pazopanib for 1year after PET-CT scan revealed bilateral lung metastases. General examination revealed Grade 2 clubbing, left supraclavicular lymphadenopathy & an exophytic growth of 15*10 cm in the right mid-leg. On Respiratory examination, decreased chest wall movements, hyper resonant note & decreased air entry on left hemithorax. Radiological evaluation confirmed Left sided pneumothorax for which chest tube drainage was done and the symptoms improved. One month later, he was referred again for recurrent pneumothorax.

CONCLUSION:

In case of sudden onset of chest pain and dyspnea in patients on chemotherapy for lung metastases, pneumothorax should be considered and radiological imaging should be utilised. Physicians should be alert to the risk of a difficult to treat pneumothorax when

prescribing pazopanib therapy.

Title: PULMONARY SARCOMATOID: A RARE PULMONARY CARCINOMA

Name of Presenter: **DR. JITENDRA SINGH**

Authors (or Co-authors): **DR.**

S.P.AGNIHOTRI, DR.SURESH KOOLWAL, DR. GOVIND SINGH RAJAWAT, DR. GULAB SINGH YADAV

Institution/Author Organization: **INSTITUTE OF RESPIRATORY DISEASES SMS MEDICAL COLLEGE JAIPUR**

INTRODUCTION:

Pulmonary sarcomatoid carcinoma is a rare subtype of poorly differentiated non-small cell lung carcinoma that comprises less than 1% of lung carcinoma. It demonstrates both epithelial and mesenchymal elements.

CASE REPORT:

A 76 years old male patient presented with complaints of shortness of breath, non-productive cough and loss of appetite since 1 month. He was a known case of hypothyroidism and hypertension since 4 years. Chest X-ray showed blunting of right costo-phrenic angle. Contrast enhanced computed tomography of thorax showed solid spiculated ill defined soft tissue density heterogeneously enhancing right upper lung mass with moderate right sided pleural effusion. Ultrasound guided thoracocentesis revealed hemorrhagic pleural effusion, predominantly lymphocytic and transudative with adenosine-deaminase level 12 and no malignant cells. Closed pleural biopsy was performed and on histopathology a diagnosis of poorly differentiated malignant neoplasm was made. Immunohistochemistry revealed the tumor cells were immunopositive for vimentin, pancytokeratin, p63 and negative for calretinin, hmb-45, ttf-1, tle-1 which is suggestive of sarcomatoid carcinoma (carcinosarcoma).

CONCLUSION:

Sarcomatoid carcinoma of the lung is a poorly differentiated non-small cell lung carcinoma which portends a poor prognosis and the characteristic histology and immunohistochemistry is essential for the diagnosis of this tumor.

Title: Clival Metastases Causing Diplopia: An Unusual Presentation of Bronchogenic Carcinoma

Name of Presenter: **Dr. Jofin George**

Authors (or Co-authors): **Dr. Damini Somayaji, Dr. Uday C Kakodkar**

Institution/Author Organization: **TB and Chest Diseases Hospital, Goa Medical College, Taleigao**

Introduction:

Lung Cancer is the most common cancer worldwide with most cases being detected at Stage IV. Among these metastases to the clivus causing lateral rectus palsy are rare with only very few cases reported in literature. We present one such case of a bronchogenic carcinoma who presented with diplopia and headache as the only symptom.

History and Presentation:

A 64-year-old man, heavy smoker, presented with history of binocular diplopia and headache for ten days. On examination, there was decreased range of movements in the left eye and a provisional diagnosis of Left Lateral Rectus palsy was made.

Diagnosis:

Routine blood investigations and Cerebrospinal fluid analysis was unremarkable. MRI Brain was suggestive of a clival metastases. Computed Tomography of Chest showed a large mass in anterior segment of Left Upper lobe and lingula, with lymphangitis carcinomatosa. CT guided lung biopsy of this lesion and immunohistochemistry was consistent with small cell carcinoma.

Management:

He was initiated on dexamethasone. Patient died within two weeks of diagnosis, before management of carcinoma could be started. Clinical Implications: Bronchogenic carcinoma metastases to the clivus, causing diplopia is rare. Hence extensive work-up is essential including appropriate radiological investigations to determine the cause of such diplopia.

Title: Pulmonary Lymphoma in a suspected case of neuroendocrine tumour - A diagnostic dilemma

Name of Presenter: **Dr. Kausalya K Sahu**

Authors (or Co-authors): **Dr Sanyo P Dsouza , Dr Vishak Acharya, Dr Sarada Rai, Dr Anusha S, Dr. Saumya Shivkumar**

Institution/Author Organization: **Kasturba Medical College, Mangalore, Manipal Academy of Higher Education,**

Introduction:

Primary diffuse large B-cell lymphoma (DLBCL) is the commonest type of non-Hodgkin lymphoma; however, the involvement of the lung and central nervous system (CNS) is

rare. Furthermore, patients with DLBCL rarely exhibit specific clinical symptoms, which may delay definitive diagnosis and their treatment which is almost curable.

Case Details:

History –A 71 /F , known case of Diabetes mellitus and hypertension presented with breathlessness since 2 – 3 months, increased on exertion . Chest Xray showed left sided pleural effusion with no breath sounds on the left side . TB culture was negative .

Histopathology:

Bronchial biopsy showed fragmented bronchial tissue bits infiltrated by tumour tissue composed of mildly pleomorphic cells with high N:C ratio with hyperchromatic nucleus and granular chromatin. AFB stain was negative . A diagnosis of poorly differentiated neuroendocrine tumour was made with pleural involvement. Immunohistochemistry revealed the final impression.

Implications:

Although rare , lung involvement secondarily in DLBCL is more common than primary . For suspected case of a lung carcinoma, immunohistochemistry is essential to come to a conclusive diagnosis even if the histopathological features suggest otherwise.

Title: A case report - Miliary lung metastasis due to papillary thyroid carcinoma mimicking Miliary tuberculosis

Name of Presenter: **DR.KOTHAPALLY SAI DHEDEEPYAA**

Authors (or Co-authors): **Dr.Ramesh Kumar K, Dr.Ranganath D**

Institution/Author Organization: **Bhaskar Medical College and Hospital**

Introduction:

Miliary shadows on chest imaging have many differential diagnoses. The most common etiology is infectious, such as miliary tuberculosis (TB) and histoplasmosis, but may present in sarcoidosis, pneumoconiosis, and secondary metastasis to the lungs from primary cancers of the thyroid, kidney, and trophoblasts as well as sarcomas.

Case Report:

A 9-year-old female was referred to Pulmonology OP due to cough, fever and weight loss with suspicion of miliary TB. The CXR showed a bilateral miliary nodules and CT of the thorax revealed extensive bilateral pulmonary infiltration without pleural effusion. On examination, she had a significant cervical lymphadenopathy. Further evaluation revealed

thyroid enlargement that was firm and free from surrounding tissues. Mycobacterium tuberculosis was not detected in either the sputum or bronchoalveolar lavage samples. Gastric washing samples for acid-fast bacilli were negative. Further assessments confirmed the thyroid mass.

Diagnosis:

Histopathology was compatible with papillary thyroid carcinoma.

Conclusion:

If miliary infiltrates are found on chest radiography, metastatic tumours including papillary thyroid cancer as a differential disease mimicking miliary tuberculosis should be considered to avoid misdiagnosis and delayed diagnosis.

Title: EWINGS SARCOMA OF PLEURA

Name of Presenter: **DR.MITHEN.K.R**

Authors (or Co-authors): **DR.IRFAN ISMAIL AYUB, DR. B. HARI PRASAD, DR. T. DHANASEKAR, DR. C. CHANDRASEKAR**

Institution/Author Organization: **Sri Ramachandra Institute of Higher Education and Research**

INTRODUCTION:

A 24 year old male presented with right sided chest pain of 3 months duration with non-productive cough and dyspnoea of 1 month duration with significant weight loss and loss of appetite. O/E found to have pallor, paucity of movements without any mediastinal shift on inspection, stony dull note on percussion with absent breath sounds on auscultation in the right lower hemithorax. CXR PA view showed right massive pleural effusion. Right side thoracentesis done, showed Exudative effusion. CECT showed a pleural based mass lesion measuring 17.4x16.4x12.7cm in the right lower lobe with mediastinal lymphadenopathy. PET CT showed intrathoracic extrapulmonary mass lesion arising from the pleura with SUV max 10.69 with enlarged lymph nodes in the right axilla, paratracheal areas. USG guided biopsy of the right pleural mass showed small round blue cells, positive for vimentin, CD99, FLI-1 all suggestive of ewings sarcoma.

TREATMENT:

Patient was given 2 cycles of chemotherapy with Vincristine, Adriamycin, Cyclophosphamide alternating with Isofosamide and Etoposide.

DISCUSSION:

Extra skeletal ewings sarcoma is a rare entity which predominantly occurs in adolescents

and young adults. DD includes embryonal rhabdomyosarcoma, neuroblastoma and lymphoma. The differential diagnosis is based on clinical features, immunohistochemical staining and cytogenetic analysis.

CONCLUSION:

Extraskelatal ewings sarcoma should be considered as a differential diagnosis in adolescents or young adults, with a soft tissue mass of the trunk or the extremities

Title: ORGANISING PNEUMONIA AFTER DOCETAXEL BASED CHEMOTHERAPY

Name of Presenter: **Dr.N.Bhanuteja**

Authors (or Co-authors): **Dr.Sobha Subramaniam, Dr.K.Pavithran**

Institution/Author Organization: **Amrita Institute of Medical Sciences**

Background:

Docetaxel is a taxane derivative used in cancers of breast, ovary, lungs, prostate, head and neck. It rarely produces lung toxicity. Methodology: Retrospective study of five cases who developed Organising pneumonia on docetaxel, between 2015 to 2020, diagnosed with HRCT-Chest, infection was ruled out with cell counts, blood and sputum cultures. Most of them had complaints of dry cough, breathlessness.

Results:

24 year old female with Metastatic Osteosarcoma, developed symptoms two weeks after 5th cycle of docetaxel, CT-Chest showed bilateral lower lobe subpleural consolidation. She improved with steroid therapy. 59 year old female with carcinoma Breast developed progressive respiratory failure after 12 days of fourth cycle chemotherapy and she succumbed in spite of treatment. 59 year old female with carcinoma breast developed symptoms 3 weeks after 6th cycle. She improved with steroids. 46 year old female with carcinoma breast developed symptoms after 20 days of second cycle. Improved after steroids. 74 years old male with carcinoma prostate developed symptoms after fourteen days of 5th cycle. He improved with steroids

Conclusions:

Organising pneumonia is a rare complication which can be treated by prompt diagnosis, steroid therapy and withholding docetaxel. In the present study it developed after few doses of docetaxel and 4 out of 5 patients improved.

Title: A CASE OF ENDOBRONCHIAL HAMARTOMA

Name of Presenter: **DR NAZIA BANU**

Authors (or Co-authors):

DR.T.KRISHNAPRIYA, DR.KOUSHIK MUTHURAJA, DR.V.G.VINOD, DR.C.CHANDRASEKHAR, DR.HARIPRASAD, DR.DHANASEKAR

Institution/Author Organization: **SRI RAMACHANDRA INSTITUTE OF HIGHER EDUCATION AND RESEARCH, INDIA**

CASE HISTORY:

A Seventy one year old female with complaints of streaky hemoptysis around 5ml/day since 3 days. No other complaints, no other comorbidities. All baseline investigations including coagulation profile was normal. Chest Xray showed linear parenchymal non homogenous opacity in the right mid zone. Contrast enhanced CT showed segmental collapse of right upper lobe. Bronchoscopy done showed partial obstruction of right upper lobe anterior segment by well defined and smooth walled sessile endobronchial lesion.

TREATMENT:

Rigid bronchoscopic intubation was done and right upperlobe endobronchial lesion was debulked in toto using cryo forceps. Post debulking tumor base was found to be broad. APC cauterization was done to base. Histology showed respiratory epithelium, cartilage, fibroadipose tissue with foci of hemorrhage in a disorganized pattern features consistant with hamartoma.

DISCUSSION:

Hamartomas are rare benign neoplasms of the tracheobronchial tree. Bronchial hamartoma accounts for only around 1.4 -10% of all intrathorasic hamartomas. Airway hamartoma commonly manifests with varying degree of respiratory distress ranging from acute respiratory failure to cough, hemoptysis and chestpain. Due to slow growing nature of these leisions, symptoms are often gradual and mimics presentation of COPD and obscuring timely diagnosis and treatment. Failure to detect bronchial hamartoma may cause fatal airway obstruction. Endoscopic treatment with rigid bronchoscopy and lasers provides an excellent outcome and can be done in patients with lesions causing obstruction.

CONCLUSION:

Hamartoma is one among the commonest benign lung tumors. Most of them are located in lung parenchyma but very rarely it can originate endobronchially. So do include them in your differential dianosis during evaluation.

Title: AN ATYPICAL PRESENTATION OF PANCOAST TUMOUR

Name of Presenter: **DR.NITIN**

Authors (or Co-authors): **DR.SHAZIA KHAN**

Institution/Author Organization: **B.J.MEDICAL COLLEGE , AHMEDABAD**

INTRODUCTION:

Pancoast tumor is a clinical syndrome associated with HORNER'S syndrome and tumors located in the extreme apex of lung .Initial pain confined to shoulder and scapula ,often it radiates to the arm following an ulnar distribution which reflects involvement of C1 and T1 nerve roots. Most often epidermoid carcinoma or adenocarcinoma is associated with Pancoast syndrome. Here, we present a case of atypical presentation of Pancoast tumor with SQUAMOUS CELL CARCINOMA

CASE REPORT:

65 year old gentleman , garment shopkeeper by occupation came to hospital Causality with complain of breathlessness on exertion ,cough with white sputum production , generalized weakness since 2 month and current smoker with 50 pack year of smoking . sputum cytology report was negative for malignant cells . CECT thorax suggested 10*8*9 cm sized heterogeneously enhancing necrotic mass lesion in right lobe extending into right chest wall and erosion of rib, possibility of Pancoast tumor. Histopathological examination showed moderately differentiated squamous cell carcinoma.

CONCLUSION:

middle aged male patient presenting with history of smoking with CXR opacity should be suspected for malignancy and detailed investigation should be done to rule out malignancy even if patient is asymptomatic.

Title: NEUROSARCOMA INHABITING POSTERIOR MEDIASTINUM AND RETROPERITONEUM: A CASE REPORT

Name of Presenter: **DR.B. NIVOTHINI**

Authors (or Co-authors): **DR. A. MAHILMARAN , DR.A.SUNDARARAJA PERUMAL , DR.C.PALANIAPPAN**

Institution/Author Organization: **MADRAS MEDICAL COLLEGE ,CHENNAI -3**

INTRODUCTION:

Neurogenic tumours are the most common neoplasms of the posterior mediastinum representing 12 to 21 percent of all the mediastinal masses. Malignant peripheral

nerve sheath tumours are rare, biologically aggressive and pose tremendous challenges to effective therapy. Incidence in general population is about 0.001%, increases to 4.6% when associated with neurofibromatosis syndromes.

HISTORY AND PRESENTATION:

A 45-year female presented with complaints of breathlessness, dry cough, vague abdominal pain for 1 month. No history and features suggestive of neurofibromatosis. No similar family history.

DIAGNOSIS:

CXR showed homogenous opacity in the left hemithorax with tracheal, mediastinal shift to right, left diaphragm pushed down with abdominothoracic sign. CECT chest and abdomen showed 20*13*15 cm hypodense mass with soft tissue component and calcifications suggestive of posterior mediastinal mass extending into retroperitoneum with liver metastasis. CT guided biopsy of mediastinal mass reported as high grade neurosarcoma.

MANAGEMENT:

As patient was not willing for surgery, palliative radiotherapy was planned. Patient did not turn up for follow up.

CONCLUSION:

The incidence of such tumours without neurofibromatosis is uncommon in the thoracic cavity. Awareness and early diagnosis can result in complete surgical excision and better prognosis.

Title: Ewing's pnet of chest wall (Askins tumour)

Name of Presenter: **Dr Pournami**

Balasundaran

Authors (or Co-authors): **Dr J Bhargava, Dr Sanjay Bharty**

Institution/Author Organization: **NSCB MCH jabalpur**

INTRODUCTION

Askins tumour belongs to ewings sarcoma family characterized by small round blue cells. It affects mainly children and young adults, originating from soft tissues of chest wall.

PRESENTATION

24 year old lady complaining of left sided dull aching chest pain for 2 months associated with loss of appetite and weight. Examination revealed decreased breath sounds over the left hemithorax with dull note on percussion.

DIAGNOSIS

CECT chest showed large poorly circumscribed heterogeneously enhancing soft tissue density in left pleural space compressing left lung segments medially. Usg guided fnac and biopsy revealed round cell tumour. Immunohistochemistry confirmed above diagnosis.

DISCUSSION

Askins tumour has always been a rare entity developing from migrating cells of neural crest. Characterized by reciprocal translocation t(11,22)(q24,q12), the cardinal presentation is in the form of mass with chest pain being most common symptom. Diagnosis is made from immunohistochemistry with markers such as CD99, FLI1, NSE and vimentin. Treatment is based on multimodal approach combining neo adjuvant chemotherapy with surgical resection of mass.

CONCLUSION

Our case enlightens about importance of considering such rare diagnosis inspite of the atypical presentation. Differentiating it from other tumours such as lymphoma enables a directed therapy and helps prognosticate condition better.

Title: Déjà vu: Different Etiologies, Similar Faces

Name of Presenter: **PRAKHAR SHARMA**

Authors (or Co-authors): -

Institution/Author Organization: **AIIMS Rishikesh**

Introduction:

Lung pathologies manifest in several ways, occasionally mimicking their counterparts, leaving one perplexed to the final diagnosis.

Clinical presentation:

We present two cases, first one presenting as a gradually progressive non homogenous opacity in the left lower zone of CXR, and second one presenting as a solid mass like lesion in the same region. Both patients were elderly, non-smokers and had no comorbidities.

Diagnosis:

Both patients had to undergo CT thorax followed by lung biopsy to reach final diagnosis. First case was diagnosed as Adenocarcinoma lung with lepidic pattern and second one as Pulmonary tuberculosis.

Management:

Our first patient diagnosed with Adenocarcinoma lung with lepidic pattern refused for treatment post diagnosis and expired with two months of diagnosis, while the second patient was treated with anti-tubercular drugs and is doing well.

Clinical Implications:

The Clinico-radiological picture of the two diseases we encountered matched with the final diagnosis of the other, hence, the mind of pulmonologist should be wide open and receptive when encountering cases on day-to-day basis and not just consider it as a déjà vu.

Title: CASE REPORT OF TRACHEOESOPHAGEAL FISTULA IN ESOPHAGEAL CARCINOMA

Name of Presenter: **PRASHANT MISHRA**

Authors (or Co-authors): **Dr. RAJENDRA PRASAD, SYED AHMED HUSSAIN KAZMI**

Institution/Author Organization: **ERAS LUCKNOW MEDICAL COLLEGE**

INTRODUCTION

Tracheoesophageal fistula (TEF) is a congenital or acquired communication between the trachea and esophagus. Acquired TEFs may occur at any age. Causative factors include malignancy, trauma and iatrogenic. Advanced esophageal carcinoma can complicate as fistulas.

HISTORY/PRESENTATION/DIAGNOSIS

A 46-year-old male smoker presented with complaints of chest pain, cough on swallowing, hemoptysis for 2 weeks and dysphagia for two months. On clinical examination, he was averagely built and malnourished with normal vitals. Respiratory system examination was normal, CXR and ECG were normal. CECT thorax revealed irregularly enhancing concentric thickening of esophageal wall just above carina, narrowing oesophageal lumen with proximal dilatation and retained contrast agent and communication of trachea and esophagus suggestive of Tracheo-esophageal Fistula. Fiberoptic bronchoscopy revealed circular ulceroproliferative growth.

MANAGEMENT

Symptomatic management was done.

CLINICAL IMPLICATIONS

TEF, together with malignant esophageal and pulmonary tumors can be fatal apart from carcinoma itself. Surgery is not advised owing to poor outcome. In these cases, stents offer an alternative to major surgery and can sometimes be a superior way to alleviate

symptoms with two main types being used currently. Covered self-expanding stents are relatively simple to insert, can firmly expand and cover the damaged area, and have a low migration rate. Malignancy associated TEFs have grave prognosis.

Title: A rare case of Pulmonary synovial sarcoma

Name of Presenter: **PRATHYUSHA ALAKUNTA**

Authors (or Co-authors): **Dr. TUSHAR SAHASRABUDHE, Dr. M.S. BARTHWAL**

Institution/Author Organization: **DR. DYPATIL MEDICAL COLLEGE**

INTRODUCTION:

Pulmonary synovial sarcoma is a rare disease which accounts for less than 0.5% of all lung malignancies. Synovial sarcomas primarily occur in the periarticular tissue and have been reported from various other sites.

CLINICAL COURSE:

A 25 year old male presented with complaints of right sided chest pain and dyspnea for one month. He had right foot amputation 10 years prior, apparently for some infection but no records were available and hence malignancy could not be conclusively ruled out. Chest radiograph and CECT thorax showed a lobulated mass lesion in the right upper lobe and a smaller lesion in the right lower lobe. Ultrasound guided core needle biopsy confirmed the diagnosis of monophasic synovial sarcoma which was positive for TLE, Bcl2, EMA and CK[AE1/AE3], myogenin, CD34 and S100 negative with the KI 67 index being 50%. FDG PET CT scan revealed hyper metabolic lung lesions along with lesions in left tibia and femur. Patient was treated with ifosfamide and doxorubicin chemotherapy regimen.

CONCLUSION:

Pulmonary synovial sarcoma rarely presents among young individuals, the mean age of presentation being 53 years. Primary site could not be ascertained but it could be the lungs.

Title: A RARE CASE OF PRIMARY PULMONARY PLASMACYTOMA

Name of Presenter: - **Dr. Pronoy Sen**

Authors (or Co-authors): **Prof. Dr. Santanu Ghosh, Dr. Hrishikesh Barui, Dr. Raghul Raj S.**

Institution/Author Organization: **BURDWAN MEDICAL COLLEGE AND HOSPITAL, PURBA BURDWAN, WEST BENGAL**

INTRODUCTION

Primary pulmonary plasmacytoma is a rare type of extramedullary plasmacytoma. Here we present an extremely unusual presentation as a pulmonary mass with pleural effusion.

HISTORY

A 60 year old Hindu male farmer presented with progressive pain and swelling on left chest wall and small skin nodules over front of chest within last one month.

PRESENTATION

He had bilateral axillary lymphadenopathy. He also had left sided pleural effusion which was confirmed by chest x-ray and USG. CECT thorax showed pleural based non-enhancing nodular mass in upper part of left hemithorax with few enlarged mediastinal lymph nodes.

DIAGNOSIS

FNAC and trucut biopsy from left lung mass and excision biopsy from lymph node and skin nodules revealed malignant plasmacytoma of lung. Immunohistochemistry findings showed CD 138, CD 38, CK7, P63, TTF1 positivity with Ki 67 of 40% which confirmed the diagnosis as a primary pulmonary plasmacytoma. Epstein Barr Virus (EBV) IgG was positive.

MANAGEMENT

The patient was administered Cyclophosphamide and Prednisolone.

COMPLICATIONS

He expired after first cycle of chemotherapy due to massive haemoptysis.

Title: ASKIN'S TUMOR IN ADULT: A RARE CLINICAL ENTITY- REPORT OF TWO CASES

Name of Presenter: **Dr Ramya Priya**

Authors (or Co-authors): **Dr Saka Vinod Kumar, Dr Manju R, Dr Madhusmita Mohapatra, Dr Dharm Prakash Dwivedi, Dr Vishnukanth, Dr Pratap Upadhyay, Dr Mahesh Babu, Dr Sivaselvi**

Institution/Author Organization:

JAWAHARLAL INSTITUTE OF MEDICAL EDUCATION AND RESEARCH, PONDICHERRY

INTRODUCTION:

Malignant neoplasm of a neuroectodermal origin that arises from the soft tissues of the thoraco-pulmonary wall. It is a rare, life-threatening malignancy that affects young children and is very uncommon in adults. Because of the rarity, only a handful of cases were reported in literature.

CASE DETAILS:

1. A 34 year-old nulliparous female with no known comorbidities presented with right sided chest pain and chronic cough of 2 months duration. CECT thorax showed 13 x 11 cms compressing anterior segment of upper lobe, middle and lower lobes of right lung. CT guided biopsy showed HPE and IHC features suggestive of extraskeletal PpNET. Patient received 10 cycles and chemotherapy and mass was excised. Post surgery showed satisfactory right lung expansion.

2. A 19 year-old male with no known comorbidities presented with complains of right sided chest pain of 3 months duration. Biopsy from right chest wall mass showed HPE features suggestive of extraskeletal PpNET. Post chemo and surgical intervention, right chest wall reconstruction done, he died 15 months later due to severe ARDS.

CONCLUSION:

Askin's tumor should be considered within the differential diagnosis of thoracic neoplasms. Multimodal management, using neoadjuvant chemotherapy in association with surgical resection and/or postoperative radiotherapy should be considered.

Title: An interesting case of metastatic malignant melanoma with tracheobronchopathia osteochondroplastica

Name of Presenter: **Sangavi R**

Authors (or Co-authors): **Dr.R.Sridhar**

Institution/Author Organization: **Govt Stanley Medical College**

INTRODUCTION:

Malignant melanoma is neoplasm of melanocytes or neoplasm of cells that develop from melanocytes. Metastasis to lung is common and often first clinically apparent site of visceral metastasis. Primary pulmonary malignant melanoma is a rare entity.

CASE REPORT:

A 44yrs old male presented with complaints right sided pleuritic type of chest pain for past 15 days with h/o LOW&LOA, known alcoholic, shipyard and agricultural worker, who was evaluated in 2008 as a case of ?metastatic malignant melanoma following lung biopsy, IHC: HMB&S100 positive, examination of skin revealed multiple hyperpigmented macules in palms and soles, large hyperpigmented patch over (R) shoulder with hairs over the patch. skin biopsy: no e/o malignancy, colonoscopy: polyp in descending colon, biopsy done which was concluded as inflammatory polyp, patient was lost to follow up then. In present admission, CT

chest: multiple heterogeneously enhancing hypodense pleural based lesion with peripheral calcification with right minimal pleural effusion, CT guided biopsy of (R) lung: fibrofatty tissue with arthroscopic pigments only, FOB revealed tracheobronchopathia osteochondroplastica, wash and biopsy done, results are inconclusive, FNAC of (L) axillary node: blackish fluid aspirated, result s/o metastatic carcinomatous deposit probably from malignant melanoma, medical oncology opinion obtained and patient was started on palliative chemotherapy and on followup

CONCLUSION:

10-year survival rate for patients with metastatic melanoma is less than 10%. Metastatic melanoma continues to be a challenging disease to treat.

Title: AN UNUSUAL CASE OF A PLEURAL MASS

Name of Presenter: **DR MALLE SIMEON**

Authors (or Co-authors): -

Institution/Author Organization: **MNR**

Medical College & Hospital

CASE REPORT:

A 35 year old lady, homemaker presented with breathing difficulty and left sided chest pain radiating to left shoulder and lower back for 3 years. On examination, dull note was heard on percussion over the left side of chest with decreased air entry in left infra-axillary and infra-scapular regions on auscultation. Chest X-ray revealed a large well defined soft density mass lesion in the left middle and lower zones obliterating the left dome of diaphragm. USG chest revealed a well defined heterogenous mass noted in the left hemithorax with central necrotic area with no internal vascularity. CECT Chest also revealed a heterogeneously enhanced mixed density lesion in left hemithorax with minimal pleural effusion suggestive of solitary pleural fibroma. HPE revealed a benign neoplasm comprising of spindle cells with vesicular nucleus and scanty cytoplasm. Stroma had few dilated congestive capillaries with perivascular lymphatic infiltration with absent atypical cells suggestive of a fibrous tumour of pleural origin. Patient recovered uneventfully after excision of the tumour.

DIAGNOSIS:

Left sided solitary fibrous tumour of the pleura.

CONCLUSION:

Solitary fibrous tumour of pleura are rare neoplasms that are 80% benign by nature. They are mostly curable with careful complete

resection.

Title: Recurrent right-side pleural effusion mimicking malignancy: Pseudo-Meigs Syndrome

Name of Presenter: **Dr. VIJENDRA CHOUHAN**
 Authors (or Co-authors): **Dr. KUSUM V. SHAH, Dr. ARTI D. SHAH, Dr. YASH RANA, Dr. ANCHAL JAIN**

Institution/Author Organization: **S.B.K.S. M.I. & R.C., SUMANDEEP VIDYAPEETH, VADODARA, GUJARAT, INDIA**

Background:

Pseudo-Meigs syndrome is defined as the triad of benign ovarian tumor other than fibroma with ascites and pleural effusion that resolves after resection of the tumor. Ovarian tumor constitutes the majority of the benign tumors seen in Pseudo-Meigs syndrome. It is a diagnosis of exclusion, only after ovarian fibroma is ruled out & confirmed by disappearance of the effusions.

Clinical Case:

A 55 yrs. old female admitted with complains of progressive shortness of breath, right sided chest pain, abdominal distention. Patient had history of recurrent right-sided moderate pleural effusion & repeated thoracentesis was done previously. Ultra-sonography of chest & abdomen revealed hepatomegaly, ascites with suspected right-side ovarian malignancy. Contrast-enhanced computed tomography abdomen suggested neoplastic lesion in left ovary. Hence earlier this disease was thought to be a malignancy but histopathological examination suggestive of mature cystic teratoma with dominant areas of Struma ovarii with no evidence of malignancy.

Conclusion:

Pseudo-Meigs Syndrome should be considered in diagnosis whenever these cardinal features are encountered i.e. ovarian fibroma, ascites and pleural effusion.

CASE REPORTS

Title: 38 YEAR OLD MALE WITH NON RESOLVING PNEUMONIA

Name of Presenter: **DR. AHMED SAFWAN.M**
 Authors (or Co-authors): **DR. SONAM SPAGAIS, PROF. RAJKUMAR**
 Institution/Author Organization: **VALLABHBHAI PATEL CHEST INSTITUTE**

INTRODUCTION

Pneumonic type-Adenocarcinoma is not

only difficult to diagnosis, but also delay in diagnosis and leads to treatment with multiple courses of antibiotics including antitubercular therapy (ATT) because of its slow progression and atypical clinical and radiological presentation. Here we reporting a case of P-ADC presenting with bilateral consolidation for 1.5 year in young, non-smoker male with repeated course of ATT.

CASE

A 38year, male, non-smoker was presented with cough for 1.5years. He was treated with ATT twice with gap of one month on clinicoradiological basis before referral to us. X ray and CECT chest revealed bilateral non-resolving consolidation predominantly in middle and lower lobes. Sputum and BAL for AFB, genexpert and malignant cell and M.tb were negative. The FNAC of consolidation was consistent with adenocarcinoma and IHC showed positive for TTF1 and negative for P40. He was diagnosed with adenocarcinoma of lung and referred to oncology department for further management.

CONCLUSION

Non-resolving pneumonia even in non-smoker and young patient should investigate for all differential diagnosis including malignancy before starting ATT to prevent delay diagnosis of adenocarcinoma.

Title: Invasive mucinous adenocarcinoma of lung

Name of Presenter: **AISHWARYA ALAVANDAR**
 Authors (or Co-authors): **Dr.Prof. Chandrasekar, Dr.Prof.Dhanasekar, Dr.B.Hariprasad**
 Institution/Author Organization: **SRI RAMACHANDRA MEDICAL COLLEGE AND HOSPITAL**

Mucinous adenocarcinoma is a rare histological type of cancer involving lung. It's clinicopathological finding is unusual from other carcinoma lung.

Case report:

42 year female presented with intermittent fever, cough with expectoration, shortness of breath on exertion for more than 3 years. Other respiratory symptoms were absent. She is a known case of bronchial asthma, CAD on regular medications. Also she is diabetic, hypertensive on medications for past 8 years. On examination, vitals were stable. Chest examination showed decreased breath sounds in right infraclavicular, axillary, suprascapular region. Other system examination unremarkable. Chest x-ray showed right

upper lobe large bullae. AFB sputum negative. Genexpert MTB not detected. Started on broad spectrum antibiotics. Patient reviewed after 2weeks with no improvement of symptoms. CT thorax revealed giant emphysematous bullae in right upper lobe with small nodule within bullae. Blood counts were raised. CA 125 was 48.7 increased. Patient referred to CTVS for right upper lobectomy. Post operative HPE showed invasive mucinous adenocarcinoma with CK7 positivity. Adjuvant chemotherapy was given.

Conclusion:

Lung mucinous adenocarcinoma is a unusual disease with poor prognosis which requires prompt early diagnosis and management.

Title: SIMULTANEOUS OCCURRENCE OF LUNG CANCER AND PULMONARY TUBERCULOSIS: A RARE CASE REPORT

Name of Presenter: **-DR.AMANPREET KAUR**
 Authors (or Co-authors): **DR.AMIT GOYAL**
 Institution/Author Organization: **GOVT. MEDICAL COLLEGE, AMRITSAR**

Lung cancer and tuberculosis (TB) are common causes of morbidity and mortality in the world. TB is a serious public health problem in developing countries including India, bearing the highest burden. Lung cancer is also increasing everywhere in the globe with India having the highest mortality due to lung cancer in males. Both diseases coexist producing a diagnostic dilemma. The simultaneous or sequential presentation of pulmonary TB and lung cancer within the same patient has been reported in various case series and case-control studies, but the association between them is still controversial. TB is an important risk factor for developing carcinoma lung. The dormant bacilli may activate due to disturbed defense mechanisms. Pulmonary cancer mortality was also higher in patients developing TB, simultaneously or during treatment courses, than in those without. The diagnosis may be delayed and the patient's survival may be decreased. Pulmonary TB coexisting with lung cancer can mask the underlying disorder resulting in delay in diagnosis and management of cancer patients. Here, we present a rare and interesting case of a 52 year old male who was diagnosed as a case of microbiologically confirmed pulmonary TB and squamous cell lung carcinoma at the same time.

Title: Bilateral Chylothorax, Chylous Ascites in Non Hodgkins lymphoma

Name of Presenter: **ANIRUDH KUMARAN V**

Authors (or Co-authors): **Dr. S. Subramanian (Professor), Dr.N.Nalini Jayanthi (Professor and HOD)**

Institution/Author Organization: **Department of Respiratory Medicine, SRM Medical College Hospital and Research Centre**

Introduction:

Chylothorax is the effusion of lymph, rich in chylomicrons into the pleural cavity. It is a rare entity with both traumatic and non-traumatic etiologies. Simultaneous accumulation of chyle in all serous cavities, though rare, can be associated with non-traumatic etiologies, like malignancy (especially lymphoma).

History:

31-year-old female presented with the complaints of fever, dry cough, progressive breathlessness and orthopnea for last 2 months with loss of weight and appetite. Presentation: On general examination, patient appeared emaciated with generalised lymphadenopathy. Respiratory examination revealed bilateral basal decreased breath sounds, stony dull on percussion. Per abdomen distended showing shifting dullness without organomegaly. Investigations: Chest-xray followed by CT Chest showed bilateral pleural effusion (Left > Right) with axillary lymphadenopathy. Thoracocentesis showed milky white pleural fluid with lymphocytic predominance, elevated triglycerides (441 mg/dl) and pleural fluid serum cholesterol ratio < 1. MRI Abdomen – Retroperitoneal mass (18 x 9 x 8 cm) compressing cisterna chyli and thoracic duct with hepatosplenomegaly. Diagnosis: Excision biopsy of axillary nodes – Non-hodgkin lymphoma, Grade I Follicular lymphoma (positive for CD-3, 10, 20, 23, BCL-2, 6)

Management:

Tube thoracostomy on the left side, Ocreotide, Medium Chain Triglyceride diet, Vincristin, Adriamycin, Cyclophosphamide regimen. Patient showed symptomatic improvement with resolution of Chylothorax on followup.

Learning points:

In milky white pleural effusion with generalised lymphadenopathy, lymphoma is the first differential diagnosis.

Title: A CASE REPORT: SMALL ROUND CELL CARCINOMA OF LUNG PRESENTED AS GROSS PLEURAL EFFUSION ADMITTED IN THE P.D.U. CIVIL HOSPITAL, RAJKOT, GUJARAT

Name of Presenter: **DR ANJALI RAWAT**

Authors (or Co-authors): **DR. KAMLESH G. VITHALANI**

Institution/Author Organization:

P.D.U.MEDICAL COLLEGE, RAJKOT, GUJARAT

Desmoplastic small round cell tumour (DSRCT) is a rare, aggressive and malignant tumour that is characterized by nests of small tumour cells surrounded by a cellular and vascular collagenous stroma and predominantly affects young adolescent males. This tumour most commonly originates in the abdomen; however, in rare cases, DSRCT can originate in other body regions. SRCT in the lung is extremely rare. Here we present an unusual case of pulmonary SRCT diagnosed in a 60-year-old male, chronic smoker, farmer by occupation, admitted in our hospital with complaining of cough with mild mucoid expectoration, breathlessness, right-sided chest pain, decreased appetite and weight loss for 1 month of duration. Clinico-radiology shows right-sided gross pleural effusion with underlying approx. 10*9 cm mass lesion. CHEST Thoracostomy performed on patient, pleural fluid was straw coloured with transudative picture. CECT Thorax shows huge mass lesion seen at mediastinum encasing mediastinal great vessels, trachea and bronchi extending up to right hilar region. CT-guided biopsy from right lung mass carried out which grossly shows grey white thread fragments like soft tissue bits. Microscopically shows atypical mononuclear cells arranged in a diffuse manner. They contain hyperchromatic rounded nuclei and scanty cytoplasm which confirmed Round cell carcinoma.

Title: DUAL PRIMARY SYNCHRONOUS MALIGNANT TUMORS – A Case Report and Review

Name of Presenter: **Dr. ANU KUMARI**

Authors (or Co-authors): **Dr. Afshan shaik, Dr. Uday C kakodkar, Dr. Neha Kharangate**

Institution/Author Organization: **GOA MEDICAL COLLEGE**

Synchronous malignant tumors mean two cancers detected at the same time in an individual. We present a case report of a 68-year-old male patient with dual synchronous primary malignant tumors affecting the lung and tonsil in view of the rarity of the condition. Our patient is a smoker with pack years of 420 with no significant family history of malignancy. Tonsillar biopsy was suggestive of squamous cell carcinoma while lung biopsy was suggestive of poorly differentiated carcinoma with IHC showing p63 positivity. The relevant literature will be reviewed.

Title: A Rare Case of Primary Pulmonary Lymphoma

Name of Presenter: **Anuthara Hareendran**

Authors (or Co-authors): **Subramanian Suriyan, N.Nalini Jayanthi, Durai Mavalavan Vasudevan Manimolliyan, Vijosh V Kumar**

Institution/Author Organization: **SRM Medical College Hospital and Research Centre**

Introduction

Primary pulmonary diffuse large B cell lymphoma (DLBCL) is extremely rare neoplasm representing only 0.5-1% of primary pulmonary malignancies. These patients usually have non-specific clinical presentation and radiological findings.

Case presentation

50-year-old lady presented with history of dyspnoea, productive cough of non-purulent in nature, loss of appetite and weight loss. Her clinical examination showed decreased breath sounds on left side. Her chest X-ray showed heterogeneous opacity on the left side. This was confirmed with CECT, which revealed a left hilar mass measuring 5.4 x 4.7 x 4.5 cm. Subsequent CT-guided lung biopsy showed evidence of poorly differentiated tumour. The immunohistochemistry of the biopsy specimen was positive for CD 45, CD 20, BCL-6, Ki 67 > 90% which confirmed the diagnosis of Primary pulmonary High Grade DLBCL. The patient was treated with R-CHOP regimen, over 4 cycles and the follow-up imaging showed resolution of lesion with symptomatic improvement.

Conclusion

Primary Lung DLBC can often be overlooked in middle-aged patients. So early identification would avoid extra-thoracic dissemination of the disease.

Title: case presentation of squamous cell carcinoma in patient with COPD

Name of Presenter: **Dr. Apoorva Singh**

Authors (or Co-authors): **Dr. Rajendra Prasad, Dr. Rachit Sharma**

Institution/Author Organization: **era's lucknow medical college and hospital**

INTRODUCTION

Squamous cell carcinoma (SCC) of the lung represents 30% of all non-small cell lung carcinomas (NSCLC). SSC is the second most frequent type of NSCLC. It is formed from round cells that replace injured or damaged cells in the lining of the bronchi. SSC usually spreads to bones, adrenal glands, the liver, small intestine or brain. The main cause of NSCLC is smoking.

CASE PRESENTATION

A 45-year-old male, bidi smoker (40/day x for 25yrs.) presented with cough, recurrent hemoptysis and loss of appetite for last 7 months. He was prescribed ATT empirically for 6 months without any response. On auscultation, breath sounds were reduced on right. CXR revealed right hilar prominence with heterogeneous radio-opaque shadow in right upper zone. CECT Thorax showed right sided mass with necrotic foci and secondaries were present in the liver. Fiberoptic bronchoscopy showed mass obstructing right main bronchus. Biopsy revealed squamous cell carcinoma.

CONCLUSION

Patients with lung cancer are often misdiagnosed as pulmonary TB leading to delay in the correct diagnosis, treatment and exposure to inappropriate medication in developing countries. In this case also, patient was subjected to ATT empirically and therefore, detailed evaluation of the patient is imperative to ensure appropriate management in developing countries like India

Title: An Interesting case of Tracheal tumor treated by Tracheal resection with reconstruction

Name of Presenter: **Dr. Aravind Ram**

Authors (or Co-authors): **Dr. Sindhura Kogati, Dr Irfan Ismail Ayub , Dr. Chandrasekar. C.**

Institution/Author Organization: **Sri Ramachandra Institute of Higher Education and Research, India**

Case report:

A 33 year male with no known comorbidities presented to the Chest OPD with complaints of Breathlessness associated with noisy breathing for 8 months associated with Cough with scanty expectoration for 8 months. Patient also complaints of hemoptysis 3 months back. CT thorax showed a Endotracheal lesion attached to right posteriolateral wall of trachea with severe Endoluminal obstruction. PFT Showed Very severe obstructive airway disease. Flow volume graph suggestive of Intrathoracic obstruction. Rigid Bronchoscopy was done for Debulking under General Anaesthesia and biopsy showed Adenoid cystic carcinoma. Check Bronchoscopy under LA was done which showed Lesion seen in posterior wall of trachea extending for 5cms and involving 8 rings. Surgical oncology consult was obtained, and patient was taken up for Tracheal resection with reconstruction through Median sternotomy. Surgery was successful and patient is on follow up.

Conclusion:

Tumors of tracheal origin are rare. The

incidence of primary tracheal tumors is less than 0.2 per 100,000 persons per year. Malignant tumors are more common in which Squamous cell carcinoma and Adenoid cystic carcinoma are the most frequent histologic types. Surgical resection followed by radiotherapy is widely recommended protocol for treatment of localized tracheal tumors.

Title: Association of CLL with Multiple Primary Malignant Tumors

Name of Presenter: **Dr Asha Undrajavarapu**

Authors (or Co-authors): **Dr.K.H.Kisku**

Institution/Author Organization: **Pondicherry Institute of Medical Sciences**

BACKGROUND:

B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL / SLL) is one of the most common lymphoproliferative disorders. Patients with SLL / CLL are at increased risk of site-specific multiple primary malignancies.

CASE:

53yr old male, former smoker, treated Pulmonary Tuberculosis, presented with productive cough, hemoptysis , breathlessness, night sweats of 6 months duration, over which period his weight had decreased by 6kgs. Examination revealed generalized non-tender lymphadenopathy and hepatosplenomegaly. Peripheral blood showed WBC count of 71,000/microL, 92% small mature lymphocytes with scant cytoplasm. and many smudge cells. FISH/Cytogenetic study couldn't be performed. CT chest showed right hilar mass(3x2.1x5.29cm(APXMLXCC) extending superiorly into right proximal upper bronchus with evidence of intraluminal growth, mediastinal lymphadenopathy which was correlated with findings on Bronchoscopy. Bronchoscopic Biopsy showed evidence of Squamous Cell Carcinoma. Excised cervical lymph node showed evidence of co-existing diffuse low grade Non-Hodgkins Lymphoma of Small Cell type. Bone marrow trephine biopsy showed presence of nodular and interstitial infiltration by lymphoid cells suggestive of CLL/SLL. Patient was referred to Oncology center for further management.

Conclusion:

This case illustrates the importance of physician's awareness regarding CLL association with multiple primary malignant tumors (MPMT) as it is critical for rational medical decision-making and treatment.

Title: A case of COVID 19 pneumonia with

newly diagnosed CLL ; lessons to learn in persistent raised TLC

Name of Presenter: **Dr. ASHISH KAUSHIK**

Authors (or Co-authors): **Dr. JAI KISHAN,DR. SAMEER SINGHAL,DR.AJIT YADAV**

Institution/Author Organization: **MMIMSR, MULLANA**

BACKGROUND –

COVID 19 PANDEMIC HAS AFFECTED LIVES OF PEOPLE WORLDWIDE DUE TO IT'S SIMILAR PRESENTATION WITH OTHER VIRAL RESPIRATORY DISEASES AND ATYPICAL PRESENTATION WHICH ARE STILL BEING EVALUATED. DUE TO THE UNIQUE ABILITY OF THE VIRUS TO IMITATE WIDE RANGE OF INFECTIONS, ABNORMALITIES IN VARIOUS INVESTIGATIONS ARE USUALLY CONSIDERED TO BE MANIFESTATION OF COVID 19 ITSELF

WE REPORT A CASE OF COVID 19 POSITIVE PATIENT (7/9/20) WHO WAS TREATED ON THE LINE OF COVID 19 TREATMENT PROTOCOL . ALTHOUGH PATIENT BECAME COVID 19 NEGATIVE ON 18/9/20 , TOTAL LEUCOCYTE COUNTS WERE PERSISTENTLY HIGH , THE VITAL PARAMETERS (TEMPERATURE , PULSE RATE , RESPIRATORY RATE AND BLOOD PRESSURE) OF THE PATIENT WERE WITHIN THE NORMAL RANGE WITH NO EVIDENCE OF SEPSIS . PATIENT WAS DISCHARGED AND FOLLOWED UP STRICTLY , DESPITE THE HIGH TLC COUNTS EVEN AFTER 1 MONTH OF DISCHARGE , PATIENT WAS STILL ASYMPTOMATIC . PATIENT WAS ADVISED FLOW CYTOMETRY WHICH WAS COMPATIBLE WITH B-CELL CHRONIC LYMPHOCYTIC LEUKEMIA

CONCLUSION –

ALTHOUGH COVID 19 HAS MANY ATYPICAL PRESENTATION AND USE OF STEROID IN COVID CAN LEAD TO PERSISTENT RISE IN TLC BUT OTHER CAUSES OF RISE OF TLC SHOULD BE EXCLUDED WITH NECESSARY INVESTIGATION FOR PROPER MANAGEMENT OF PATIENT

Title: SOLITARY FIBROUS TUMOR IN A 50 YEAR OLD LADY

Name of Presenter: **DR AVISHEK LAYEK (JR)**

Authors (or Co-authors): **DR PRAKHAR SHARMA (Asst Prof), DR LOKESH SAINI (ASST PROF), DR MAYANK MISHRA (ADDL PROF), DR RUCHI DUA (ADDL PROF), DR GIRISH SINDHWANI (PROF & HOD)**

Institution/Author Organization: **AIIMS RISHIKESH**

Introduction:

Solitary fibrous tumours (SFTs) of the pleura are rare pleural neoplasms, usually benign and arise from the mesenchymal tissue underlying

the mesothelial layer of the pleura. Most cases occur in the sixth/seventh decades of life with no gender predilection.

Clinical presentation:

We present case of a 50-year-old non-smoker woman who presented with dyspnoea, right sided chest pain & heaviness for past 4 months. CXR and subsequent CECT thorax revealed a 16×16×19 cm mildly enhancing soft tissue lesion with multiple foci of coarse calcification in right lower hemithorax and associated with right diaphragmatic inversion and mediastinal extension. There was no evidence of any similar mass lesion in CECT abdomen.

Diagnosis:

USG Guided Biopsy from the mass proved it to be a SFT with STAT-6 and CD-34 positivity. Para-neoplastic conditions like clubbing, hypoglycaemia and osteoarthropathy were absent.

Management:

Surgery is the treatment of choice; though local recurrence can occur after many years. For benign lesions, complete resection is usually curative. Patient is planned for open thoracotomy & en-bloc resection.

Clinical Implications:

Solitary fibrous tumour of pleura (SFTP) is a rare tumour contributing to less than 5% of all pleural tumours.

Title: A rare case of solitary fibrous tumor of pleura as malignant pleural effusion

Name of Presenter: **DR. B. Gowthami**

Authors (or Co-authors): **Dr.J.K.Mishra, Dr.K.S.Sravani, Dr.Aparna, Dr.Brighton**

Institution/Author Organization: **Institute of medical sciences, Banaras Hindu University, Varanasi**

Solitary fibrous tumors of the pleura also known as benign mesothelioma, localized fibrous tumor, submesothelial fibroma is a mesenchymal tumor of fibroblastic origin, arising most commonly from visceral pleura. Idiopathic in nature. It has no age or gender predisposition, noted in 40-70 yrs. Prevalence is 2.8/100000. Usually asymptomatic, presents with nonpleuritic chest pain, dyspnoea, cough or pleural effusion. It stains for Vimentin, CD34, CD99, bcl-2, but negative for cytokeratins. Surgical resection is curative with half yearly follow-up for 2 years and yearly thereafter. A 56 yrs female, housewife, non-smoker with no asbestos exposure presented with shortness of breath, dry cough for 2 weeks and right chest

pain for 1 week. X-ray done revealing a massive pleural effusion. ICTD was placed and 12 litres of fluid drained. pleural fluid reports suggestive of a transudative effusion. CECT thorax done revealing a thickened pleura with relatively well defined enhancing lesion attached to pleura in right midzone with right lung volume loss. Usg-guided pleural biopsy sent for histopathology. She had an episode of hypoglycaemia. Histopathology reported areas of high cellularity with interlacing spindle cells conclusive of Solitary fibrous tumour. patient advised for surgical resection but followup was lost. It implies that SFT can present as a massive pleural effusion and we should expand our horizons in diagnosing a case of pleural effusion.

Title: MULTIPLE MYELOMA PRESENTING AS MALIGNANT MYELOMATOUS PLEURAL EFFUSION WITH PULMONARY TUBERCULOSIS.

Name of Presenter: **DR B. SNEHA**

Authors (or Co-authors): **Dr.MD Mateenuddin Saleem, Dr.Tanzil Rahaman, Dr.Kavya**

Institution/Author Organization: **KAMINENI INSTITUTE OF MEDICAL SCIENCES**

INTRODUCTION:

Multiple myeloma represents 10% of malignant hematological diseases affecting mainly bone marrow, extramedullary tissues. Pleural effusion may be a sign of thoracic involvement affecting about 6% of patients. Pleural involvement is rare (<1%) in multiple myeloma which may result in delayed diagnosis.

CASE REPORT:

A 55yr old male patient presented with complaints of dyspnea of grade-2, dry cough, fever, backache and headache since 1 month. Imaging revealed right pleural effusion with multilobar consolidation with osteolytic lesions in ribs and sternum. Pleural fluid analysis revealed exudative type with elevated ADA. Cytology and cell block revealed mature & immature plasma cells suggestive of malignant involvement. Bone marrow biopsy of sternum showed >30% mature plasma cells confirming the diagnosis. Serum Electrophoresis revealed M bands in gamma region. Sputum for a/fb was positive. Patient was initiated on ATT and referred to hemato oncologist for further management.

LEARNING POINTS:

Pleural effusion though rare can be a presenting feature in Multiple Myeloma and indicate a grave prognosis. Our patient also had pulmonary kochs indicating increased risk

of mortality. Early diagnosis of myelomatous pleural effusion and tuberculosis with prompt initiation of treatment is essential to avoid worsening outcomes.

Title: ADENOCYSTIC CARCINOMA OF LEFT LUNG

Name of Presenter: **CH.SUDHEER REDDY**

Authors (or Co-authors): -

Institution/Author Organization:

GOVERNMENT GENERAL AND CHEST HOSPITAL

Introduction:

Adenocystic carcinoma is a rare but distinctive salivary gland type malignant neoplasm that arises infrequently as a primary tumour of the lung, probably accounts for 0.04-0.2% of all primary pulmonary tumours.

Case report:

A 32yr old female presented with a 2 month history of shortness of breath, non productive cough, fever. There was no lymphadenopathy and rest of the systemic exam was within the normal limit.

C X RAY PA View: homogenous opacity on the left lung. CT Chest showing soft tissue density with necrotic areas in entire left hemithorax with complete loss of left lung and narrowed pulmonary vasculature. Examination sections of endobronchial biopsy showing cribriform pattern- nests of tumour cells containing numerous sharply outlined luminal spaces, sometimes containing mucinous secretion within their lumens.

Refer to Oncologist for further management

Implication:

In case of non resolving symptoms, we must always rule out malignant etiology even in young patients and non smokers

Title: Giant cell carcinoma of lung metastasis to skin and suboccipital swelling

Name of Presenter: **Dr. Deepak kumar suthawal**

Authors (or Co-authors): **Dr. Govind singh rajawat**

Institution/Author Organization: **Sawai man singh medical college Jaipur rajasthan**

48 yrs old male, smoker with MDR PTB and on ATT since 20 months presented with complaints of left sided chest pain, loss of weight, hoarseness of voice since 3 months and on examination firm, non-

tender suboccipital swelling was present. CECT chest shows heterogeneous lobulated mass in left upper lobe. Bronchoscopy shows exophytic growth in left upper lobe with left vocal cord palsy but biopsy was inconclusive. USG guided FNAC of lung mass shows malignant epithelial neoplasm. After excisional biopsy of suboccipital swelling shows poorly differentiated carcinoma while CBNAAT was negative. Immunohistochemistry study shows bizarre, large tumor cells with numerous multi-nucleated cells also positive for PanCk,CK7,Calretinin and CD10. All these features are consistent with diagnosis of Giant cell carcinoma of lung.

Title: A RARE CASE OF PULMONARY CARCINOSARCOMA

Name of Presenter: **DR.S.DHANALAKSHMI**
 Authors (or Co-authors): **DR.A.MAHILMARAN, DR.A.SUNDARAJAPERUMAL**
 Institution/Author Organization: **INSTITUTE OF THORACIC MEDICINE, MADRAS MEDICAL COLLEGE**

INTRODUCTION

Pulmonary carcinosarcoma is an unusual biphasic tumour of the lung with carcinomatous and sarcomatous components. Pulmonary carcinosarcoma accounts for 0.3-1% incidence. Pulmonary carcinosarcomas are more common in male and strongly associated with smoking and asbestosis.

CASE REPORT

A 60 year old female presented with complaints of right sided chest pain and shortness of breath for the past 2 months. No h/o fever, weight loss and hemoptysis. On general examination she was pale, no cervical lymphadenopathy and clubbing. On systemic examination there was decreased respiratory movements and decreased breath sounds on right side. X ray chest shows homogenous opacity over right lower zone. CECT showed right side enhancing lesion of size 11*8 cm in right lower lobe and herniating to the left, displacing heart and great vessels, anteriorly it was eroding the ribs and the chest wall. Diagnostic bronchoscopy showed no intraluminal mass. CT guided biopsy done and section showed malignant neoplasm with epithelial and mesenchymal components (Squamous cells and spindle cells) with IHC vimentin and cytokeratin positive. Patient was referred to oncology centre for further management.

CONCLUSION

Pulmonary carcinosarcoma is a rare tumour that present either as a solid mass or a

polypoidal lesion involving the endobronchial tree. It is important to identify the epithelial and mesenchymal components to make the diagnosis.

Title: A CASE REPORT -EMPYEMA - A RARE MANIFESTATION OF TERATOMA

Name of Presenter: **DHANISHA.C.P**
 Authors (or Co-authors): **Dr.M.SRAVAN KUMAR, Dr.PHANI KUMAR, Dr. R. SURESH**
 Institution/Author Organization: **KAKATIYA MEDICAL COLLEGE**

INTRODUCTION

A teratoma of the mediastinum is an uncommon germ cell tumor. Mediastinal teratomas are often asymptomatic. When symptoms are present, they relate to mechanical effects including chest pain, cough, dyspnea. Anterior mediastinal teratoma presenting as a pleural effusion is a rare condition.

HISTORY AND CLINICAL PRESENTATION

A 14 year old female presented to the department with 3 month history of dry cough, left side chest pain, loss of appetite, and weight loss. There were no significant medical comorbidities and past surgical history.

PHYSICAL EXAMINATION

on percussion dull note was heard on entire left hemithorax. On auscultation there were decreased breath sound and decreased vocal resonance on left hemithorax.

INVESTIGATIONS AND DIAGNOSIS

Chest X-ray demonstrated a homogenous opacity in the left hemithorax with blunting of CP angle. ICD was done pus was drained. Analysis of pleural effusion showed exudative pattern. CT scan demonstrated a large heterogeneously enhancing mass lesion with multiple calcifications and patchy areas of fat attenuation value within. USG guided biopsy was done. HPE findings were consistent with immature teratoma.

MANAGEMENT

Patient was advised to consult oncologist.

CONCLUSION

The result of this case study showed that in young patients presenting with massive pleural effusion, teratoma could be considered as rare cause of it.

Title: Rare presentation of pulmonary metastases from Giant Cell tumor of bone

Name of Presenter: **Dr DURGESH J HIREKAR**
 Authors (or Co-authors): **Dr P Mahaboob Khan, Dr Dhanlakshmi, Dr Sujatha**
 Institution/Author Organization: **OSMANIA MEDICAL COLLEGE, HYDERABAD**

Introduction:

Giant Cell tumor of bone (GCTB) is considered a benign lesion with variable progression. Distant metastasis and malignant transformation are extremely rare. Incidence of pulmonary metastases is determined by tumor grading, localization, age, gender and overall health status of the patient.

Case report:

A 38 year old male patient came with history of Dyspnea, cough, fever and loss of appetite since 3 months without comorbidities. He had a Left Tubercular pleural effusion 1 year back and was started on ATT. Patient was diagnosed with Giant cell tumor of the Right tibia for which above knee amputation was done 5 years back. Chest radiography showed left side pleural effusion. Pleural fluid ADA was 76 IU/L and ATT was started on that basis. On thoracoscopy, a friable mass was visible. Histopathological examination of the biopsy showed findings consistent with metastasis from Giant cell tumor of bone. Patient was subsequently managed at the Oncology unit at MNJ Cancer Hospital.

Discussion:

Although GCTB is considered a benign bone tumor, it should be kept in mind that it can metastasise to vital organs like the lung. The prognosis is good with timely and appropriate surgical resection and/or chemotherapy.

Title: PLEURAL INVOLVEMENT IN CHRONIC MYELOID LEUKEMIA –AN EXTRA MEDULLARY BLAST CRISIS.

Name of Presenter: **DR. E.RAJU**
 Authors (or Co-authors): **PROF & HOD -DR. MAHABOOB KHAN**
 Institution/Author Organization: **GOVERNMENT GENERAL AND CHEST HOSPITAL/OSMANIA MEDICAL COLLEGE**

Introduction;

myeloid leukemia are characterised by presence of increased number of immature myeloid cells in marrow and peripheral blood. extra medullary involvement is uncommon. pulmonary involvement consists of leukemic infiltration along lymphatics. pleura are very uncommon site.

Case description;

A 29 yr old male patient with left moderate pleural effusion- suggestive of extra-medullary blast crisis. his peripheral blood picture suggestive of cml in chronic phase. Philadelphia chromosome positive & leucocyte alkaline phosphatase level was low. thoracoscopic pleural biopsy revealed leukemic infiltration of pleura. patient was referred to oncology.

Conclusion;

patients with cml should be considered at risk for development of extra medullary manifestations of blast crisis while bone marrow remains in chronic phase due to circulating stem cells. pleural involvement of cml adversely affects prognosis.

Title: Tuberculous Pleural Effusion complicating Adult Lymphoblastic Lymphoma

Name of Presenter: **Dr. Gautamramkarthik M**

Authors (or Co-authors): - **Dr. A. Mahilmaran, Dr. A. Sundararajaperumal, Dr. D. Nancy Glory, Dr .G. Allwyn Vijay**

Institution/Author Organization: **Institute of Thoracic Medicine, Madras Medical College**

Introduction:

Adult Lymphoblastic Lymphoma – T cell type (T-LBL) is an aggressive form of non-Hodgkin lymphoma occurring predominantly in adolescent and young adult men. Although mediastinal mass, lymphadenopathy, pleural and pericardial effusions are the major characteristics of T-LBL, occasionally Tuberculous Pleural Effusion (TPE) may complicate this condition.

History & Presentation:

A 32-y/o male presented with swelling in the neck and breathlessness for 2 weeks. On evaluation, there was left cervical lymphadenopathy, left sided pleural effusion, mediastinal mass and pericardial effusion. Peripheral smear revealed mild leukopenia with relative lymphocytosis.

Diagnosis:

Excision biopsy of the cervical lymph node was done and immunophenotypic study revealed CD3 +, Bcl2+, tDt +ve, Ki67 +ve. Pleural effusion was straw coloured, exudative, lymphocytic with low ADA and no cellular atypia. Medical thoracoscopy guided parietal pleural biopsy revealed chronic granulomatous inflammation with caseous necrosis and multinucleated giant cells. Pleural tissue CBNAAT detected Rifampicin sensitive M. tuberculosis

Management:

A diagnosis of T-LBL with TPE was made and patient was started on chemotherapy and Anti-tuberculous treatment

Complication: Nil

Clinical Implication:

This report highlights the point that high clinical suspicion of TPE is warranted in LBL and Medical Thoracoscopy is a safe and accurate diagnostic procedure for establishing the diagnosis in pleural diseases

Title: A RARE CASE OF ADENOCARCINOMA IN YOUNG FEMALE

Name of Presenter: **GOKUL**

Authors (or Co-authors): **DR.ELAYAKUMAR, DR.CH.RADHIKA, DR.SRINIVASAN**

Institution/Author Organization: **MEENAKSHI MEDICAL COLLEGE HOSPITAL AND RESEARCH INSTITUTE**

INTRODUCTION:

Lung cancer in young patient is quite uncommon. Clinical presentation and outcome in young individuals compared to older age group are not yet well defined. Only single institutional retrospective reports are available on such young age malignancies.

PRESENTATION:

30year old female with no history of tobacco use and biomass exposure presented with shortness of breath, cough with expectoration, chest pain and significant weight loss- 10kg in 2months.

DIAGNOSIS:

CT chest revealed mass in right lower lobe. HPE of section from lung showed a malignant tumor growing along walls of alveoli. Tumor cells are columnar with eosinophilic cytoplasm. No lymphovascular and perineural invasion.

CONCLUSION:

Despite thorough elicitation of patients family and medical history, there was no underlying risk for lung cancer detailed clinical lab workup should be performed in young individuals. when a diagnosis of lung cancer is arrived, given the clarity of disease in this setting, only a institutional multicenter study could address the issues.

Title: CARCINOID LUNG MIMICKING PULMONARY ARTERY ANEURYSM

Name of Presenter: **HARITHA SREE CH**

Authors (or Co-authors): **Dr.K Rajendra**

kumar,Dr M kiran,Dr Chakravarthi,DR NagaLakshmi,Dr.Ramya Gadam

Institution/Author Organization: **RANGARAYA MEDICAL COLLEGE**

Introduction:

Carcinoids are primary malignant well differentiated neuroendocrine tumours arising from kulchitsky (APUD system) cells. They constitute 1-5% of lung tumours, with equal incidence in both males and females. They are two types : Typical and atypical carcinoids. Patients usually presents with post obstructive pneumonia, cough, hemoptysis and wheezing.

CASE REPORT:

A 38 year old female presented with dull aching right sided chest pain,dry cough, streaky hemoptysis and exertional dyspnea since 3months with no comorbidities. Chest X-ray showed right hilar mass. CECTchest was suggestive of pulmonary artery aneurysm. CTPA was done which showed solitary pulmonary nodule in anterior segment of right upper lobe.Histopathological examination of CT guided FNAC of SPN revealed typical Carcinoid.

CONCLUSION:

This is a case of well differentiated neuroendocrine tumor- typical carcinoid stage1 which was confirmed by histopathological examination of CT guided FNAC.Finally tumour was excised by open thoracotomy and excisional biopsy confirmed typical Carcinoid.

Title: CASE REPORT OF BRONCHOGENIC CARCINOID

Name of Presenter: **HARSHITA RANI**

Authors (or Co-authors): **RACHIT SHARMA, RAJENDRA PRASAD**

Institution/Author Organization: **ERA LUCKNOW MEDICAL COLLEGE**

INTRODUCTION

Carcinoid tumors are malignant neuroendocrine tumors arising from Kulchitsky (APUD system) cells and are classified by the WHO into typical carcinoid (TC) and atypical carcinoid (AC) on the basis of presence of necrosis and mitotic activity. 75% of carcinoids are central, endobronchial tumors and present commonly with post-obstructive pneumonitis, hemoptysis, or wheezing.

CASE PRESENTATION

A 22-year-old female patient, presented with recurrent fever, cough, with expectoration and moderate to massive haemoptysis for last 12

years, and was misdiagnosed as pulmonary tuberculosis and had received multiple courses of Antitubercular drugs without any response. Chest X Ray showed collapse right lung. CT thorax showing heterogeneous enhancing soft tissue mass in right lung. Fiberoptic bronchoscopy revealed a tumour obstructing right main bronchus. Endobronchial biopsy showed Bronchial Carcinoid. Patient was advised surgery and referred.

CONCLUSION

Our case illustrates clinical diagnostic difficulties encountered in the workup in a young adult patient with respiratory symptoms such as cough with expectoration and recurrent hemoptysis. The differential diagnosis should include endobronchial tumors apart from more common infective etiologies like pulmonary tuberculosis. With a strong clinical suspicion aided with radiological investigations, an early and accurate diagnosis of an endobronchial tumor can be made.

Title: INTRA THORACIC-EXTRA SKELETAL EWINGS SARCOMA

Name of Presenter: **JUVVA KISHAN SRIKANTH**

Authors (or Co-authors): **NITESH GUPTA, PRANAV ISH, S CHAKRABARTI**

Institution/Author Organization:

SAFDARJUNG HOSPITAL, NEW DELHI

Clinical details:

A 18 yr old boy presented with right sided chest tightness since 2 month. No history of significant medical and treatment history in the past. On examination, decreased breath sounds in right mammary and infra axillary and infra scapular areas compared to left side.

Approach to diagnosis:

Chest roentgenogram shows homogenous opacity in right mid and lower zones silhouetting right heart boarder, cardiophrenic angle and diaphragm. Ultrasonography of chest shows complex cystic lesion of size 10.6X 10.3 cms in right hemithorax showing thick septations and few solid areas, indenting the postero-superior surface of right lobe of the liver with thin right pleural effusion. Contrast Enhanced Computed Tomography Chest(CE CT) shows lesion located in the Para vertebral region, with heterogenous densities inside, extending from the level of D5 downward to the D12 indenting the postero-superior surface of right lobe of the liver with no underlying bone changes. Bronchoscopy shows normal right and left bronchial trees. Thoracotomy was carried out and pathological examination of specimen shows Vascular

and cellular tumour composed of small blue round cells. Immunohistochemistry showed positive staining with CD-99 and reported as EXTRA SKELETAL EWINGS SARCOMA(EES). The treatment of EES should be aggressive as most patients may not survive beyond 3 years from diagnosis.

Conclusion:

Although EES is rare, it should be included in the differential diagnosis of para vertebral and posterior mediastinal masses.

Title: Non Hodgkins Lymphoma presenting as Recurrent Pleural Effusion

Name of Presenter: **Dr Jerin Dsilva**

Authors (or Co-authors): **Dr. Arti D.Shah ,Dr.**

Yash Rana, Dr.Ujwal Jain

Institution/Author Organization: **Sumandeep Vidyapeeth University**

Background:

Non Hodgkin lymphoma is a type of carcinoma which usually begins with lymph nodes. Only 16% of Patients with Non Hodgkins Lymphoma may present with exudative pleural effusions as a complication.

Clinical case:

18 years old male with complaints of chest pain ,breathlessness, dry cough for past fifteen days and generalized weakness from past a month, patient had history of left sided moderate pleural effusion & tapping was done. recent X ray chest suggested Left sided mild to moderate pleural effusion with mediastinal widening, CT thorax suggested Anterior mediastinal mass /lymphoma / invasive thymoma with moderate left sided pleural effusion, again pleural fluid was tapped and analysed. The pleural fluid was exudative in microscopy, cytology showed predominantly lymphocytes and 25% mesothelial cells. Subsequent Chest x-rays showed refilling of the effusion, hence intercostal drainage was inserted. CT guided Mediastinal lymph node biopsy was taken & diagnosis was established.

Conclusion:

Lymphoma should be considered in cases of Recurrent exudative Pleural Effusions. Clinical Importance: In cases of lymphoma, pleural effusion is a rare occurrence, which helps in diagnosis and management.

Title: A unusual case of adenocarcinoma of lung with intrapulmonary miliary metastasis

Name of Presenter: **KOMAL CHAUDHARY**

Authors (or Co-authors): **Dr.Suresh Koolwal, Dr.G.S Rajawat**

Institution/Author Organization: **Institute of Respiratory Diseases,SMS Medical College Jaipur**

Introduction:

Miliary shadows in lung are seen in variety of diseases. Most common etiologies are infectious in origin. Some inflammatory and non infectious causes also causes miliary shadows. Malignant causes include hematogenous spread from some highly vascular organs like thyroid, prostate, kidneys etc. Although very infrequent, miliary mottlings can also be seen with primary lung carcinoma . Hence we report a case with lung carcinoma with intrapulmonary metastasis.

Case report:

A 30 year old female, non-smoker presented with dry cough, low grade fever, chest pain since 1 year and blood in sputum since 2 months, on & off in nature. Past history of taking antitubercular therapy was there for 7 months with no improvement in symptoms. No history of any chronic illness. On physical examination clubbing was present. On radiological evaluation miliary shadows was present, with left lower lobe mass. Other system examination was normal. Further histopathological examination was suggestive of Moderately Differentiated Adenocarcinoma, which was further confirmed by immunohistochemistry.

Conclusion:

Primary adenocarcinoma of lung with intrapulmonary metastasis is rare presentation with poor prognosis. Hence it should always be considered a differential in patients with miliary shadows. Early and prompt diagnosis aids better outcome of the disease.

Title: PLEURAL SARCOMA- A CASE REPORT

Name of Presenter: **KUNAL WAGHRAY**

Authors (or Co-authors): -

Institution/Author Organization: **SVS MEDICAL COLLEGE, MAHABUBNAGAR, TELANGANA**

INTRODUCTION

Synovial sarcoma is a malignant neoplasm of soft tissues. it occurs mainly in the extremities and closely related to large joints such as knee and lower thigh region, tendons, tendon sheaths and bursal structures. Extrapulmonary synovial sarcomas are more common than primary pulmonary sarcoma.it is a distinctive soft tissue tumor having epithelial differentiation. Prognosis carries a poor

outcome. Treatment comprises a combination of surgical resection, radiotherapy and chemo therapy, there are no guidelines for optimal treatment due to rarity of the tumor.

CASE PRESENTATION

A 40 year old female farmer came complaining of shortness of breath, left sided pleuritic chest pain, dry cough, loss of weight and loss of appetite since a month. She is a known case of sarcoma of left thigh treated with chemotherapy 7 years back. On examination: she was tachypnoeic, dull note on percussion bilaterally, decreased breath sounds bilaterally in infrascapular and infra axillary region. Chest x-ray is suggestive of bilateral pleural effusion with non homogenous opacity in upper and mid zone in right lung and left lower zone. USG Chest was suggestive of loculated pleural effusion left more than right. Usg guided thoracentesis was done. Pleural fluid analysis was inconclusive and negative for malignant cells. CECT chest s/o- right upper lobe mass with left sided pleural based mass and bilateral pleural effusion. PET scan s/o increased uptake in right upper lobe. Medical thoracoscopy was done –intra op findings- a 8*8 cm well defined fleshy mass seen originating from pleura and thick dense adhesions were seen along with multiple nodules all over parietal pleura. Biopsy was taken from the mass and sent for HPE-s/o spindle cell tumor of the pleura. IHC was done positive for CD99 s/o sarcoma of pleura.

CONCLUSION

We present a case of pleural sarcoma due to metastasis from the sarcoma of the thigh. definitive treatment has not been defined yet due to rarity of the tumor. Patient was not willing for surgical or further management and opted for palliative care.

Title: A CASE REPORT - ATYPICAL PRESENTATION OF MEDIASTINAL MASS OBSCURED BY MASSIVE PLEURAL EFFUSION

Name of Presenter: **Dr Manisha Challuri**

Authors (or Co-authors): -

Institution/Author Organization: **MNR Medical College & Hospital**

CASE REPORT:

A 30year old female patient complained of breathlessness grade-2 since 3months and chest pain since 1month. On examination, vitals were stable with decreased air entry noted on right side with dullness on percussion, left lung was normal on examination. Routine lab test were normal. Chest x-ray revealed homogenous opacity involving right hemithorax with contralateral

shift of mediastinum, reported as right massive pleural effusion. Post intercoastal drainage tube insertion a follow-up chest x-ray revealed large radiopaque mass in right upper zone of hemithorax with broad base towards mediastinum. CECT showed large well defined heterogenous cystic lesion with areas of fat, soft tissue component with peripheral calcification in mediastinum. Patient underwent complete mass excision by right anterolateral thoracotomy. Histopathology examination confirmed mass as mature cystic teratoma with mature elements of cyst lined by ciliated epithelium, adipose tissue, cartilage, and cluster of sero-mucinous glands. Patient recovered uneventfully after surgery

DIAGNOSIS:

Right sided mediastinal mature cystic teratoma.

CONCLUSION:

We conclude that in our case mediastinal mass presented as large massive pleural effusion on chest x-ray. With the help of proper evaluation and CT imaging, diagnosed as a Mediastinal Mass.

Title: JOINT TUMOUR OF THE LUNG:A RARE CASE OF PULMONARY SYNOVIAL SARCOMA

Name of Presenter: **DR. MANISHA JAIN**

Authors (or Co-authors): **DR.NARENDRA KHIPPAL,DR.MOHD.JAVED QURESHI**

Institution/Author Organization: **S.M.S MEDICAL COLLEGE AND HOSPITAL**

INTRODUCTION

Synovial sarcoma of lung is a rare tumor accounting for 0.5% of all primary lung malignancy.It occurs commonly in the soft tissues of large joints.Metastasis to lung,from other organs is common than primary pulmonary synovial sarcoma.Here we are presenting a case of primary synovial sarcoma of lung.

CASE REPORT

A 57years old male patient presented with dyspnea,cough and left-sided chest-pain since one month.On examination dull-note was present over the left lung areas.CT-thorax showed heterogenous soft tissue density mass in left-lung lower lobe with minimal left-sided pleural effusion.Sonography-guided biopsy of lung mass revealed mesenchymal neoplasm on histopathology. As per Oncology board,left sided pneumonectomy was done and immunohistochemistry of the specimen showed diffuse positivity for vimentin and TLE-1;negative for S100,desmin,CD34,CD99 and Bcl2.PET scan showed no evidence of

abnormal hypermetabolism other than lung and mediastinal nodes.Hence the patient was diagnosed as a case of primary monophasic synovial sarcoma of lung,underwent pneumonectomy and is on follow-up.

CONCLUSION

Primary synovial sarcoma of lung is a very rare tumor,with poor prognosis.The appropriate management is surgical excision with negative margins.Early diagnosis and prompt intervention can add to the number of survival years.

Title: Pulmonary inflammatory myofibroblastic tumor- A rare tumor presenting with diagnostic dilemma.

Name of Presenter: **MEGHANA SUBHASH**

Authors (or Co-authors): **Dr Tinku Joseph, Dr Sreeraj, Dr Ajit Nambiar**

Institution/Author Organization: **Amrita Institute of Medical Sciences**

Introduction:

Inflammatory myofibroblastic tumor(IMT) of the lung includes spectrum of pulmonary lesions. Commonly present as solitary pulmonary nodules, but can also be locally invasive. Its unclear whether these lesions represent primary inflammatory process or low-grade malignancy with prominent inflammatory response.

Objectives:

To evaluate and manage tumor arising in lung with local invasion into great vessels and heart.

Methods:

34year old lady presented with complaints of cough, haemoptysis, chestpain and breathlessness. CECT showed left lower-lobe(LL) consolidation, necrotic area with enhancing walls, thrombosis within pulmonary vein extending into left atrium. Echocardiography confirmed it. Bronchoscopy revealed penduculated vascular intrabronchial mass occluding branch of left main bronchus, debulking done, stump was arising from superior segment of LLL. Histopathology was necrotic tissue with granulation. CT-guided biopsy from high uptake area showed IMT of LLL Patient also underwent Left atrial tumor excision followed by Open-left Lower Lobectomy

Results:

Inflammatory myofibroblastic tumor of left Lower-lobe with Left-atrial tumor extension from Left-inferior pulmonary vein.

Conclusion: IMT of lung is extremely rare.

To our knowledge, this is the first reported case of IMT in lung with local invasion. Due to its suspicious behaviour, histopathological examination and surgical excision are warranted. Radiological studies have limited role. If completely resected, recurrence rare and prognosis good.

Title: AN INTERESTING CASE OF HODGKINS LYMPHOMA

Name of Presenter: **DR.MUTHURAMAN.PL**
 Authors (or Co-authors): **DR.ABDUL MAJEED ARSHAD**
 Institution/Author Organization: **SRI RAMACHANDRA INSTITUTE OF MEDICAL SCIENCES AND RESEARCH**

INTRODUCTION:

HODGKINS LYMPHOMA IS A MALIGNANCY OF MATURE B-LYMPHOCYTES BRIEF HISTORY 16YEAR OLD FEMALE PRESENTED WITH HISTORY OF SWELLING WITH PAIN OVER LEFT SIDE OF NECK FOR 6MONTHS ASSOCIATED WITH LOSS OF APETITE AND INTERMITTENT FEVER FOR 1MONTH. SHE WAS ON ANTI-TUBERCULOUS THERAPY FOR 6 MONTHS WITH NO CLINICAL RESPONSE.ON EXAMINATION ,FIRM,MATTED,TENDER CERVICAL LYMPHADENOPATHY WERE IDENTIFIED. HER VITALS AND SYSTEMIC EXAMINATION WERE NORMAL. INVESTIGATIONS Hb-9.6; TC-5900;PLATELETS-2.1LAKHS;INR-1.RFT, LFT, SERUM ELECTROLYTES WAS WITHIN NORMAL LIMITS.FNAC- GRANULOMATOUS INFLAMMATION; GENE EXPERT NEGATIVE. CXR- RIGHT PLEURAL EFFUSION.(NO EVIDENCE OF MALIGNANT CELLS IN PLEURAL FLUID ASPIRATE . CT- BILATERAL HILAR LYMPHADENOPATHY WITH MEDIASTINAL NODES.MGIT CULTURE- NO GROWTH ,SHE CONTINUED TO HAVE HIGH GRADE FEVER.PERIPHERAL SMEAR SHOWED MICROCYTIC HYPOCHROMIC ANEMIA. EXCISION BIOPSY OF CERVICAL LYMPHNODE WAS DONE. HPE &IHC SHOWED HODGKINS LYMPHOMA(LYMPHOCYTE DEPLETED TYPE) AND WAS NEGATIVE FOR MTB ON GENE XPERT. MEDICAL ONCOLOGY OPINION WAS SOUGHT AND PATIENT WAS STARTED ON CHEMOTHERAPY.

DISCUSSION:

HODGKINS LYMPHOMA IS A MALIGNANCY OF MATURE B- LYMPHOCYTES.TYPES OF WHICH INCLUDE NODULAR LYMPHOCYTE PREDOMINANT TYPE AND CLASSICAL TYPE THE SUBTYPES OF WHICH INCLUDE. 1. NODULAR SCLEROSIS 2.LYMPHOCYTE RICH 3.MIXED CELLULARITY 4.LYMPHOCYTE DEPLETED.

LEARNING POINTS:

HODGKINS LYMPHOMA MUST BE KEPT AS A DIFFERENTIAL DIAGNOSIS IN PATIENTS WITH FEATURES OF TB LYMPHADENOPATHY AS IT POSES A DIAGNOSTIC CHALLENGE.

Title: AN UNUSUAL PRESENTATION OF ADENOCARCINOMA OF LUNG AS NON-RESOLVING PNEUMONIA

Name of Presenter: **Dr. NETI ASHOKBHAI THUMMAR (1)**
 Authors (or Co-authors): **Dr. ARVIND S. PANDEY (2) ; Dr. ANAYA M. PRAKASHKAR(3)**
 Institution/Author Organization: **SURAT MUNICIPAL INSTITUTE OF MEDICAL EDUCATION AND RESEARCH; SMIMER; SURAT**

Introduction:

Non resolving pneumonia is defined as a slow or delayed resolution of clinical symptoms and radiographic opacities despite of adequate coverage of antibiotic therapy. Several conditions can be responsible for non resolving pulmonary infiltrates. This case highlights a non-infectious cause that mimics infectious pneumonia.

History & Presentation:

A 42year old female patient came with 6 weeks c/o cough with expectoration,dyspnea,left sided chest pain &weight loss of 6kg over 3months.Patient was hemodynamically stable,pulse 80/min, RR22/min, Spo2 on Room Air97%, digital clubbing grade1 & auscultation showed decreased air entry in left mid-lower zone.

Diagnosis & Management:

Chest Xray-left mid-lower zone illdefined soft tissue opacity with obliteration of left CPangle. CECT Chest-well demarcated segmental consolidation involving left lingual and lower lobe with enlarged pre and para tracheal nodes; s/o Koch's etiology. AFB&CBNAAT negative. Diagnostic video bronchoscopy s/o non endo luminal pathology. D/D included BOOP or Broncho Alveolar malignancy.

CT guided lung biopsy from left lung opacity-Adenocarcinoma with lepidic pattern. CAE-borderline elevated. Patient referred to oncologist & started with chemotherapy.

Conclusion:

Pulmonary neoplasms are one of the non infectious causes of non reasolving pneumonia. Patient with persistent symptoms and pulmonary infiltrates despite higher

antibiotics should be reevaluated & clinician should include lung cancer as D/D.

Title: A rare case of endobronchial carcinoid

Name of Presenter: **ORUGANTI SINDHUJA**
 Authors (or Co-authors): -
 Institution/Author Organization: **Siddhartha government medical college**

A 15years old female,with right pleural effusion,was started ATT outside,months later she didn't improve on bronchoscopic view there was a tumor which turned out to carcinoid on histopathology

Title: A case of metastatic giant cell tumor to lungs

Name of Presenter: **ORUGANTI SINDHUJA**
 Authors (or Co-authors): -
 Institution/Author Organization: **Siddhartha government medical college**

A 48year old female,with complaints of chest tightness,cough since 1week had a large homogeneous opacity on left side on chest xray .on past history 15 years ago patient had amputation of right middle finger in view of giant cell tumor,thus now metastating now to lungs

Title: AN UNSUAL PRESENTATION OF A RARE ENDOBRONCHIAL TUMOR

Name of Presenter: **P.SAI KRISHNA**
 Authors (or Co-authors): **P.YUGANDHAR**
 Institution/Author Organization: **ASRAM MEDICAL COLLEGE**

INTRODUCTION

Pulmonary hamartoma (PH) also known as mesenchymoma was first described in 1904 by Albrecht.They are usually found in adult males with a peak incidence in the fifth decade of life. We report a case of 62-year-old male patient presented with cough and shortness of Breath(SOB)) since 2 months

CASE REPORT:

A 62 yr old male patient came with complaints of Dry cough,SOB,intermittent low grade Fever since 2 months. DIAGNOSIS On admission,Physical examination and Laboratory investigations were found to be normal.CT chest plain study revealed a soft tissue density lesion measuring 2x2cms,in the segmental Bronchus of the anterior segment of Right Upper Lobe Bronchus.Bronchoscopy revealed a pedunculatd lesion which was mobile,slightly bleeding on touch,occluding

Right Upper Lobe near totally.

MANAGEMENT

Using CryoBiopsyProbe, The polypoidal mass lesion was removed from RUL and sent for Histopathological examination(HPE),which revealed Benign Mesenchymal neoplasm composed of admixture of cartilage,adipose tissue,fibro-myxoid elements suggestive of HAMARTOMA.No evidence of malignancy in the biopsy.

COMPLICATIONS

Hemoptysis,Recurrence

CLINICAL IMPLICATION

Pulmonary Hamartoma is usually found in the periphery and rarely in the proximal airways. We report a case of Hamartoma obstructing the Right Upper Lobe Bronchus which is rarity in its own presentation.

Title: Pancoast tumor- a case report

Name of Presenter: **DR.PALASH SAXENA**

Authors (or Co-authors): **DR.ANIL**

SONTAKKE,DR.B.O TAYADE, DR.

SAMRUDDHI TAYADE, DR. CHETAN

KHEDKAR

Institution/Author Organization: **NKPSIMS**

AND LATA MANGESHKAR HOSPITAL,

NAGPUR

Introduction:

Pancoast tumor or superior sulcus tumor are uncommon type of lung cancer, it is 3% of all lung cancers. Mostly they are non small cell tumor specifically- squamous cell or adenocarcinoma. Classical presents with horner's syndrome (ptosis, miosis, anhidrosis and enophthalmos) and other features like- severe pain in shoulder region radiating to ulnar aspect of arm to hand and atrophy of muscles of hand and arm.

History:

A 57 year old male came to OPD with chief complaints of pain in right shoulder which was radiating to right arm since 6 months, dryness in right axillary region as compare to left side with loss of weight and loss of appetite.

Diagnosis:

- Chest xray- ill defined radio opaque lesion in right apical and upper zone of lung with spiculated margins. Signs of erosion of 3rd and 4th ribs.
- HRCT Thorax- ill defined soft tissue density lesion with spiculated margins arising from apical region of right lung and destroying 3rd, 4th and 5th ribs posteriorly. Mild contrast

enhancement with lymphadenopathy at right hilar region.

Treatment plan:

Patient is to be posted for CT guided lung biopsy for histological conformation and staging. And accordingly the treatment will be planned.

Title: DIGGING DEEPER WITH USG GUIDED BIOPSY REVEALING THE HODGKINS TUMOUR

Name of Presenter: **Dr.R.Parthiban**

Authors (or Co-authors): **Dr. A. Mahilmaran,**

Dr. A. Sundarrajaperumal, Dr. D. Nancy

Glorry, Dr. G. Allwyn Vijay

Institution/Author Organization: **Institute of Thoracic Medicine, Madras Medical College**

Introduction:

Primary mediastinal Classical Hodgkin lymphoma(CHL) is rare. Nodular-sclerosis CHL(NS-CHL) is the most common subtype involving the anterior mediastinum and/or mediastinal lymph nodes.

History & Presentation:

A 13 year old girl child presented with complaints of non productive cough* 2 months,retrosternal chest pain *1 month with significant weight loss & dyspnoea on exertion. Chest-X-Ray showed huge mediastinal widening towards left side & mediastinal mass, Contrast enhanced CT-chest revealed anterior mediastinal mass in left side chest compressing left pulmonary artery.

Diagnosis:

Since it's a very huge mass of size 11(T)*7.3(AP)*12(CC) cm mass,Enlarged mediastinal lymphadenopathy(+),USG-guided transthoracic biopsy of the lesion taken by using coaxial needle and sent for Histopathological examination. which showed nodules of fibro-collagenous tissue with extensive areas of sclerosis, infiltrated by neoplastic cells in highly scattered pattern. The cellular nodules contain variable numbers of Reed-Sternberg cells, Immuno-histochemistry revealed CD15+,CD30+,PAX-5+.PET-CT was done to stage the disease

Management:

Patient was initiated on chemotherapy.

Clinical implication:

Nodular-sclerosis type of Hodgkins lymphoma is a disease of young age,which has best prognosis among other HL .hence early diagnosis of the disease is important to initiate

treatment and further disease progression. Being less invasive and easily available, USG-guided interventions can be done for even mediastinal lesions.

Title: Giant cell tumor: A rare cause of lung mass

Name of Presenter: **Dr. PRANZAL GARG**

Authors (or Co-authors): -

Institution/Author Organization: **SANTOKBA DURLABHJI MEMORIAL HOSPITAL, JAIPUR**

Introduction:

Giant cell tumor (GCT) is a relatively rare, benign but locally aggressive osteolytic skeletal neoplasm of young adults. Furthermore, in approximately 2 to 3 percent of cases, distant metastases occur, most often to the lungs. In a series of 470 patients with GCT of bone diagnosed over a 20 year period at Tata Memorial Hospital in Mumbai, 24 developed distant metastases, with 21 involving the lungs. Hence we present a previously operated case of GCT who presented to us with lung metastases without local recurrence.

Case:

A 22 year old male patient presented with complaint of cough and occasional hemoptysis since 6 months. He had a history of right distal radius GCT for which he was operated and en bloc resection was done 8 years ago. His CT Chest revealed mass like consolidation in left upper lobe with multiple variable sized sub-pleural nodules. CT guided biopsy was done which was suggestive of GCT. After oncology consultation, patient is being managed with denosumab. Further, the case will be elaborately presented.

Title: CASE REPORT OF ADENOCARCINOMA LUNG

Name of Presenter: **PRASHANT MISHRA**

Authors (or Co-authors): **Dr. RAJENDRA**

PRASAD, RISHABH KACKER

Institution/Author Organization: **ERAS**

LUCKNOW MEDICAL COLLEGE

INTRODUCTION

Adenocarcinoma of the lung is the most common type of lung cancer, and like other forms of lung cancer, it is characterized by distinct cellular and molecular features. Lung adenocarcinoma accounts for most of non small cell lung cancer and is the most common one among non smokers.

CASE PRESENTATION

A 57 year old female, chronic smoker, presented with complains of Cough with expectoration, recurrent hemoptysis (streaking), loss of appetite, weight and fever (off and on). Patient was given ATT empirically but had no response. Chest X Ray revealed Left Lower Lobe Collapse with Pleural Effusion. CECT Thorax revealed Left lung mass. Fiberoptic bronchoscopy showed Left Lower Lobe Bronchus obstructed by fungating mass. Endobronchial lung biopsy revealed Adenocarcinoma.

CONCLUSION

Lung cancer is often misdiagnosed as tuberculosis in our country. Misdiagnosis leads to increased pill burden along with unnecessary adverse drug reactions and also a delay in diagnosis and in the initiation of effective treatment. Adenocarcinoma often mimics tuberculosis and the diagnosis could be missed if no tissue biopsy is taken and patients are treated empirically in TB endemic areas based on a radiological diagnosis.

Title: A case of Adenocarcinoma of the lung mimicking pulmonary tuberculosis

Name of Presenter: **Dr. Prashanthi. R**

Authors (or Co-authors): **Dr. K. Ramesh Kumar , Dr. D. Ranganath**

Institution/Author Organization: **Bhaskar medical college and general hospital, Hyderabad**

Adenocarcinoma of the lung represents the most common type among all the lung cancers. Here we present the case of a 45 year old male complaining of cough, dyspnea and fever for the last one month. Chest imaging showed right sided pleural effusion with collapse of lung parenchyma and underlying consolidation. Pleural fluid analysis showed an ADA level > 150, protein 6.2g/l and negative for malignant cells. Cytology showed predominant lymphocytes with occasional mesothelioma cells. Patient was diagnosed as tuberculous pleural effusion and started on anti tuberculosis therapy . As there is no improvement on follow up USG chest is done and it showed right loculated effusion with thickened pleura. CT scan showed extensive rind like modular pleural thickening on right side extending into fissures. CT guided biopsy and immunohistochemistry was done which showed features of adenocarcinoma. The patient was given chemotherapy and followed up.

Title: Tubercular Pleural Effusion and Carcinoma Lung-A Dual Pathology

Coexistence: A Case Report

Name of Presenter: **Dr. Preetam Parida**

Authors (or Co-authors): **Prof Dr Pravati Dutta, Asso Prof Dr Rekha Manjhi, Asso Prof Dr Sudarshan Pothal, Asst prof Dr Aurobindo Behera, Asst prof Dr Gourahari Pradhan**

Institution/Author Organization: **VSS INSTITUTE OF MEDICAL SCIENCES AND RESEARCH(VIMSAR)**

Introduction:-

Tubercular pleural effusion in background of malignancy is rare if patient is not on immunosuppressives.

Case History:- A 60-year female with biomass exposure presented with fever, cough, breathlessness for 20 days. No other significant past medical history.

Presentation:-

Vitals – RR 30/min. General examination- no peripheral lymphadenopathy and clubbing. Respiratory system examination-Suggestive of right pleural effusion
Diagnosis:- Blood haemogram, biochemistry -normal CXR- Right atypical pleural effusion
Pleural fluid- Colour-Straw ADA-64 IU/L, exudative, lymphocytic predominant
Pleural fluid CBNAAT- MTB detected medium, No Rifampicin resistance
Repeat CXR - Right lower zone mass lesion with effusion
CECT THORAX-Right lower lobe mass with effusion.
Bronchoscopy- No intra-bronchial growth, BAL performed
BAL Cytology-Few atypical cells
ATT was started and then loss to follow up due to COVID-19 pandemic. Symptoms worsened later. After 8 months she presented with increased cough, chest pain, breathlessness for 1 month.
CECT thorax-large right lung mass with rib erosion, hepatic metastasis. USG guided FNAC of lung mass-Adenocarcinoma.

Management:-

Initially- ATT for tubercular effusion
Later- Chemotherapy for adenocarcinoma

Complication and Clinical implication:-

Incidence of lung carcinoma in patients with active tuberculosis is 0.75% which are mostly SCC. Worsening in a patient on ATT can be due to drug-resistant TB. But here patient effusion disappeared on ATT but increase in size of lung mass (ADENOCARCINOMA) caused worsening.
Learning

Points:-

Suspicion for coexistence of malignancy should be considered when an elderly patient with tubercular effusion don't improve on ATT.

Title: Rare and varied presentations of bronchial carcinoid

Name of Presenter: **Dr. Rahul suri**

Authors (or Co-authors): **Dr. Gagandeep kaur, Dr. Komaldeep kaur, Dr. Vishal chopra**

Institution/Author Organization: **GMC PATIALA**

Rare and varied presentations of bronchial carcinoid
Introduction-Carcinoid are neuroendocrine tumors mainly involving the gastrointestinal tract, lungs, and bronchi. carcinoid is an uncommon tumor of the respiratory system although it is the commonest benign tumor of the tracheobronchial tree. These represent approximately 1-2 % of all carcinoid tumors. Patients with persistent dyspnea and wheeze not responding to conventional treatment should be investigated for rarer causes.
Material and methods-First case is of 32-year-old male who presented with complaints of recurrent episodes of cough, progressive breathlessness, and right sided chest pain. Another case is of 28-year-old postpartum female with complaints of chest pain and cough with expectoration without hemoptysis.

Results-

Bronchoscopy in first case revealed well defined mass in truncus intermedius of right main bronchus, and in second case round solid growth in right lower lobe bronchus obstructing the lumen. The histopathology was done in both the cases and confirmatory of carcinoid tumor in one of them.

Conclusion-

Due to lack of characteristic symptoms, diagnosis of bronchial carcinoid is delayed, and patients are often misdiagnosed with asthma, chronic obstructive pulmonary disease, and pulmonary tuberculosis. Therefore, early suspicion, combined with imaging, examination and biopsy is key to diagnosis and increasing the chance of radical treatment.

Title: CHYLOTHORAX – A rare case presentation of Chylothorax secondary to Lymphoma

Name of Presenter: **Dr. Rahul Ugale**

Authors (or Co-authors): **Dr. Anil Sontakke, Dr. B.O. Tayade, Dr. Samruddhi Tayade**

Institution/Author Organization: **N.K.P. Salve institute of medical sciences and research centre & Lata Mangeshkar hospital.**

Introduction:

Chylothorax is formed when the thoracic duct is disrupted and chyle enters the pleural space.

History/Presentation:

a)Breathlessness on exertion b)Cough with expectoration c)Left sided chest pain

Investigations:

Pleural Fluid Routine: Colour: Milky white
Biochemistry: Triglycerides: 654 mg/dl
Pleural fluid Cholesterol: 185 mg/dl
Sr. Cholesterol: 212 mg/dl
CECT Thorax: S/o ? Lymphoma.

Diagnosis:

In our case pleural fluid triglycerides were 654 mg/dl (>110mg/dl) and the ratio between pleural fluid cholesterol and serum cholesterol is 0.87(<1.0).

Treatment:

In non-traumatic Chylothorax possibility of Lymphoma should be considered. In our patient, Intercostal drainage tube was inserted and chylothorax was drained. The patient was further evaluated for Lymphoma and treated for the same.

Conclusion:

Chylothorax secondary to Lymphoma, with proper investigations can be treated with medical management.

Title: LUNG MALIGNANCY DISGUISED AS UNREMITTING DISTANT AGONY

Name of Presenter: **Ram Prasath**

Authors (or Co-authors): **Prof. Dr.**

Meenakshi.N, Prof.Dr.Aruna.S,Fathima Zehra Razvin,Naveen Vennilavan, Nisha Ganga

Institution/Author Organization: **CHETTINAD HOSPITAL AND RESEARCH INSTITUTE**

INTRODUCTION:

Adenocarcinoma of lung accounts for 40% of all lung cancers. It is diagnosed late because of paucity of respiratory symptoms and atypical presentations. Hereby we present a case of adenocarcinoma presenting as chronic shoulder pain. It is the most common form of lung cancer in women, Asians and in non-smokers

HISTORY:

A 48year old female non smoker, presented with H/O right shoulder pain and discomfort for 5 month associated with H/O loss of appetite and loss of weight. No respiratory or other symptoms.

PRESENTATION:

Patient general examination was normal and

vitals were stable. Respiratory examination revealed decreased air entry on right interscapular, infrascapular, axillary region. Other systems examination was Normal.

DIAGNOSIS:

Chest x ray and CT chest showed right Upper lobe mass with moderate pleural effusion. Thoracentesis revealed straw colored lymphocytic exudative fluid with low ADA .CT guided biopsy done from right upper lobe mass revealed Adenocarcinoma.

MANAGEMENT:

Patient was referred for advanced management to cancer institute.

CLINICAL IMPLICATIONS:

Patients with malignancy of lung may present with atypical non respiratory symptoms resulting in delayed diagnosis and poor prognosis. Hence clinicians should be aware of possibility of lung malignancy in patients presenting with unremitting non respiratory and constitutional symptoms.

Title: NEUROLOGICAL MANIFESTATION AS THE PRESENTING SYMPTOM OF LUNG CANCER

Name of Presenter: **RAVI KANT PANDEY**

Authors (or Co-authors): **ERAS LUCKNOW MEDICAL COLLEGE**

Institution/Author Organization: **DR. RAJENDRA PRASAD**

INTRODUCTION

Squamous cell carcinoma (SCC) of the lung represents 30% of all non-small cell lung carcinomas (NSCLC). Squamous cell carcinoma is the second most frequent type of NSCLC, formed from round cells that replaces injured or damaged cells in the lining of the bronchi. Squamous cell carcinoma usually spread to bones, adrenal glands, the liver, small intestine, brain.

HISTORY/PRESENTATION/COMPLICATION

A 55-year-old male, cigarette smoker (10/day x 30yrs.) presented with uncontrolled seizures and loss of appetite since last 4 months. With no respiratory complaints.

DIAGNOSIS

CT Head was advised which revealed metastasis in the brain. He was referred to us for further evaluation. Chest X Ray showed a homogenous opacity along the right para cardiac area. CECT Thorax showed right sided mass. Fiberoptic bronchoscopy showed multinodular growth covered with necrotic

slough obstructing the right main bronchus. Endobronchial and brush biopsy from tumor revealed squamous cell carcinoma.

MANAGEMENT

Patient refused for further treatment

CLINICAL IMPLICATIONS

Neurological manifestations are reported in 5 to 10% of cases of lung cancer. In our case patient had no respiratory manifestations and only presented with neurological complaints. Primary neurological manifestations are rare in lung cancer and lungs should be the first site of evaluation in a case of a cerebral metastasis with an unknown primary.

Title: A Diagnostic Surprise: rare case of Primary Pulmonary Hodgkin's Lymphomao

Name of Presenter: **RUPAL NAIR**

Authors (or Co-authors): -

Institution/Author Organization: **Sawai mann Singh medical college Jaipur**

INTRODUCTION

Primary Pulmonary Hogdkin's Lymphoma is exceedingly rare with less than 100 cases reported till date.It occurs due to the clonal proliferation of lymphoid cell lines ,forming a mass. The rarity of this condition can be attributed to the requirement that the regional lymph nodes must be free of the disease.

CASE REPORT

A 28-year-old female presented with cough with expectoration, left sided chest pain and hemoptysis for the past 1 month with associated symptoms in the form of night sweats and loss of weight. On examination lymphadenopathy was absent,chest movement and expansion were decreased on the left side. Dull note on percussion, decreased intensity of breath sound and increased vocal resonance were present over the left infraclavicular area. Routine investigations revealed an elevated TLC. High resolution computed Tomography chest revealed heterogeneous lesion in left hilar region involving the adjacent pleura. Histopathological examination confirmed the diagnosis of Classical Hodgkin's Lymphoma.

CONCLUSION

PPHL is a rare disease owing to its non specific presentation. A high degree of clinical suspicion and tissue biopsy for required for prompt diagnosis and combination of chemotherapy , radiation and surgery are key towards improving survival.

Title: EVANS TUMOR AT AN ATYPICAL SITEName of Presenter: **DR.A. MAHILMARAN**Authors (or Co-authors): **DR. G ALLWYN VIJAY, DR.VEENA**Institution/Author Organization: **INSTITUTE OF THORACIC MEDICINE, CHETPET, CHENNAI****Abstract:**

Low Grade Fibromyxoid Sarcoma (LGFMS) originally described by Evans is slow growing sarcoma that most commonly arise in the deep soft tissue of proximal extremities or trunk in young adult. It is very rare in the viscera as a primary site with only few cases reported in the literature. Here we present a case of Evans tumor occurring in rarely reported location: Mediastinum. Primary sarcoma of mediastinum accounts for 1.4% of soft tissue sarcomas.

Description:

A 58-year-old male presented with H/o progressive dyspnea, chest pain, subsequent imaging revealed a well-defined heterogenous enhancing mass arising in left hemithorax abutting the left cardiac border with associated chest wall implants. The mass was surgically removed. Grossly tumor was well circumscribed arising from parietal pleura with attachment to chest wall, focally involving visceral pleura with no extension into underlying lung parenchyma. Histologically the tumor was composed of atypical spindle cells arranged in rosettes and storiform pattern. By immunohistochemistry the tumor showed 60% positivity for Vimentin. Given the overall morphology and phenotype final diagnosis of LGFMS was made.

Conclusion:

Mediastinal LGFMS should be considered in differential diagnosis of visceral soft tissue tumor. Pathological examination, immunohistochemical and molecular work up play a vital role.

Title: Lung cancer with TuberculosisName of Presenter: **Dr. Saba Khanam**

Authors (or Co-authors): -

Institution/Author Organization: **Govt General and Chest hospital, Hyderabad**

A 52 yrs old female presented with cough with sputum, fever on/off low grade, loss of appetite and loss of weight since 6 months. CXR shows right upper zone and mid zone homogenous opacity. CT chest showed cavities with consolidation. Sputum AFB negative and sputum CBNAAT MTB not

detected. Bronchoscopy revealed BAL CBNAAT MTB detected.

CT guided biopsy showed granulomatous inflammation. Patient was started on ATT but did not improve.

Later repeat CT guided biopsy showed adenocarcinoma.

Discussion:

Malignancy is masked by Tuberculosis hence one should be careful in diagnosing two entities.

Title: A curious case of gigantic tumor submerged in chestName of Presenter: **Dr. Sameena**Authors (or Co-authors): **Dr.Mahaboob Khan (HOD), Dr.Dhanalakshmi (Associate professor), Dr.Sravan (assistant professor), Dr.Nalini (assistant professor)**Institution/Author Organization: **Government General Chest Hospital****Introduction-**

Solitary fibrous tumors of pleura are rare with unpredictable behavior. These are mesenchymal in origin. Approximately 800 cases were reported in literature 1.2

History -

A 47 year old male presented with chief complaints of sob, dry cough since 3 months. He had history of ASD closure 25 years ago, CABG 3 years ago, hypothyroidism and family history of keloid tendencies

Evaluation-

Chest x-ray revealed white out right lung with shift of mediastinum to left. Serial thoracentesis did not reveal any malignant cells. ADA was 04 U/L. CT chest was done which showed heterogeneous masses with right massive pleural effusion. CT guided biopsy revealed spindle cell tumor which was negative for epithelial markers and mesothelial markers

Treatment-

Patient underwent surgery, solid tumor 20x22cm and arising from pleura was excised and diagnosed as solitary fibrous tumor of pleura

Learning points-

Not all massive effusions imply malignancy. Solitary fibrous tumor are benign tumors which can be cured after surgery.

References- 1. de Perrot M, Fischer S, Brundler MA, et al. Solitary fibrous tumors of the pleura. *Ann Thorac Surg.* 2002;74:285-293. 2. Walid Abu Arab, Solitary fibrous tumours of the pleura, *European Journal of Cardio-Thoracic Surgery*, Volume 41, Issue 3, March 2012, Pages 587-597, <https://doi.org/10.1093/ejcts/ezr009>

Title: BILATERAL HYDROPNEUMOTHORAX IN A CASE OF SQUAMOUS CELL CARCINOMA OF BUCCAL MUCOSA WITH CAVITATING LUNG METASTASISName of Presenter: **Dr. SANKET KRISHNA DESSAI**Authors (or Co-authors): **Dr. VEENA E.R, Dr. DURGA LAWANDE**Institution/Author Organization: **GOA MEDICAL COLLEGE, BAMBOLIM GOA****Introduction:**

The lung is the major organ for distant metastases from head and neck cancers. Spontaneous pneumothorax secondary to lung metastasis is very rare. History and presentation: A sixty year old female, known case of well differentiated squamous cell carcinoma of buccal mucosa with local extension into alveolus, status post radical neck dissection presented with breathlessness since 15 days. Patient was in respiratory distress and had reduced breath sounds bilaterally.

Diagnosis:

Chest radiograph showed bilateral hydropneumothorax. Computed Tomography of Thorax showed severe hydropneumothorax on the right and mild hydro-pneumothorax on left side, cavitating and non-cavitating metastasis in the lung parenchyma with right cervical level III necrotic lymph node.

Management:

Intercostal tube (ICT) was passed on right side that drained 250 mL hemorrhagic pleural fluid. Post ICT insertion patient improved symptomatically and subsequent chest radiograph showed incomplete expansion of lung on the right side. Patient opted for palliative care. Complication: No complications noted post procedure.

Clinical Implication:

Pneumothorax as a complication should always be kept in mind in case of a squamous cell carcinoma because of the propensity of cavitating lesions extending to the adjacent pleura.

Title: Effusion of Confusion

Name of Presenter: **Dr Santhosh Kumari K R**

Authors (or Co-authors): **Dr Archana B, Dr Deepak Kumar R**

Institution/Author Organization:

Kempegowda Institute of Medical Sciences , Bengaluru

Introduction:

Pleural effusion is one of the common cases we encounter in the pulmonary OPD, most common being tubercular pleural effusion in young males. But here we discuss about a curious case of massive recurrent unilateral pleural effusion with an uncommon diagnosis.

History:

A 35yr old male from North Karnataka , with no comorbidities or similar history in the past came with complaints of left sided chest pain , shortness of breath and dry cough since past 20days. For which he was evaluated at a nearby hospital and diagnosed as recurrent massive left sided pleural effusion with suspicion of malignancy.

Presentation:

Middle aged male, moderately built and nourished. Tachypneic with saturation of 92% on RA and BP of 100/60. General physical examination was normal. Systemic examination revealed left sided absent breath sounds, ICD in situ with haemorrhagic pleural effusion.

Investigations:

Commuted Tomography of chest showed ill-defined nodular opacity in left upper lobe with enhancement along pleural surface s/o neoplastic etiology. Later CT guided biopsy was done and sent for HPE, which was s/o Solitary Fibrous tumour with differential of synovial sarcoma. Hence decortication and excision was done , which confirmed SFT with IHC positive for pan CK, CD 34 and ki67 of 70% and TLE negative , probably malignant.

Diagnosis:

Solitary Fibrous tumour of pleura

Management:

Post decortication , as IHC reports were awaited , patient again developed SOB and left sided chest pain , with CXR showing left sided white out lung, ? Recurrence. Chemotherapy was planned with advice from medical oncologist , but patient succumbed to same within a few days.

Learning implication:

SFT of pleura is a rare neoplasm accounting less than 5% of primary pleural tumours,

incidence of 2.8/100000 per year, arising from mesenchymal layer , usually from visceral pleura. It can also occur in extra thoracic location like meninges, bladder, spinal cord etc. It is fatal if it is more than 15cm occupying 40% of hemithorax. Treatment mainly being surgical excision, with chances of recurrence.

Title: Benign Cystic Teratoma in Anterior Mediastinum with rupture into the lung parenchyma

Name of Presenter: **Sebin John Thampan**

Authors (or Co-authors): **Prince George Varughese**

Institution/Author Organization: **Pondicherry Institute of Medical Science**

Teratomas are most commonly found in gonads and most common extra pulmonary site is mediastinum. Teratoma of lung is a rare tumour. Although teratomas originally arise at an early stage of embryonic development they are only discovered later in life due to their slow growth. They can be found in female's in age group 16 to 60 years, and more commonly seen in the left upper lobe of the lung. Teratomas are usually considered benign tumors. Pulmonary teratomas are mostly composed of mature, cystic somatic tissues. The malignant transformation can happen in any type of tissue present in the teratoma and is potentially capable of metastasis to lymph nodes and other regions. It can cause hemoptysis and compression of the esophagus or trachea. One major complication is rupture of the tumor, which is caused by proteolytic enzymes secreted by the tumor itself. Diagnosis is often not established until thoracotomy. Resection is curative and recommended. Here we report a case of Benign Cystic Teratoma in an 18 year old female who underwent left upper lobectomy along with the mediastinal tumor. Biopsy showed features of benign cystic teratoma with rupture into the lung parenchyma. Patient underwent uneventful recovery

Keywords

Cystic Teratoma, mediastinal teratomas, rupture teratomas

Title: A RARE CASE OF BILATERAL LUNG PARENCHYMAL DISEASE IN COVID ERA

Name of Presenter: **DR. SHIV KUMAR PANDEY**

Authors (or Co-authors): **DR. KUMAR GIRENDRA, DR. ABHIJEET KHANDELWAL, DR. SUNIL MUKATI, DR. ROTHMAN PT, DR. KSHITIZ CHOURASIYA**

Institution/Author Organization: **INDEX MEDICAL COLLEGE HOSPITAL & RESEARCH**

CENTRE

INTRODUCTION:

Lung adenocarcinoma is a type of NSCLC. Lung adenocarcinoma starts in glandular cells, which secrete substances such as mucus, and tends to develop in smaller airways such as alveoli. In this COVID time, it is very difficult to diagnose if a case has bilateral lung infiltrate with some common clinical feature as of COVID-19.

AIM:

To make correct diagnosis in a patient with bilateral infiltrate in COVID era

METHOD:

We describe a case of a young girl with clinical features depicting COVID-19 but this was a case of Adenocarcinoma which was diagnosed later on.

RESULT:

A 30 year female with sudden onset dyspnoea, cough, chest pain, crackles on auscultation. X-ray chest PA view shows inhomogenous diffuse opacity in middle & lower zone of bilateral lungs. Repeated COVID test (RT-PCR) were negative. HRCT chest-large lobulated mass with spiculated margin in right upper lobe. GGOs in both lung with multiple small lymph nodes. BAL fluids cytology- Metastatic lung adenocarcinoma Endobronchial lung biopsy histopathology- Adenocarcinoma

CONCLUSION:

Patients in COVID-19 era with cough, dyspnoea, chest pain & bilateral infiltrates in X-ray chest PA view may have other disease than COVID-19. We should think of various differential diagnosis for early detection & management.

Title: A rare case of Solitary Fibrous tumor of Pleura in young female patient

Name of Presenter: **Dr. Soumya Swaroop Dash**

Authors (or Co-authors): **Dr. J.K. Mishra, D. G.N. Srivastava, Dr. M. Brighton**

Institution/Author Organization: **INSTITUTE OF MEDICAL SCIENCES, BANARAS HINDU UNIVERSITY**

INTRODUCTION

The solitary fibrous tumor of the pleura (SFTP) is a rare primary tumor arising from mesenchymal cells in the pleura adjacent to the mesothelial lining predominantly affecting patients in the fifth and sixth decade.

History

25 years female non-smoker presented with complains of dull aching, non radiating, right sided chest pain and hemoptysis for 1 year. Her hemoptysis increased since last 1 month with 20ml per episode and 2-3 episodes per day. She had complaints of loss of weight and appetite since 1 month. On examination she was tachypneic and on auscultation there was decreased air entry on right side.

DIAGNOSIS

Routine investigations were normal. Sputum R/M: Volume -2ml, greyish white, N-88, L-09, M-03. Gram stain : gram positive bacilli. Sputum c/s: Sterile, Digital CXR, CECT thorax: Ill defined, moderately enhancing, soft tissue density mass lesion in middle lobe with complete encasement of lobar bronchus, descending branch of right pulmonary artery, fissural and mediastinal invasion.

Transbronchial lung biopsy was done via bronchoscopy and histopathological examination showed features suggestive of solitary fibrous tumor of pleura.

MANAGEMENT

Patient was managed with antibiotics and other supportive measures to stop hemoptysis. After diagnosis the patient was referred to the cardiothoracic and vascular surgery department for further management.

COMPLICATIONS

Hemoptysis, massive pleural effusion

Title: SOLITARY FIBROUS TUMOUR OF PLEURA- A CASE REPORT.

Name of Presenter: **Dr. Sree Nidhi Gonnakuti**

Authors (or Co-authors): **Dr. V.Reddy**

Tummuru

Institution/Author Organization: **SVS MEDICAL COLLEGE**

INTRODUCTION:

Solitary fibrous tumour (SFT) comprises a histologic spectrum of rarely metastasising fibroblastic mesenchymal neoplasms. SFTs preferentially arise in serosal membranes, the dura of the meninges, and deep soft tissues. Approximately 30 percent of cases arise in the thoracic cavity (including pleura, lungs, and mediastinum). Intrathoracic SFTs may arise in the pleura, mediastinum, or lung parenchyma. Most of them are pedunculated masses and harbour benign histological features. Although they may be relatively large, these tumours are usually treated by simple excision.

CASE PRESENTATION:

A 65 year old male presented to our OPD with complains of dry cough and shortness of breath since 6 months. Patient was a former smoker. On examination, patient had Grade 2 clubbing, dull note on percussion in the right infra mammary, axillary, infra axillary and infra scapular areas. Breath sounds were decreased in the same areas. Chest radiograph is suggestive of a left sided homogenous opacity s/o a located pleural effusion or mass lesion. CE-CT chest showed s/o benign pleural mass. A CT guided biopsy sent for HPE revealed a solitary fibrous tumour of pleura.

CONCLUSION:

We present a case of Solitary fibrous tumour of pleura. Complete tumour resection is the treatment of choice, for which the patient was referred to the CTVS department.

Title: BILATERAL MULTINODULAR DISEASE, A MANIFESTATION OF ADENOCARCINOMA OF LUNG WITH PULMONARY METASTASIS

Name of Presenter: **Dr.MANDA SRUJANA**

Authors (or Co-authors): **Dr.M.SRAVAN**

KUMAR, Dr.PHANI KUMAR, Dr.PRADHIKA

Institution/Author Organization: **KAKATIYA MEDICAL COLLEGE**

INTRODUCTION

Adenocarcinoma of lung with pulmonary metastasis may present similar to TB clinically. SO we should rule out malignancy in such cases. Diffuse Pulmonary nodules are usually seen as multiple pulmonary nodular opacifications on a HRCT chest scan. They can signify disease processes affecting either the interstitium or the airspace. They can range from a few millimeters to up to 1 cm. They can arise from a vast number of pathological entities.

HISTORY AND CLINICAL PRESENTATION

A 45 year old male presented to the department with 2 months history of dry cough, left side chest pain, loss of appetite, and SOB on exertion. There were no significant medical comorbidities and past surgical history. No past history of TB.

PHYSICAL EXAMINATION

Bilateral airtentry present. Normal vesicular breath sounds present. VR equivocal.

INVESTIGATIONS AND DIAGNOSIS

Chest X-ray demonstrated bilateral extensive nodular opacities. CT Chest plain showed multiple reticular nodular lesions in bilateral lung fields involving all lobes with few

cavitating nodules with left upper lobe showing patchy consolidation. sputum CBNAAT-MTB not detected. CECT chest demonstrated left upper lobe heterogeneously enhancing mass lesion with multiple nodules and few cavitating nodules. BAL for cytology showed no atypical cells and CBNAAT-MTB not detected. Transbronchial biopsy was done. HPE findings were consistent with invasive moderately differentiated adenocarcinoma. All other routine investigations were normal.

MANAGEMENT

Patient was advised to consult oncologist.

CONCLUSION

The result of this case study showed that in patients presenting with bilateral multiple nodules in lungs, malignancy with metastasis could be considered as one cause of it.

Title: PHANTOM TUMOUR OF LUNG

Name of Presenter: **SURESH KUMAR**

Authors (or Co-authors): -

Institution/Author Organization: **GMC KOTA**

INTRODUCTION:

PHANTOM TUMOR/VANISHING TUMOR STAND FOR LOCALIZED TRANSUDATIVE INTERLOBAR COLLECTION OF PLEURAL FLUID IN CONGESTIVE HEART FAILURE. NAME IS GIVEN BECAUSE RESEMBLANCE TO TUMOR ON CXR AND TENDENCY TO DISAPPEAR FOLLOWING THERAPY FOR CARDIAC FAILURE THAT'S DIURETIC WITH FLUID RESTRICTION. FIRST REPORTED BY STEWART IN 1928 AS INTERLOBAR HYDROTHORAX. OBJECTIVES-A RARE CASE STUDY OF LOCULATED PLEURAL EFFUSION

CASE REPORT:

80 YR OLD MAN PERSENT WITH FOLLOWING COMPLAIN SINCE 5 DAYS SHORTNESS OF BREATH, SWELLING OVER LEG, DRY COUGH, GENERLIZED TENDERNESS.

PAST HISTORY:

NO H/O TUBERCULOSIS OR OTHER COMORBIDITY, SIMILR EPISODE IN PAST & PATIENT ON T/T. ON AUSCULTATION:-B/L FINE INSPIRATORY CREPTS, NO CARDIAC MURMUR DISCUSSION PREREQUISITES FOR GROWTH OF VANISHING /PHANTOM TUMOR 1) CONGESTIVE HEART FAILURE OBLITERATIVE PLEURITIS PHANTOM TUMOR ARIES WHEN TRANSUDATION FROM PULMONARY VASCULAR SPACE EXCEEDS RESORPTIVE ABILITY OF PLEURAL LYMPHATICS. APPEARANCE IS MOST OFTEN THAT OF A WELL DEFINED HOMOGENEOUS DENSITY, USUALLY IN THR RIGHT LUNG, TRANSUDATIVE---1) LVF, 2)

RF EXUDATIVE---1)PARAPNEUMONIC PLEURAL EFFUSION, 2)LOCALIZED MALIGNANT PLEURAL EFFUSION , 3) BENIGN ASBESTOS RELATED PLEURAL EFFUSION FIBROUS TUMORS ORIGINATING FROM VISCERAL PLEURA OF INTERLOBAR FISSURE.

RESULT/CONCLUSION:

THIS CASE CONFIRM EFFICACY OF CONSERVATIVE MEDICAL TREATMENT (LOOP DIURETICS AND FLUID RESTRICTION) FOR LOCALIZED INTERLOBAR EFFUSION IN CONGESTIVE HEART FAILURE.

Title: Rheumatoid Lung delay diagnosis of Adenocarcinoma for 8 months

Name of Presenter: **Dr Vatsal Bhushan Gupta**
 Authors (or Co-authors): **Dr Sonam Spalgais, Dr Parul Mrigipuri, Dr Raj Kumar**
 Institution/Author Organization: **Vallabhbhai Patel Chest Institute**

INTRODUCTION

Adeno-carcinoma of lung is difficult to diagnose on the background of interstitial lung disease and infections. We present a case of adenocarcinoma lung which was treated as a case of organizing pneumonia on the background of rheumatoid arthritis for 8 months along with bronchoscopy done twice before final diagnosis.

CASE REPORT

64 years female, never smoker, homemaker, diabetic and hypertensive on treatment, presents to us with 8 months of dyspnea and dry cough. She was on treatment for rheumatoid arthritis with disease modifying agents for last 15 years. She underwent bronchoscopy twice in last 8 months with transbronchial biopsy and BAL with inconclusive result. Multiple course of antibiotics, steroids were administered with no symptomatic relief. On auscultation there was bilateral infrascapular crepts with bronchial breath sounds in right infrascapular region. X ray chest showed consolidation in lower zones, diminished lung volume and nodular infiltrates. CECT showed consolidation with predominant peripheral distribution and discrete multiple nodular lesions in both lungs without any enlarged mediastinal lymph node. CT guide biopsy showed well-formed adenocarcinoma cells arranged in small nests. Immunohistochemistry further confirmed the diagnosis and she was referred to oncology department for further management.

CONCLUSION

Adenocarcinoma of lung is difficult to differentiate from ILD, infection and TB on

clinico-radiological basis. Non-resolving pneumonia should be investigated for malignancy even with low clinical suspicion.

Title: A rare case of primary pulmonary leiomyosarcoma in a young male

Name of Presenter: **Dr Venna Abhilash Reddy**
 Authors (or Co-authors): **Dr G.K.Paramjyothi , Dr K.Bhaskar , Dr N.Narendra kumar**
 Institution/Author Organization: **Nizam's institute of medical sciences, Hyderabad**

primary pulmonary leiomyosarcoma is a very rare malignant tumour which arises from bronchial smooth muscle and vessels. we report a 21 year old male who presented with short duration of respiratory symptoms. A left upper lobe mass was detected on chest X-ray film. On further evaluation a heterogeneously enhancing large well defined soft tissue density lesion noted in left upper lobe in CT chest. CT guided biopsy showed malignant mesenchymal tumour with evidence of smooth muscle differentiation (leiomyosarcomatous differentiation). we are presenting this case report in view of rarity of disease.

Title: A RARE CASE OF GIANT SOLITARY FIBROUS TUMOUR OF PLEURA(SFTP)

Name of Presenter: **DR VINOD KUMAR KURMI**
 Authors (or Co-authors): **DR KUMAR GIRENDRA, DR ABHIJEET KHANDELWAL**
 Institution/Author Organization: **INDEX MEDICAL COLLEGE INDORE**

INTRODUCTION:

SFTP is also known as solitary fibrous tumour(SFT), is a rare mesenchymal tumour originating from the sub-mesothelial mesenchymal cells , its incidence is <5% of all pleural tumours, approximately 78-88% of SFT are benign and 12-22% are malignant, the clinical course is usually indolent and prognosis is favorable if complete resection is possible.

CASE REPORT:

Patient 60 year old non-smoker female, married, presented to the OPD with chief complaints of dry cough since 2month, other symptoms are chest pain, loss of weight, loss of appetite and trouble breathing. On examination, the vital parameters, of patient have tachypnoea and tachycardia , with decreased oxygen saturation at room air. Physical examination revealed clubbing grade-2 . On auscultation markedly decreased air entry on right side. Chest X-ray (PA) view demonstrates homogenous opacity in RML & RLL. HRCT

reveals large irregular , heterogeneously enhancing pleural mass lesion measuring approximately 13.2x12.4x14.4 cms is seen to involve the entire right lower lobe. Lytic lesion seen in D3 vertebra. Histopathology report of biopsy from RLL shows features favouring mesenchymal/mesothelial tumour.

DISCUSSION:

SFTP are rare, slow-growing neoplasms. The peak incidence is in the 5- 8th decades, with no sex predilection. Extra-thoracic symptoms have also been reported. Giant solitary fibrous tumors of the pleura are part of a broad class of fibroblastic lesions that can occur nearly anywhere in the body..

CONCLUSION:

We report a case of large benign SFTP confirmed by IHC marker studies, which has been untreated for many years, They are rarely malignant and complete surgical resection is curative. , in this case surgery was not done.

Title: A RARE CASE OF LEFT SIDE PLEURAL DUE TO METASTASIS RENAL CELL CARCINOMA

Name of Presenter: **DR.VISHAL MALVIYA**
 Authors (or Co-authors): **DR.KUMAR GIRENDRA, DR.ABHIJEET KHANDELWAL, DR.SUNIL MUKATI**
 Institution/Author Organization: **INDEX MEDICAL COLLEGE HOSPITAL & RESEARCH CENTRE INDORE(MADHYAPRADESH)**

INTRODUCTION-

pleural effusion due to metastatic renal cell carcinoma(RCC) is rare.RCC metastasis to pleura along with pleural effusion is late events in the course of malignancy. spread exact mechanism is not known.

CASE REPORTS-

60 year old male presents with fever cough chest pain shortness of breathing since 2 months on examination patient febrile tachycardia chest examination dullness of left sided chest wall upon percussion & reduced breath sound on auscultation. chest x ray pa view show left side pleural effusion with mild atelectasis of left lung. CT Scan showed left sided pleuraal effusion with generalised thickening of left pleural reflection along with atelectasis of left middle & lower lobe. chest ct reporting large pleural effusion & suspicion cystic renal mass guided attenuation towards malignancy. diagnostic and therapeutic thoracocentesis done & removal of 1000 ml of pleural fluid. in thoracoscopy pleural biopsy collect & send for histopathology. pleural biopsy report suggestive of metastatic

carcinoma.

DISCUSSION-

Lungs are most common metastatic site for RCC, metastatic solely to the pleura without the involvement of lung parenchyma is very rare. RCC leading to 1-2% cases of pleural effusion.

CONCLUSION-

Presentation of RCC as pleural effusion is very rare without involvement of lung parenchyma. patient was treated with pleurodesis.

RESEARCH PAPERS

Title: A STUDY OF RADIOLOGICAL PRESENTATION IN BRONCHOGENIC CARCINOMA ALONG WITH PREVALENCE OF PULMONARY TB IN A TERTIARY CENTRE

Name of Presenter: **AISHWARYA A P**

Authors (or Co-authors): **DR. ANIL SAXENA ,DR. SUMAN KHANGHAROT,DR. HEMANT SHARMA,DR.GUNJAN SHARMA**

Institution/Author Organization:

GOVERNMENT MEDICAL COLLEGE KOTA

Lung cancer is the leading cause of cancer death in the united states and worldwide. Lung cancer ranked first in both sexes in the number of estimated death yearly.

OBJECTIVE –

a study of radiological presentation in bronchogenic carcinoma along with prevalence of pulmonary tuberculosis in a tertiary centre.

MATERIALS AND METHOD –

total of 100 patients with histologically proven lung cancer from May 2019 to December 2019 at tertiary centr . Data of participants regarding demographics , history of smoking habit , histopathological type , radiographic finding on chest radiograph , computed tomography(CT) scan .Statistical analysis was performed using descriptive statistics of collected data.

RESULTS –

Most common age group of bronchogenic carcinoma was between 60-69 yr age(37%) with male predominance (82%).Smoking history present in about 80%patients. Most common radiological presentation was a mass lesion present (91%)followed by unilateral hilar prominence present in 44% of patient. Other common findings are mediastinal widening(38%) collapse(26%) pleural effusion(22%) metastasis(22%) cavitation

(13%) consolidation(12%) bony erosion(11%) pneumothorax (5%) and pancoast tumor(4%). Prevalence of pulmonary tuberculosis in bronchogenic carcinoma is 9%.

CONCLUSION –

in this study adenocarcinoma was found to be most common lung cancer. Smoking most common risk factor. Pulmonary Tuberculosis coexistence with bronchogenic carcinoma was most common.

Title: DIAGNOSTIC EVALUATION OF COMPUTED TOMOGRAPHY GUIDED BIOPSY IN SUSPECTED LUNG MALIGNANCY

Name of Presenter: **AJIT KUMAR**

Authors (or Co-authors): **DR. K. B. GUPTA, DR. ROHTAS K. YADAV**

Institution/Author Organization: **PT. B. D. SHARMA, PGIMS, ROHTAK**

BACKGROUND:

Early diagnosis of lung cancer is important. The present study was conducted in our Centre to evaluate the usefulness and safety profile of CT – guided biopsy in 43 patients with suspected lung malignancy.

OBJECTIVES:

To study the diagnostic yield and safety profile of CT guided lung biopsy in suspected malignant lesions in cases where bronchoscopy was negative or not possible.

METHODOLOGY:

In the selected patients, under CT guidance the entry site for biopsy needle was marked on skin after patient's positioning. The area was cleaned and anaesthetized and the biopsy specimen was obtained and sent for histopathological evaluation. Post biopsy imaging and 24 hours observation was done to rule out complications.

RESULTS:

The overall diagnostic yield was 90.7% and 100% in central and 86.7% in peripheral lesions and 100% in cases with negative bronchoscopy. The only complication was pneumothorax in 3 (7.0%) cases with no mortality. The relative risk for pneumothorax was higher in cases with lung tissue interface (RR = 1.45) and in patients with history of PTB (RR = 3.08).

CONCLUSION:

CT guided lung biopsy is a safe procedure with excellent diagnostic results in both central and peripheral lung lesions and in cases with negative bronchoscopy.

Title: PROFILE OF SUBJECTS UNDERGOING MEDICAL THORACOSCOPY AT A TERTIARY LEVEL HOSPITAL

Name of Presenter: **B.RAMYA KRISHNA**

Authors (or Co-authors): **Ramu Madire, Sampath Reddy, Satish Chandra**

Institution/Author Organization: **PRATHIMA INSTITUTE OF MEDICAL SCIENCES**

INTRODUCTION:

Role of medical thoracoscopy in the evaluation of undiagnosed exudative effusions is well established. AIM: Aim of our study was to evaluate the demographic, clinical, radiological profile of subjects undergoing thoracoscopy and to establish diagnosis with the help of histopathological examination and IHC markers.

MATERIALS AND METHODS:

Fifty-two subjects (61.5% males) with undiagnosed exudative pleural effusions were taken into the study. Study comprised of 46.2% smokers. Chest pain was the predominant symptom (86.5%) followed by dyspnea (76.9%). All the subjects underwent thoracoscopy for further evaluation. Cases of malignancies were further evaluated by immunohistochemistry (IHC) markers.

RESULTS:

Malignancy was diagnosed in 47.1% of cases of which adenocarcinoma was seen in 60%. Tuberculosis was diagnosed in 34.6% cases. Thoracoscopic yield in our study is 84.6% with no specific disease seen only in 15.4% cases (non-specific inflammation). IHC markers helped in further evaluation with Primary adenocarcinoma in 17%, malignant mesothelioma in 1.9% and small cell carcinoma in 3.8% cases). The HRCT chest findings (p<0.001) and thoracoscopic findings (p<0.001) co-related with the final diagnosis obtained. Complications, all minor were noted in 23% of cases.

CONCLUSION:

Medical thoracoscopy is an useful, safe procedure in establishing diagnosis in undiagnosed exudative pleural effusions.

Title: A Cross Sectional Study For Evaluation Of Carcinoembryonic Antigen In the Diagnosis Of NSCLC (Non-Small Cell Lung Cancer)

Name of Presenter: **JITENDRA KUMAR BAIRWA**

Authors (or Co-authors): **Narendra khippal,**

Mohammed Javed

Institution/Author Organization: **SMS MEDICAL COLLEGE**

Background:

The 5-year survival rate for all patients with lung cancer is very low as most patients are diagnosed at a locally advanced or metastatic stage, a point where curative therapy is no longer fully effective. A biomarker with high sensitivity and specificity for diagnosis at an early stage of disease can be significant. The aim of study was assess levels of CEA in NSCLC at the of diagnosis.

Material methods:

55 patients of NSCLC who diagnosed at our institution between 2019 to 2020 were included. CEA levels assessed at time of diagnosis & after completion of 6th cycle of chemotherapy. Response to chemotherapy was assessed by RECIST criteria & correlate with CEA levels.

Results:

Among 55 patients mean age was 61.69 ± 8.9 years, 91% were male, 58.18% had Squamous cell carcinoma. CEA levels was associated with TNM staging and histology. Raised CEA level a was significantly higher in Adenocarcinoma & associated with progression of disease ($P < 0.001$).

Conclusion:

CEA level was mainly elevated in adenocarcinoma at the time of diagnosis. These results may be helpful in early diagnosis of NSCLC

Key words:

Non-small cell lung cancer(NSCLC), Carcinoembryonic Antigen (CEA)

Title: Demographic and etiological characteristics of malignant pleural effusion in Kumaon region of Uttarakhand

Name of Presenter: - **Kapil Tomar**

Authors (or Co-authors): **D .C Punera , Sanjay Singh ,Anshul Kedia , Shilpi Raikwar**

Institution/Author Organization: **Govt Medical College Haldwani**

Introduction:

Pleural effusion (PE) is defined as the excessive accumulation of fluid in the pleural space, resulting from an imbalance between pleural fluid formation and removal. The PE can be due to either exudative or transudative process.

Aim & Objectives:

To study the etiology and prevalence of malignant pleural effusion in different age groups. Material & Methods: A total of 87 patients were included in this study aged between 18 to 80 years .They were subjected to thorough history, clinical examination chest radiography , pleural fluid analysis and cytology .

Results:

Out of 87 patients 67 had tuberculosis followed by 18 malignant with 13 systemic causes 02 were undiagnosed .It was found more in males associated with smoking and alcoholics and females having history of biomass exposure .Majority having exudative and unilateral effusion .

Conclusions:

The result revealed that tuberculosis still is most common followed by malignant pleural effusion which is rising gradually with time .Therefore needs to early diagnose malignant effusion by pleural biopsy and thoracoscopy for such undiagnosed cases.

Title: Assessment of clinical and pathological profile of Lung Malignancy cases

Name of Presenter: **Karan Raj Singhal**

Authors (or Co-authors): **Girija Nair**

Institution/Author Organization: **D Y Patil Hospital**

Objectives:

To assess the clinical and pathological profile of patients with lung malignancy

Methods:

20 confirmed cases of lung malignancies were enrolled from pulmonary medicine OPD of a tertiary care teaching hospital. Demographic data was analyzed. Clinical profile was recorded. Patients with having radiological features consistent with Lung carcinoma were subjected to sputum cytology, bronchoscopy, CT thorax & FNAB depending on need. Diagnostic findings were assessed. All results were analyzed by SPSS software.

Results:

Highest incidence of lung malignancy was found in age group of 51-70 years (12 subjects). 60 percent of the patients were males. Out of 20 cases, 11 cases were of adenocarcinoma (7 males, 4 females), 8 cases were of squamous cell carcinoma (4 males, 4 females) while the remaining one case was of small cell carcinoma (1 case). The most common symptoms were cough (11 cases), loss of appetite (8 cases), dyspnea (7 cases),

fatigue (7 cases), weight loss (6 cases), chest pain (6 cases), and hemoptysis (5 cases). Symptoms were present for duration of more than 6 months in 12 patients (7 males, 5 females).

Conclusions:

The proportion of females is increasing, whereas smoking rates and mean age at diagnosis remained unchanged over time. Associated risk factors, symptoms, and investigations are extremely important to diagnose lung cancer in early stage so that further mortality & morbidity can be minimized.

Title: Survival in Lung Cancer patient with treatment received

Name of Presenter: **Dr Naman S Ajwani**

Authors (or Co-authors): **Dr. N. T . AWAD**

Institution/Author Organization: **LTMMC and GH**

Background :

The current study was undertaken to evaluate the factors affecting survival in patients diagnosed with lung cancer attending a tertiary care cancer institute Aim : To describe the overall survival in the patients diagnosed with Lung cancer Methodology: Consecutive patients with diagnosed with primary lung cancer were included in this study. Demographic, clinical, radiological data(CXR CT MRI PET Bone scans) were collected retrospectively from the medical records. Patients were classified as never-smokers when they had never smoked in the past. The clinical presentation of these subjects with various symptoms related to lung cancer and the duration of first symptom before confirmation of the diagnosis of lung cancer were recorded. The radiological evaluation included Histopathology of all the patients was confirmed by lung biopsy, fine needle aspiration cytology (FNAC) lung, bronchial washings and pleural fluid and pleural biopsy specimen. Presence of co-morbid conditions like DM, HTN, IHD pr PTB was noted

Results:

The 5 year survival rate were poor specially in males and patients presenting with SCC

Title: impact of covid-19 on diagnosis of lung carcinoma

Name of Presenter: **Pulkit Basra**

Authors (or Co-authors): **Rajesh Agrawal, Shubham Jain**

Institution/Author Organization: **Rohilkhand Medical College and Hospital Bareilly**

Introduction:

Lung carcinoma is most common cancer in the world. Where adenocarcinoma is most common type there has been increased incidence in the other types. Covid-19 has impacted lifestyle with various diseases. Patients are reluctant to approach the hospital due to current status.

Aim:

To determine the impact of CoVid19 on diagnosis of Lung Carcinoma.

Objective:

To compare the rate of diagnosis of lung carcinoma in COVID era from Last year.

Material and methods:

An observational study conducted by comparing data from March-September over period of one year 2019-2020. Results: In 2020 there were 17 atypical cells on cytology, 3 on biopsy and 2 on FNAC, compared to 2019 which was 11, 28 and 4 respectively. The total presentation was of 53 including inconclusive and 22 excluding inconclusive. Incidence of patients has reduced compared to last year.

Discussion:

In current scenario and lockdown effects the patient's arrival to OPD has reduced. Patient arrives when patient lands in critical condition leading to main cause of delay in diagnosis of cancer. Secondly there is decreased doctor to patient interaction delaying the diagnosis further.

Conclusion:

Patients with age of 65 years or more should be screened for lung carcinoma. Telemedicine can be used to assess symptoms and then patients can be called for screening.

Title: A Study of types of Lung malignancy diagnosed with the help of flexible bronchoscopy at a tertiary care rural hospital

Name of Presenter: **Dr. Shailya Patel**

Authors (or Co-authors): **Dr. Nimit Khara, Dr. Yagnang Vyas, Dr. Dhaval Prajapati, Dr. Sateesh Patel, Dr. Rajiv Paliwal**

Institution/Author Organization: **Shree Krishna Hospital and Pramukh Swami Medical College**

Introduction:

Lung cancer continues to be a leading cause of cancer death worldwide, while the availability of flexible bronchoscopy has revolutionized

the respiratory cytological techniques.

Aim/Objectives:

To study types of lung malignancy diagnosed with the help of flexible bronchoscopy at a tertiary care rural hospital and compare its demographic data, clinical history and radiological findings. Also, to compare, bronchoscopic findings and histopathological reports of various samples collected while performing flexible bronchoscopy.

Methodology:

A retrospective study comprising of 111 patients who underwent flexible bronchoscopy in Department of Respiratory Medicine from 2015-2020, was done using premade Proforma comprising of clinical, bronchoscopic and histopathological details.

Result:

Adenocarcinoma of lung was most common among smokers. SCC of lung was only seen in males (n=5) in study while majority of females included in study had No malignancy (32.14%) on lung biopsy. Mass and consolidation were most common radiological finding seen in patients with SCC, Adenocarcinoma and Suspicious of Malignancy. Endobronchial growth (42.34%) was the most common finding on bronchoscopy in majority.

Conclusion:

Adenocarcinoma of lung was most common lung malignancy diagnosed followed by SCC. Endobronchial biopsy was most efficient in diagnosis of types of lung malignancy as compared to Bronchoalveolar lavage, TBNA and Brush Cytology.

Title: Clinicopathological profile and course of malignant pleural effusion in tertiary care teaching hospital

Name of Presenter: **Dr Shravani Dunna**

Authors (or Co-authors): -

Institution/Author Organization: **Andhra medical college**

Background:

Malignant pleural effusion is major clinical problem associated with primary and metastatic pleural malignancies. Pleural effusion from unknown primary are responsible for 15% of malignant pleural effusions. Presence of malignant pleural effusion puts the patient in advanced stage and renders the prognosis as poor.

Aim:

in this study we intend to find the incidence

of malignant pleural effusion and its ethology in patients attending tertiary care teaching hospital.

Results:

A total 35 patients were taken in the study a majority of patients are lung cancer(15),lymphoma(7),breast cancer(3),female genital tract(2),others (2) and primary remained unknown(6),the yield of pleural fluid cytology, blind pleural biopsy and bronchoscopy were 48%,16%,28%.Chemical pleurodesis yielded complete response in 70%,in complete response in 12 patients. In hospital mortality was 6 and 23 referred to higher centre for chemotherapy

Conclusion:

We included that malignant pleural effusion is a commonly misdiagnosed ,lung cancer is the most common cause,17% of cases are undiagnosed.Chemical pleurodesis provides expected results

Lung Cancer

Title: Prevalence of post bronchodilator reversibility and factors influencing it among the patients presenting with dyspnea: A tertiary care centre experience

Name of Presenter: **DIVYA SURENDRAN**

Authors (or Co-authors): **Divya Surendran, Mehta Asmita A, Nidhi Sudhakar Haridas Nithya, Kunoor Akhilesh, Shafi Tajik M**

Institution/Author Organization: **AMRITA INSTITUTE OF MEDICAL SCIENCES, KOCHI, KERALA**

BACKGROUND:

The change in FEV₁ after administration of a short-acting bronchodilator has been widely used for diagnosis of obstructive airway diseases. Many factors can influence post bronchodilator reversibility.

AIM:

To study prevalence of reversibility and factors influencing it among patients presenting to Respiratory Medicine OPD with complaints of dyspnea.

METHODS:

100 stable patients who reported to Respiratory medicine OPD with symptoms of dyspnea were evaluated with spirometry. Spirometry and post bronchodilator reversibility (BDR) were defined using ATS/GOLD guidelines. SPSS 17 was used for statistical analysis, P of <0.05 was considered significant.

RESULTS:

Out of 100 patients studied, 33 had BDR. Median age of the population was 58 ± 17 years. There were 72 non smokers, 58 men, 32 COPD, 56 asthma patients. The median pre and post bronchodilator FEV₁ was 1.34L/Sec and 1.46 L/sec respectively. Twenty seven (41%) asthma and 6(19%) COPD had BDR (P=0.05). Other factors associated with BDR were smoking (p=0.035). No statistically significant correlation was found between eosinophilia, gender, severity of obstruction, BMI, height, weight and age.

CONCLUSION:

Prevalence of postBDR in study population was 33%. The factors affecting BDR were smoking status and asthma, asthma, and BMI.

Title: DIAGNOSTIC STABILITY OF A SINGLE SPIROMETRY AS OPPOSED TO REPEAT SPIROMETRY FOR AIRWAY OBSTRUCTION IN SUSPECTED COPD PATIENTS

Name of Presenter: **Dr HIMA B**

Authors (or Co-authors): **Dr Ronaldwin B, Dr Praveen G S**

Institution/Author Organization: **GOVT MEDICAL COLLEGE TRIVANDRUM**

INTRODUCTION

GOLD guidelines for diagnosis of COPD recommends repeat spirometry on a separate occasion in patients with FEV₁/FVC ratio between 0.6-0.8.

AIMS AND OBJECTIVES

To determine the proportion of patients having no change in obstruction status on a repeat spirometry performed 2 weeks later. To determine the factors that are associated with change in obstruction status

MATERIALS AND METHODS

Study was done as a cross-sectional study in suspected COPD patients with FEV₁/FVC ratio 0.6-0.8. Repeat spirometry was done 2 weeks later. Obstruction status of both the spirometry results were compared and proportion of patients having no change in obstruction status calculated.

RESULTS

80 patients had a FEV₁/FVC of 0.6-0.8 on their first spirometry and of which 65 patients (81.25%; 95%CI:70.97%-89.11%) had stability in the diagnosis. 15 patients (18.75%; 95%CI:10.89%-29.03%) had change in their status of obstruction. 5 patients (6.25%; 95%CI:2.06%-13.99%) had no obstruction on the second spirometry and 10(12.5%; 95%CI:6.16%-21.79%) patients who had no obstruction initially had obstruction on the second spirometry. Factors like age, sex, BMI, SABA/LABA use, smoking status and baseline FEV₁ were not associated with the changed status.

CONCLUSION

This study shows that a significant proportion of patients will be misdiagnosed if a repeat spirometry is not performed in patients with FEV₁/FVC ratio 0.6-0.8.

Title: Impact of exposure of coal dust from coal stockpile on pulmonary function in South Indian coal

Name of Presenter: **Krishna Chaitanya Bolla**

Authors (or Co-authors): **Meenakshi Narasimhan, Aruna Shanmuganathan**

Institution/Author Organization: **Chettinad Hospital And Research Institute**

Introduction:

Impairment of lung function due to coal dust exposure during mining is well documented, however, studies are limited on the effect of coal dust generated during stockpiling. Therefore, this study was undertaken to assess the pulmonary function and the relationship between deterioration of lung function and duration of exposure in workers at coal terminal.

Methodology:

A cross-sectional study, conducted at International Coal terminal, Chennai, after obtaining ethical committee approval. Workers aged >18 years with minimum one year coal dust exposure were included and grouped into high (Group I) and low-risk (Group II) based on the intensity of exposure and spirometry was performed. Correlation between spirometric parameters and intensity of exposure was analysed using Pearson's correlation.

Results:

A total of 150 workers (Group I-80, Group II-70) were included and majority (78.7%) were asymptomatic. Spirometry was abnormal in 44.67% subjects, with obstruction being the predominant pattern. Significant negative correlation was observed between duration of exposure and FEV₁, FEF_{25-75%} in Group I and FEV₁/FVC, FEF_{25-75%} in Group II.

Conclusion:

Periodic follow-up is necessary for the workers exposed to coal dust since majority of our subjects, though asymptomatic, had impaired lung function. This would enable early diagnosis and optimal management and thereby, better respiratory outcomes.

Title: The Peak Inspiratory Flow Rate improvement in patients discharged following acute exacerbation of Chronic Obstructive Pulmonary Disease based on the type of inhaler prescribed.

Name of Presenter: **Dr. Manu S**

Authors (or Co-authors): **Dr. Lalita Fernandes**

Institution/Author Organization: **Goa Medical College**

Background

Peak Inspiratory Flow rate (PIFR) determines the drug dispersion and lung deposition. Patients hospitalised with acute exacerbation of COPD (AECOPD) are prescribed bronchodilators and steroids delivered

through inhalers; DPI or MDI. Suboptimal PIFR at discharge is associated with readmissions with AECOPD.

Aim

1. To determine mean PIFR at discharge following AECOPD and at three months follow up. 2. Real time prescription of inhalers at discharge following AECOPD. 3. Mean change in PIFR at 3 months in patients receiving DPI and MDI at discharge. Method 138 patients admitted with AECOPD were enrolled. PIFR at discharge was measured with In-Check PIFR meter. Treating physician prescribed inhalers was checked for errors and corrected. PIFR was measured at 3 months of follow up. Optimal PIFR defined as >60L/min. Results Mean PIFR at discharge was 58.9 with 85(61.6%) having low PIFR. 59(69.4%) with Low PIFR were prescribed MDI, 26(30.6%) received DPI. At 3 months, mean change in PIFR was 18.64, $p=0.005$ in patients with Low PIFR receiving MDI while with DPI, there was worsening in PIFR with mean change -3.84, $p=0.005$

Conclusion

Significant change in PIFR was observed at 3 months in patients discharged from AECOPD with low PIFR receiving MDIs.

Title: CORRELATION OF SPIROMETRIC PARAMETERS WITH PERIPHERAL EOSINOPHILIA LEVELS AMONG GARDENERS

Name of Presenter: **NAYEEM KADIR K**

Authors (or Co-authors): **Meenakshi N, Aruna S, Nisha G**

Institution/Author Organization: **CHETTINAD HOSPITAL AND RESEARCH INSTITUTE**

INTRODUCTION:

Occupational hazards of gardening result from exposure to variety of organic and inorganic allergens leading to respiratory disease including occupational asthma, exacerbation of underlying lung disorder, and atopy. Even though studies on eosinophil level and allergens, limited literature on the correlation of spirometry parameters with eosinophils in gardeners are available.

AIM:

To correlate spirometry parameters with peripheral eosinophil levels among gardeners.

METHODOLOGY:

A cross-sectional observational study was carried out among 71 gardeners Demographic data, smoking status, duration and type of work, co-morbidities, prior respiratory disease and spirometry parameters, blood eosinophil

count was analyzed.

RESULT:

Out of a total of 71 subjects, 69% had abnormal PFT, the most common pattern being mixed though the majority (78.8%) were asymptomatic, 66% had abnormal PFT. Peripheral eosinophilia was seen in 64.7% of subjects. Correlation with spirometry parameters and eosinophil levels did not show statistical significance.

CONCLUSION:

Though the majority of subjects were asymptomatic, their spirometric parameters were abnormal, hence regular screening for early diagnosis of pulmonary impairment and optimal management with advice on the use of PPE at work place is necessary to avoid occupational hazards from gardening.

Title: Asymptomatic small airway obstruction in traffic police personnel . A case control study

Name of Presenter: **Dr. Priyadarshini S Raykar**

Authors (or Co-authors): **Dr. Kushal Bondade, Dr. Anup Banur, Dr. Ajith Eti, Dr. Basanth Kumar**

Institution/Author Organization: **S. S. Institute of medical sciences, Davanagere**

INTRODUCTION

Traffic related air pollution due to vehicular exhaust is an occupational hazard to individual who work close to traffic.

Aims and objectives

TO evaluate effect of air pollution on pulmonary function in traffic police personnel. Materials and method Case control study involving 52 traffic policemen belonging to second tier city of central Karnataka at tertiary care center was conducted. Similar number of controls were enrolled for the study. After obtaining the consent, spirometry (portable) was done and FEV₁, FVC, Post Bronchodilator FEV₁/FVC and FEF₂₅₋₇₅ parameters were recorded pre and post bronchodilatation. Odds ratio comparing case and controls was evaluated.

Results:

Mean age of participants in case and control was 37 and 33 years respectively. Mean duration of Exposure was 3.79 yrs. A total of 26 (25%) participants who had exposure history had small airway obstruction compared to only 10 (9.6%) participants from control group. Odds ratio was 4.2 with 95% CI of 1.745 to 10.10 with significant P value of 0.0014. 24 out of 26 who had Airway obstruction features in

PFT had no respiratory symptoms.

Conclusion:

Air pollution as an occupation exposure in Traffic police is associated with asymptomatic small airway obstruction.

Title: Post tubercular sequelae and quality of life in adequately treated patients of pulmonary tuberculosis

Name of Presenter: **Pusarla Mounica**

Authors (or Co-authors): **Dr Somnath Dash, Dr Ramya Gadam, Dr Mary Vasantha, Dr K Kondal Rao**

Institution/Author Organization: **GSL Medical College**

Background:

Even after adequate anti-tubercular treatment tuberculosis leaves behind significant sequelae in the patients. Both structural and functional impairments are found in the lungs of the patients.

Aim of the study was to assess the degree of structural and functional abnormalities in lungs of adequately treated patients of pulmonary tuberculosis and their effect on the respiratory quality of life.

Patients and methods:

Total 139 diagnosed cases of pulmonary tuberculosis, who underwent adequate treatment and declared cured were recruited for study. They were subjected to chest radiograph and spirometry and also respiratory quality of life was assessed by using St. George's respiratory Quality questionnaire (SGRQ). Observation. The most common pathological sequelae were fibrocavitary lesions followed by bronchiectasis. Among 139 patients 41.7% had an obstructive pattern, 44.6% had a restrictive pattern, 5.5% had a mixed model, and 3.5% had normal spirometry. . .

Conclusion:

There are significant structural and functional abnormalities and consequent deterioration of quality of life irrespective of age, gender and socioeconomic status of the patients. Early diagnosis and prompt initiation of antitubercular treatment may reduce the severity of problem. .

Title: A follow up study of post infectious obliterative bronchiolitis in adults and comparative analysis with chronic obstructive pulmonary disease

Name of Presenter: **Dr. Dipti Gothi**

Authors (or Co-authors): **Dr. Mahismita Patro, Dr. Sunil kumar, Dr. Sameer Vaidya, Dr. Ishani desmukh**

Institution/Author Organization: **ESI PGIMSR Basaidarapur New Delhi**

Introduction:

Post-infectious obliterative bronchiolitis (PIOB) is common in developing countries. No studies have evaluated longitudinal change in lung functions in PIOB in adults.

Aims:

1.To evaluate the change in forced expiratory volume in 1st second (FEV1), forced vital capacity (FVC), dyspnoea grading, body mass index (BMI) and SpO2 in patients with PIOB over a period of time 2.To evaluate the same parameters in chronic obstructive pulmonary disease (COPD) patients and compare with PIOB as both are often clubbed together.

Methods:

It was a retrospective observational study involving patients of COPD and PIOB with minimum 3 years of follow-up. Out of total of 106 patients, 61 (31 COPD and 30 PIOB) patients were included in the final analysis after applying exclusion criteria.

Results:

The baseline FEV1 and FVC was significantly worse in PIOB compared to COPD. In PIOB there was non-significant increment in FVC by 18.79 ml/year and FEV1 by 12.2 ml/year whereas in COPD there was significant decline in FVC by 106.8 ml/year and FEV1 by 63.25 ml/year. The SpO2 and mMRC score had a yearly decline in the COPD whereas in PIOB there was increment in mMRC score and non-significant change in SpO2.

Conclusion:

The PIOB is characterised a non-significant increase in lung function whereas COPD shows a significant progressive decline.

Title: ROLE OF PULMONARY FUNCTION TESTS AMONG DHABA WORKERS.

Name of Presenter: **VARDHELLY RAMESH**

Authors (or Co-authors): **Satish Chandra Kilaru, C N Prasad**

Institution/Author Organization: **PRATHIMA INSTITUTE OF MEDICAL SCIENCES**

Introduction:

Indoor air pollution is considered as a serious health hazard for development of respiratory illnesses. The health hazards in the unorganized sector, especially in Dhaba's kitchen workers could be more attributed to

indoor air pollution. Thus, Present study was conducted to assess the respiratory health profile of Dhaba's cooks & other workers. Aims: To evaluate the respiratory symptoms and extent of lung function impairment among Highway kitchen workers exposed to cooking fumes using spirometry.

Methodology:

Study was conducted among 34 dhaba kitchen workers with respiratory health profile questionnaire followed by pulmonary function test by spirometry and six-minute walk test.

Results:

Respiratory symptoms of chest tightness (47.1%), cough (44%), eye irritation (44%), dyspnea (29%) and wheeze (8.7%) and nasal symptoms (47%) among dhaba workers were associated with duration of work and workplace conditions. Among symptoms, cough is significantly ($p=0.026$) associated with inadequate exhaust system. Spirometric evaluation among subjects revealed obstructive airway disease in 10(29.4%) and restrictive lung disease in seven (20.6%). Abnormal 6MWD was observed in 18 subjects (52.9%).

Conclusion:

Exposure to cooking fumes and biomass smoke aided further by inadequate exhaustion has deleterious effects on kitchen worker's respiratory health and is associated with reduction in lung functions.

Title: To study the importance of home spirometry and spirometer supported lung exercises as an interventional and supportive tool in respiratory treatment

Name of Presenter: **Dr. Vishal More**

Authors (or Co-authors): **Dr.Sonal Arsude ,Mr. Shardul Joshi, Dr. Gajanan Sakhare, Mrs. Aditi Pais**

Institution/Author Organization: **Dr. More's Chest Clinic**

Objective –

To study the importance of home spirometry and spirometer supported lung exercises as an interventional and supportive tool in respiratory treatment.

Methodology –

1. A purposive sample is selected for this observational study.
2. Patients were initially screened for Pulmonary Function using BRIOTA's clinical grade Spirometer - SpiroPRO™ as per GINA Guidelines and were asked to repeat the test in

clinic after 6 weeks

3. BRIOTA's connected digital home spirometer SpiroPRO™ was provided to patients for doing PEFR and maintaining a record of symptoms, triggers and overall health.

4. Patients were also encouraged to do daily lung exercises using SpiroPRO™ with the help of remote video assistance from a certified spirometry technician

5. Patients were assessed on regular basis where their weekly lung health was explained and impact and importance of daily Lung Exercise was emphasized

6. Quality of Home Spirometry, exercises, any Deviations compared to at Clinic Spirometry were compared

Results -

1. With proper training and remote video assistance from certified respiratory technicians - patients were able to do quality Spirometry tests at home - the quality of spirometry test in clinic and at home was found to be highly comparable in more than 80% of total tests conducted
2. Daily Lung Exercises and Regular Spirometry Monitoring has resulted in increased confidence of patient and their family in Self Care Management of respiratory ailments
3. To reduce the chances of infection of Covid19 for high risk patients - home spirometry could prove as an effective tool as long as patient training, ease of technology and remote video assistance by a trained technician is provided

POSTER

Title: Radiological and functional assessment in moderate to severe Covid 19 patients post recovery

Name of Presenter: **AAKANSHA SARDA**

Authors (or Co-authors): **DR.ANIL SONTAKKE, DR. B. O. TAYADE, DR. SAMRUDDHI TAYADE**

Institution/Author Organization: **NKPSIMS, LATA MANGESHKAR HOSPITAL, NAGPUR**

Introduction:

Coronavirus disease 2019 is caused by a novel coronavirus known as severe acute respiratory syndrome coronavirus-2 (SARS COV-2). The sequelae of Sars Cov 2 on pulmonary function and the associated radiological implications have not been studied in depth, thus many aspects are not understood. Objective: To assess the functional status and radiological findings in moderate to severe Covid 19 patients post recovery by using the 6MWT, PFT, DLCO and HRCT thorax respectively.

Methodology:

A prospective study in moderate to severe Covid 19 patients post recovery was conducted where the patients were subjected to 6MWT, PFT, DLCO and HRCT thorax and the resulting data was analyzed.

FINDINGS:

20 patients participated. In majority of these Restriction was seen and six minute walk distance was impaired and FVC, TLCO was reduced. In most of them fibrosis was seen and Ground glass opacities were regressed in a few on HRCT thorax.

IMPLICATION:

As functional and radiological impairment is seen in majority of the patients there is a need to conduct a randomized trial on the role of anti fibrotics.

Title: Evaluation of lung function in post covid 19 patients at one month of recovery

Name of Presenter: **Dr. Aparna S Nirmal**

Authors (or Co-authors): **Dr Rajesh V, Dr Jolsana augustine, Dr Divya R, Dr Melcy Cleetus, Dr Fathima KH**

Institution/Author Organization: **Department of Pulmonary Medicine, Rajagiri Hospital, Aluva, Kochi, Kerala**

Background

COVID-19 pandemic has become the worst public-health crisis in a century. Recovery of lung function to baseline after covid-19 may take weeks, specially so in those with more severe disease. This study attempts to analyse the lung function status at 1 month of recovery after Covid-19 in those patients with no known background lung disease.

Aims /Objectives

1.To measure the forced vital capacity (FVC) at one month of covid-19 recovery 2.To measure the diffusion capacity (DLCO) at one month of covid-19 recovery

Methodology

Patients with no known respiratory disease prior to covid 19 were selected. Lung function was analysed with chest radiograph, spirometry and diffusion capacity between day 35-40 of hospital discharge after recovery from covid-19. Results were expressed as percentage predicted.

Results were also categorised based on Covid-19 severity (Category A, B and C). Results 24 patients were evaluated. Spirometry revealed restrictive ventilatory defect in 15 out of 24 subjects. Mean FVC of patients was 58.2% +/- 5.4%. 19 patients had low diffusion

capacity, the mean value being 55.4% +/- 4.8%. Patients with category C disease had more severe impairment of lung function.

Conclusion

A substantial proportion of Covid 19 patients have persistent and new onset lung function abnormalities at 1 month of recovery.

Title: Follow up of lung functions of kyphoscoliosis patients after correction surgery

Name of Presenter: **ARUN M**

Authors (or Co-authors): **Dr N T Awad**

Institution/Author Organization: **Lokmanya Tilak General Hospital**

6 months follow up of lung functions of kyphoscoliosis patients after correction surgery

Aims

1.To study change in lung functions over 6 months in kyphoscoliosis patients after correction surgery. 2.To compare association between lung functions and clinical symptoms post surgery Introduction Kyphoscoliosis is defined as a deformity of the spine involving both lateral displacement (scoliosis) and anteroposterior angulation (kyphosis) commonly detected on CXR . It affects about 1 in 1000 of the population but only 10% of the cases present with significant clinical symptoms. Kyphoscoliosis (KS) is characterized by diminished chest wall compliance and impaired respiratory mechanics, leading to progressive hypoventilation, hypercapnia and chronic respiratory failure (CRF)¹ .The condition is associated with restrictive airway disease and reduced vital capacity. The severity of KS is judged by the Cobb angle. In this study we aim to study the change in Forced vital capacity of patients and effect of correction surgery on respiratory mechanics in kyphoscoliosis patients after 6 months of surgical correction.

Methodology

5 young patients of kyphoscoliosis who underwent correction surgery in tertiary care centre were included in the study. Preoperative FVC and cobb's angle were noted.All these patients went surgical correction and above parameters were repeated at the end of 6 months. Both these values are compared.

Results

At the end of 6 months of surgery there was varying results in FVC among individual patients.3 patients shown an average increase of 170ml and 2 patients shown decrease of

120ml in FVC. Lung functions improved in patients who are clinically less symptomatic while deteriorated in patients with more clinical symptoms

Title: Impact of pulmonary rehabilitation on lung function, exercise capacity and Health-Related Quality of life in post-tuberculosis sequelae patients

Name of Presenter: **Krishna Chaitanya Bolla**

Authors (or Co-authors): **Meenakshi Narasimhan, Aruna Shanmuganathan**

Institution/Author Organization: **Chettinad Hospital And Research Institute**

Introduction:

Pulmonary rehabilitation (PR) as a multidisciplinary and comprehensive intervention has emerged as a standard of care in several chronic respiratory diseases such as COPD, Bronchiectasis and ILD. However, evidence for role of PR in post-tuberculosis(pTB) sequelae patients is still mounting. Hence, we aimed to see effect of PR on lung function, health-related quality of life (HQoL) and exercise capacity in pTB patients.

Methods:

A prospective follow-up study, 60 patients with pulmonary tuberculosis sequelae were enrolled in a 12-weeks PR program. Spirometry, Six-Minutes-Walking-Distance(6MWD) and HQoL with Saint Georges Respiratory Questionnaire(SGRQ) were recorded and analyzed at baseline, end of the PR and three months follow-up.

Results:

Out of 60 patients, 58 completed PR program and 53 were followed up after 3 months. No significant difference was observed in spirometric parameters at either of the intervals following PR. However, both SGRQ and 6MWD showed significant improvement not only at the end of PR, but also at 3 months follow-up.

Conclusion:

PR is feasible and effective in previously treated pulmonary tuberculosis patients. Hence, implementation of PR in post-tuberculosis sequelae patients is necessary to improve the respiratory outcome with regards to exercise tolerance and quality of life.

Title: A RETROSPECTIVE STUDY : DIFFERENCE IN FENO VALUES BETWEEN ASTHMA AND COPD PATIENTS

Name of Presenter: **Dr.S.Muthulakshmi**

Authors (or Co-authors): **Dr. K.Anupama**

murthy

Institution/Author Organization: **PSG INSTITUTE OF MEDICAL SCIENCE & RESEARCH**

INTRODUCTION:

FeNO measurements have been considered a surrogate for eosinophilic airway inflammation, especially in asthma. FeNO levels in COPD are conflictual, but it seems that smoking habits and disease severity are the most important factors influencing exhaled NO levels in these patients.

AIM:

1. To determine the difference in Fractional exhaled Nitric oxide levels between bronchial asthma and COPD patients.
2. To determine whether FENO can be used as biomarker to predict severity of asthma.

MATERIAL AND METHODS:

We retrospectively evaluated 30 patients with established bronchial asthma and 30 patients with established COPD who attended respiratory medicine OPD between 2019-2020.

RESULTS:

This study showed that there is difference in FENO values between COPD and asthma patients. But no significant correlation between FENO values and COPD patients. The median FENO value among non smokers COPD is high compared to smoker COPD patients. Among asthma patients, FENO shows significant correlation [$P < 0.05$], but it does not correlate with severity of asthma.

CONCLUSION:

FENO is sensitive, reproducible, noninvasive marker which can be used to diagnose allergic phenotype in asthma as well monitor response to treatment.

Title: EVALUATION OF CORRELATION OF SIX MINUTE WALK TEST WITH SPIROMETRIC INDICES IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE PATIENTS IN A TERTIARY CARE HOSPITAL.

Name of Presenter: **Dr PRAJJWAL SARKAR**
 Authors (or Co-authors): **DR (PROF) ATIN DEY, DR SOMNATH BHATTACHARYA**
 Institution/Author Organization: **RGKAR MEDICAL COLLEGE AND HOSPITAL**

Introduction:

Chronic obstructive pulmonary disease(COPD) is a leading cause of morbidity and mortality worldwide that includes an economic and social burden which is both substantial and

increasing.

Aims & Objectives:

To assess the severity of COPD patients based on spirometry and 6 minute walk test and to find correlation between them.

Materials & Methods:

A Tertiary Care Based Cross sectional study where 50 COPD patients were included and evaluated with detailed history taking, clinical examination, spirometry and six minute walk test.

Results & Analysis:

Maximum patients(46%) were in GOLD stage 3, maximum patients (37.78%) walked a distance between 401-500 mts. We found that 6MWD has a positive correlation with post-bronchodilator FEV1 [$r=0.673$, $p<0.001$], FVC [$r=0.585$, $p<0.001$], PEFr [$r=0.554$, $p<0.001$]. We did not find any significant correlation between FEV1/ FVC ratio.

Conclusion:

Therefore, six minute walk test is a reliable tool to assess disease severity in COPD patients. We conclude that six minute walk test can replace spirometry in assessment of severity of COPD, monitor changes of pulmonary function in COPD patients.

Title: ASSESSMENT OF ASTHMA CONTROL USING ASTHMA CONTROL TEST AND ITS CORRELATION WITH SPIROMETRY

Name of Presenter: **DR SRIDHAR**
 Authors (or Co-authors): **DR HEMALATHA**
 Institution/Author Organization: **STANLEY MEDICAL COLLEGE**

INTRODUCTION:

The occurrence of asthma among adults and children are at a rise in this pollution filled era. The treatment of asthma depends on the maintenance of control status and prevention of exacerbations. The treatment physician needs an easy tool to identify the control status of the subjects and Asthma Control Test is one among them.

MATERIAL & METHODOLOGY:

This was a cross sectional study among 150 subjects was conducted over a period of one year. The ACT was administered to assess the control of asthma. Spirometric test was done in patients using a portable spirometer. The results were analysed

RESULTS:

The ACT score categories into

uncontrolled [<20] and controlled [≥ 20] distribution shows that 75(50%) of the subjects shown to be controlled and 75(50%) were uncontrolled asthma. The FEV1% categories among the population shows that 82(54.7%) had Normal $\geq 80\%$ and 68(45.3%) mild obstruction 60-79%. The correlation among the spirometry variables and ACT score shows that FEV1% shows a strong positive correlation (0.82), FEV1 moderate correlation (0.57) and FVC weak positive correlation (0.37) with ACT score. 18(24%) of uncontrolled asthma by ACT showed a normal status by spirometry. The validity measures of ACT score shows that for a score of 20 the sensitivity was 78%, specificity was 83.8%, with a positive predictive value of 85.3% and negative predictive value of 76%.

CONCLUSION:

In the present study 75(50%) were having uncontrolled asthma in accordance with ACT test and 68(45.3%) were having mild obstruction in accordance with spirometry. The ACT showed a sensitivity of 78% and 83.8% specificity. The ACT can be used a reliable tool for assessing the control status of asthma

Title: To study the Pulmonary Function Test In Discharged Covid 19 Patients

Name of Presenter: **Rishi Rana**
 Authors (or Co-authors): **Anand Agrawal, Kamaljeet Singh, Sunaina Kharb, Puneet Singla**
 Institution/Author Organization: **BPS Government Medical College, Khanpur Kalan, Sonipat**

Background:

Coronavirus disease 2019 (COVID-19) is caused by a novel coronavirus, known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). As we battle through this pandemic, the challenging part is to manage COVID-19 sequelae which may vary from fatigue and body aches to lung fibrosis. Lung function damage of patients with COVID-19 in early convalescence phase deserves attention.

Material and method:

The study was conducted in the Department of Respiratory Medicine, BPS GMC, Khanpur, Sonipat by including 35 subjects. The covid 19 patients with CT severity score ≥ 8 were included in the study. Spirometry was done at the time of discharge of the patient. Statistical analysis was done by using SSPS ver 23.

Result:

Out of total 35 patients, 26 were male and 9 were female. The mean age of the subjects

was 49.91 ± 12.36 years. Mean FVC and FEV1 were 2.10 ± 0.79 & 1.93 ± 0.70 litre respectively. 11 (31.4 %) patients had severe restriction, 4 (11.42%) patients had moderately severe restriction, 5 (14.28%) patients had moderate restriction and 3 (8.57%) patients had mild restriction on spirometry.

Conclusion:

A significant proportion of patients surviving the acute illness have impairment in overall functional capacity and health status.

Title: Health at home in COPD patients

Name of Presenter: **Dr Sarang Patil, MD Pulmonary Medicine**

Authors (or Co-authors): -

Institution/Author Organization: **MUHS Nashik**

Introduction:

Chronic obstructive pulmonary disease (COPD) is the leading cause of morbidity and mortality. It is estimated that COPD contributes to almost 5% of deaths globally with around 95% occurring in low and middle income countries. Pulmonary rehabilitation is a proven comprehensive and multidisciplinary therapeutic strategy to improve healthcare related quality of life (HRQoL) and healthcare utilisation in patients with COPD. However, there are multiple barriers to pulmonary rehabilitation, including insufficient capacity, lack of access, patient inconvenience and cost of treatment. Therefore affordable and easily accessible solutions to increase the availability and access to pulmonary rehabilitation are necessary. We at City Hospital conducted a study to examine the feasibility and effectiveness of pulmonary rehabilitation through a telemedicine based homebound, pulmonary rehabilitation program.

Aims and objectives:

To study the effectiveness and feasibility of home-based pulmonary rehabilitation offered through telemedicine and

To study the improvement in quality of life of COPD patient post home-based pulmonary rehabilitation.

Methodology:

We included 25 patients in our study

Duration of study was 12 weeks

Inclusion criteria

1. Patients diagnosed with COPD and on medications
2. Patients with basic knowledge of using smartphone
3. Patients willing to spare 30 minutes per day
4. Patients consenting for the study

Exclusion criteria

1. Patients not consenting for the study
2. Patients with active pulmonary tuberculosis and
3. Patients with recent history of myocardial infarction in past three months

A home-based pulmonary rehabilitation program was designed and involved real-time 12 weeks interactive rehabilitation sessions with a Pulmonologist. Baseline characteristics of 25 participants enrolled in a pilot study were collected between March 2020 to June 2020. Pre-program and post-program assessments were performed. The primary outcome major was changed in quality of life as evaluated by chronic obstructive permanent disease assessment tests (CAT) score. Other outcomes included changes in functional ability depression severity scale as well as utilisation of health care services.

Results:

1. The mean age of participants in a study was 68 years
2. The mean FEV1 predicted was 56.4 ± 11.9
3. About 69% of enrolled patients had advanced COPD defined as gold stage D
4. Home-based pulmonary rehabilitation resulted in clinically and statistically significant improvements in CAT scores (20.7 ± 17.5 , $P < 0.05$)
5. Similarly improvements were noted in patient health questionnaire-9 (PHQ-9) and Duke activity status index (DASI) scores as well as BODE indices
6. A trend towards reduce health care utilisation was observed but was under power to indicate clinical significance
7. Dropout rate was 18% and overall satisfaction score with this new modality was quite high i.e approximately 98%

Conclusion:

So we can conclude by observing that home-based pulmonary rehabilitation was an effective tool for increasing access of COPD patients to pulmonary rehabilitation services and demonstrated improvement in quality of life measures. A low drop-out rate indicates that it can be easily used especially in elderly population if familiarised with the process and technical expertise are made available.

Clinical implications:

Home-based pulmonary rehabilitation offered a potential for convenience and easy accessibility for pulmonary rehabilitation services especially in older population and they didn't seem to be psychologically disconnected from the concept of e-health as

observed by promising results obtained on statistically and clinically significant home-base pulmonary rehabilitation program. Dropout rate was relatively low indicating the feasibility of administrating this program.

Title: EFFECT OF PULMONARY REHABILITATION ON PHYSICAL AND FUNCTIONAL CAPACITY OF PATIENTS WITH COPD –A ONE YEAR FOLLOW UP STUDY

Name of Presenter: **DR. SHAFNA. P**

Authors (or Co-authors): -

Institution/Author Organization: **INSTITUTE OF CHEST DISEASES, GOVERNMENT MEDICAL COLLEGE, KOZHAIKODE 673008**

BACKGROUND AND OBJECTIVES

Pulmonary rehabilitation is counter-stone of COPD management apart from pharmacological measures which has many short-term health benefits. However, the long term subjective and objective effects were not well studied. The aim of this study was to determine the short-term and long-term effect of pulmonary rehabilitation on physical and functional capacity of COPD patients compared with patients receiving only pharmacological care.

METHODOLOGY

The study group included 60 COPD patients newly registered for pulmonary rehabilitation programme with thrice weekly training for 6 weeks followed by continuation of the same at home with regular follow up, and the control group included 60 COPD patients who were receiving only pharmacological care. The subjects were followed up for 1 year and assessed at 6 weeks, 3 months, 6 months and 1 year with 6MWT, spirometry, midarm circumference and SGRQ.

RESULT

Rehabilitation group showed improvement in physical capacity measured by 6MWT (197.01 ± 31 cm) and MAC (0.11 ± 0.07 cm) at 6 weeks, and quality of life measured by SGRQ at 6 months (19.07 total score). Benefits sustained upto 1 year. There was no improvement in lung function.

CONCLUSION

The physical capacity and quality of life of COPD patients were improved significantly after pulmonary rehabilitation and sustained upto 1 year. There was no improvement in lung function.

Title: COMPARISON OF 6 MINUTE WALK DISTANCE WITH SPIROMETRIC CHARACTERISTICS IN OBSTRUCTIVE AND RESTRICTIVE LUNG DISEASES

Name of Presenter: **V. Samanvitha**

Authors (or Co-authors): **C N Prasad, K. Satish Chandra**

Institution/Author Organization: **PRATHIMA INSTITUTE OF MEDICAL SCIENCES**

INTRODUCTION-

The six-minute walk test (6MWT) evaluates the integrated response of respiratory system and neuromuscular skeletal system. Spirometric evaluation has limitation as it is based on patient's effort, machine's efficiency and patience of the technician. Various studies have shown 6MWT as a reliable test for assessing subjects with chronic lung diseases.

MATERIALS AND METHODS-

A total of 111 subjects with chronic lung diseases including obstructive lung diseases (COPD, Bronchial asthma) and restrictive lung diseases (Diffuse parenchymal lung diseases, Post-tubercular fibrosis) were taken into the study. Subjects underwent spirometric evaluation and six-minute walk test. The spirometric characteristics (FEV1, FVC, FEV1/FVC, FEF25-75) were evaluated and subjects categorized based on percentage predicted. The predicted six minute walk distance was calculated based on standard formulae. The percentage predicted for spirometry were compared with percentage predicted values on six-minute walk test among all the diseases and particularly between obstructive and restrictive lung diseases.

RESULTS-

6MWD showed statistically significant correlation ($p < 0.05$) with the parameters of FEV1% predicted, FVC, FEV1/FVC, FEF 25-75 among subjects with restrictive lung diseases. 6MWD showed correlation which was not statistically significant among subjects with obstructive lung diseases.

CONCLUSION-

6MWT is a useful, inexpensive and reliable test in evaluation of obstructive or restrictive lung diseases.

Title: A PROSPECTIVE STUDY ON EXERCISE LIMITATION IN PATIENTS WITH MILD CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN A TERTIARY CARE CENTRE IN TELANGANA

Name of Presenter: **VARAYURI AKHILA**

Authors (or Co-authors): -

Institution/Author Organization: **Osmania**

Medical College

INTRODUCTION

Airflow obstruction even in mild COPD is associated with reduced exercise capacity. The objective of the study is to evaluate, whether there exists any limitation of exercise in cases of mild COPD when compared with age and sex matched controls.

AIMS AND OBJECTIVES

To know whether there is any exercise limitation in mild copd compared to controls

MATERIALS AND METHODS

This is an observational study conducted on 30 cases of mild COPD and compared to 20 controls. Subjects are asked to perform cycle ergometry as per the standardised protocol. Spirometry is performed before and after the test. Inspiratory capacity is measured with spirometry at peak exercise.

RESULTS

Inspiratory capacity is measured before and after exercise. Results showed there is a fall in inspiratory capacity after exercise in cases with mild COPD, there is no significant decrease in inspiratory capacity in controls.

CONCLUSION

There is significant reduction in the inspiratory capacity in cases when compared to controls. Decrease in the inspiratory capacity is due to dynamic hyper inflation resulting in increased end expiratory lung volume leading to exercise limitation.

Title: Assessment of improvement in Exercise tolerance and Dyspnea score with Indacaterol/Glycopyrronium in patients with Chronic Obstructive Pulmonary Disease (COPD)

Name of Presenter: **Dr. VIDYA S**

Authors (or Co-authors): **Dr. V VINOD KUMAR**

Institution/Author Organization: **GOVT. STANLEY MEDICAL COLLEGE**

BACKGROUND:

In COPD patients with persistent symptoms despite monotherapy (LABA or LAMA), GOLD recommends combination of bronchodilators (LABA/LAMA) as a treatment option.

OBJECTIVES:

* To assess improvement in Exercise tolerance, Dyspnea score and change in FEV1 after 1 month of treatment with Indacaterol/ Glycopyrronium (IND/GLY) in COPD patients

METHODOLOGY:

Prospective study of 65 COPD patients belonging to GOLD group D and group B & C with persistent symptoms despite monotherapy. Prior to treatment and 1-month post treatment with once-daily IND/GLY (110 mcg/50 mcg), following parameters were assessed: • Exercise Tolerance – by 6 Minute Walk Test, performed in accordance to the ATS Guidelines, 2002 • Dyspnea score – mMRC grade, CAT score • Pulmonary function – change in FEV1

RESULT:

Data from 65 patients, 45 males (37 smokers & 8 non-smokers) and 20 females, analysed. IND/GLY demonstrated a clinically significant improvement in 6-minute walk distance (mean 68.96 metres, 95% CI: 62.28-75.66) and CAT score (mean 3.4, 95% CI: 2.9-3.9). 20 patients (30.8%) showed 1 grade improvement in mMRC. Mean change from baseline in trough FEV1 was 70.6 ml (95% CI: 56.3-84.9)

CONCLUSION:

Improvements in quality of life and lung function represent the major needs for COPD patients. This study reiterates on the real-life effectiveness of combined long acting bronchodilators in symptomatic COPD patients.

Sleep Disorders

Title: CLINICAL PROFILE OF PATIENTS WITH MODERATE TO SEVERE OBSTRUCTIVE SLEEP APNEA SYNDROME IN A CENTRE FROM SOUTH KERALA

Name of Presenter: **AHAMED RAFAD**

Authors (or Co-authors): **Dr Mathew Ninan ,, Dr P Sukumaran ,, Dr.Beena Thomas, Dr Veni Krishna, Dr J Balachandran**

Institution/Author Organization: **Pushpagiri Institute of Medical Sciences**

INTRODUCTION:

Obstructive sleep apnea syndrome (OSAS), a common but under-recognised sleep-related breathing disorder (SRBD) which is associated with significant morbidity and increased mortality.

AIM-

To assess the clinical profile and co-morbidities of patients with moderate to severe form of OSAS

METHODOLOGY-

Patients included in the study were from a sleep clinic and had symptoms of OSAS or risk factors for significant sleep apnea. They underwent a supervised polysomnography with a portable equipment at home after history taking, relevant clinical evaluation, and pre-requisite workup.

RESULTS-

140 patients were included in the study and 87.9% (123) of the patients were detected to have moderate or severe OSAS (Apnea Hypopnea Index > 15 episodes/hour), 81% (100) of these patients with significant (moderate or severe) sleep apnea were males having a mean age of 47.9 years, mean body mass index of 33.6 kg/m² and an average neck circumference of 41.2 cm. 80% of patients with moderate to severe OSAS were between the ages of 31-60 years. 61.7% and 41% of patients with significant OSAS had hypertension and diabetes respectively. Body mass index and neck circumference had a direct correlation with the severity of OSAS.

CONCLUSION-

Our study on the clinical profile of patients with OSAS shows male predilection, frequent association with obesity and cardiovascular co-morbidities such as hypertension and diabetes.

Title: Prevalence and correlates of restless leg syndrome (RLS) among patients of chronic obstructive pulmonary disease

(COPD): A hospital based cross-sectional study

Name of Presenter: **Jain Anshul**

Authors (or Co-authors): **Gothi Dipti, Patro Mahishmita, Vaidya Sameer, Teotia Aanchal, Sah Ram Babu, Ojha U. C.**

Institution/Author Organization: **ESI PGIMSR, Basaidarapur, New Delhi 110015**

Background-

No studies have been done from India on RLS in COPD patients. Also, very few international studies have evaluated its RLS association with spirometry and daytime hypoxia.

Objective -

To study the frequency of RLS among COPD patients and to investigate various factors associated with presence of RLS in COPD.

Materials and methods -

Out of total 206 patients with stable COPD, 186 patients satisfied inclusion criteria. The diagnosis of RLS was made according to the criteria of the International RLS Study Group (IRS- LSSG). Demographic data (age, gender, body mass index), spirometry and arterial blood gas analysis was evaluated for each patient.

Results -

The prevalence of RLS in COPD was 31.18%. Males (27.4%) had a significantly lower prevalence of RLS compared to females (61.9%), ($\chi^2 = 10.313$, $p = 0.001^*$). The RLS was more commonly associated with insomnia (52.5%) compared non RLS patients (34%), ($\chi^2 = 4.9424$, $p = 0.08$). The prevalence was more in patients with forced expiratory volume (FEV1) % predicted < 50% compared to those with > 50% ($\chi^2 = 0.3319$, $p = 0.85$). Also, RLS was significantly more prevalent among the participants with hypoxemia i.e. PaO₂ < 60 mmHg compared to those with normal PaO₂ (39% vs 23.6%; $\chi^2 = 4.3271$, $p = 0.037^*$). The prevalence of RLS was higher (50%) among those hypercapnia compared to those with normal (27.7%) and lower than normal (32.5%) PaCO₂ though the difference was statistically not significant ($\chi^2 = 4.9424$, $p = 0.08$).

Conclusion -

RLS is frequent in patients of COPD. Higher prevalence of RLS in COPD is possibly due to poorer lung function and hypoxia.

Title: Oxygen Desaturation Index by

Overnight-oximetry and its correlation to Apnea-Hypopnea Index by Polysomnography by patients undergoing sleep study for Obstructive Sleep Apnea (OSA)

Name of Presenter: **Dr Asha Undrajavarapu**

Authors (or Co-authors): **Dr. K.H.Kisku**

Institution/Author Organization: **Pondicherry Institute of Medical Sciences**

INTRODUCTION:

Polysomnography is the gold-standard in diagnosis of OSA. However due to high cost and limited availability, this is difficult to access and often delayed. To evaluate the reliability of overnight-oximetry as a screening tool for OSA diagnosis.

AIM:

To study sensitivity, specificity, Positive predictive value (PPV) and negative predictive value (NPV) of overnight-oximetry in the diagnosis of OSA as defined by Level-1 Polysomnography.

METHODOLOGY:

All adults suspected of OSA underwent overnight-oximetry (at home using the Prince-100H wrist pulse oximeter) and subsequent Polysomnography (Alice-5 polysomnography system), and were studied prospectively.

RESULTS:

Among 67 patients who had undergone both Oximetry and PSG, 24 (35.82%) had normal oximetry, 20 (29.85%) had moderate and 5 (7.46%) had severe OSA. 7.4% of patients with normal oximetry had a normal PSG. Overall sensitivity, specificity, PPV & NPV of ODI in identifying OSA were 93%, 100%, 100% and 55% respectively. Sensitivity, specificity, PPV & NPV of ODI in diagnosing moderate-to-severe OSA were 98.1%, 69.2%, 93% and 90% respectively. Strong correlation was found between ODI (Oximetry) and AHI (PSG) [$r = 0.7022$, $p = .0001$].

CONCLUSION:

Overnight oximetry provides satisfactory diagnostic performance in detecting moderate and severe OSA; However, a normal ODI does not rule out OSA, and a PSG is required for diagnosis.

Title: COMPARISON OF VARIOUS PRETEST PROBABILITY SCORES IN OBSTRUCTIVE SLEEP APNEA SYNDROME

Name of Presenter: **Dr. Gautam Bharat**

Sarawade

Authors (or Co-authors): **Topiwala National medical college and BYL CH. Hospital, Mumbai**

Institution/Author Organization: **Dr. Ketaki Utpat , Dr. Unnati Desai , Dr. J. M. Joshi, Dr. R. N. Bharmal**

Introduction

OSAS is characterized by repetitive upper airway collapsibility, airflow obstruction and resultant arousals. Pretest probability scores like BERLIN, SACS, STOPBANG, APNEIC, 4VT can enable to stratify the risk for the development of OSAS.

Aim

To compare various pretest probability scores in OSAS

Methodology

This was prospective observational study conducted at tertiary care hospital. The study included patients presenting with history suggestive of OSAS.

Result

Mean age was 50.4 years with M:F of 1.6:1. SACS,APNEIC,STOPBANG,BERLIN,4VT and ESS classified 70,90,93,93,49,87 patients respectively as high risk of OSA. Among 93 patients diagnosed by polysomnography 23 mild, 24 moderate and 46 had severe OSAS. The sensitivity, specificity, PPV and NPV were calculated according to PSG-based AHI severity. For Mild OSAS, sensitivity and specificity were higher for STOPBANG and BERLIN. For Moderate OSAS sensitivity of SACS,STOPBANG,BERLIN,4-VT were 25%,23%,51%,24% respectively and specificity were 80%,66%,55%,42% respectively. For Severe OSAS, sensitivity of SACS,STOPBANG,BERLIN,4-VT were 54%,46%,48%,59% respectively and specificity were 70%,66%,85%,66% respectively. For mild OSAS,STOPBANG has highest PPV of 91% and 4-VT has highest NPV of 45%. For Moderate and severe OSAS the PPV is >50% in all scores and 4-VT has NPV >50%.

Conclusions

Our study showed that various pretest probability questionnaires are useful screening tools.

Title: A STUDY OF SLEEP PROFILE IN POST ICU SURVIVORS OF ACUTE RESPIRATORY DISTRESS SYNDROME

Name of Presenter: **JUVVA KISHAN SRIKANTH**
Authors (or Co-authors): **NITESH GUPTA, PRANAV ISH, S CHAKRABARTI**

Institution/Author Organization:

SAFDARJUNG HOSPITAL, NEW DELHI

Introduction and Aims:

To determine the profile of sleep disorders among ARDS survivors in early (less than 7 days) and late period (more than 6 weeks) after discharge from Intensive Care Unit (ICU) on the basis of polysomnography (PSG).

Materials and Methods:

In this prospective observational study, consecutive ARDS patients discharged from the ICU underwent evaluation with Insomnia severity index (ISI), Richards–Campbell Sleep Questionnaire (RCSQ), Epworth sleepiness scale (ESS), Pittsburgh Sleep Quality Index (PSQI) and over night polysomnography (Level 1) at two time points after ICU stay (less than 7 days and more than 6 weeks). Patients having one or more of the following characteristics were classified as having abnormal sleep: ISI>15, ESS >10, PSQI >5, apnea–hypopnea index (AHI) ≥5.

Results:

Thirty patients (median age of 33 [21–59] years) were included in the study. The median duration of stay in the ICU and IMV was 13 and 10 days respectively. The overall sleep efficiency (median 59%) was poor. The determined sleep disorders in early period (less than 7 days) after ICU stay are Clinical insomnia (ISI score 15-21), Sleep Disordered Breathing (AHI>5), low sleep quality and altered sleep architecture (Increased duration of N1, decreased N3 and REM sleep). 18 out of 30(60 %) patients had one of the above mentioned sleep disorders. After 6 weeks, SDB disappeared but Clinical Insomnia, low sleep quality persisted (based on PSG and PSQI). Risk factors for poor sleep quality after ICU stay (based on logistic regression analysis) include duration of ICU stay more than 10 Days, IMV more than 7 Days, Fentanyl use more than 7 mg and sedatives use more than 7 days.

Conclusion:

There is high prevalence of sleep disorders among ARDS survivors, insomnia is most common among them. SDB after critical illness is transient and will improve with time with out any intervention

Title: A NEW APPROACH FOR ASSESMENT OF SLEEPINESS AND PREDICTIVITY OF OBSTRUCTIVE SLEEP APNEA IN DRIVERS

Name of Presenter: **Dr. MANGU DEVI PRIYANKA**

Authors (or Co-authors): -

Institution/Author Organization: **KATURI**

MEDICAL COLLEGE**Background:**

Falling asleep behind the wheel is one of the most relevant consequences of obstructive sleep apnea (OSA). We created a new screening questionnaire, named Driver Sleepiness Score (DSS), aiming to assess sleepiness in drivers with suspected OSA.

Aims:

The aim was to evaluate sleepiness in drivers with a suspicion of OSA by the DSS to assess its correlation with the apnea hypopnea index (AHI), oxygen desaturation index (ODI). We also aimed to assess the diagnostic accuracy of DSS for three cutoffs of AHI 5,15,30 which allow stratification of severity of OSA

Methodology:

30 driving patients at risk for OSA participated in study. DSS and the Epworth Sleepiness Scale (ESS) were administered Results: The DSS showed higher accuracy in screening patients with mild and moderate OSA whereas ESS showed higher accuracy in screening with severe OSA . A DSS score ≥ 7 is the optimal cutoff for distinguishing true positives from false positives for the presence of OSA and for its different severity levels. The administration of both questionnaires increases accuracy for detection of all OSA severity levels.

Conclusions:

If validated, DSS may qualify as new screening tool specifically for drivers with the suspicion of having OSA, in combination with the ESS

Title: How doctors sleep during the COVID-19 pandemic: A survey

Name of Presenter: **NIMIT KHARA**

Authors (or Co-authors): **Darpan Gandhi**

Institution/Author Organization: **PS Medical College, Karamsad**

Background:

Sleep deprivation is known amongst doctors and COVID-19 pandemic may make it worse. Objective: To observe the effects of COVID-19 pandemic on sleep of doctors.

Method:

A survey on Google Forms was circulated through WhatsApp for voluntary participation.

Results:

304 responses from doctors of various specialties, cadres and background showed that 52% were involved in direct care of COVID-19 patients. 55.8% doctors reported

change in sleep pattern and 37.2% reported reduced duration of sleep. More than 50% of them slept for less than 7 hours a day since the beginning of pandemic. 37% had difficulty falling asleep and maintaining sleep. 30% had difficulty in concentration and functioning during day-time. Non-refreshing sleep was experienced by 36.3% and 18.8% had recollected having COVID-19 related dreams. 33% doctors' last thought before sleep and first thought after waking up were about COVID-19. 36% doctors looked for information about COVID-19 before going to sleep and immediately after waking up. More than 60% doctors started meditation, exercise, yoga or relaxation techniques for getting better sleep.

Conclusion:

A further decline in the duration and quality of sleep due to the pandemic amongst already sleep-deprived doctors may be detrimental not only to their own health but for patient-care also.

Title: Obstructive Sleep Apnea Risk Assessment in End Stage Renal Disease Patients Undergoing Hemodialysis

Name of Presenter: **Dr. Puneet Komarla Nagendra**

Authors (or Co-authors): **Dr. Linga Devi Thanasekaran, Dr. Shiva Murthy N, Dr. Narendra. U**

Institution/Author Organization: **BACME**

Introduction:

Obstructive sleep apnea(OSA) is associated with significant morbidity. Berlin questionnaire(BQ), STOP-BANG Questionnaire(SBQ), Sleep Apnea Clinical Score(SACS), and Epworth Sleepiness Scale(ESS) are validated to screen OSA. Renal failure inturn may lead to OSA via a variety of mechanisms including alterations in chemoreflex, pharyngeal narrowing due to fluid overload, and accumulation of uremic toxins.

Aim:

To assess the risk of OSA in End-Stage Renal Disease(ESRD) patients undergoing hemodialysis (HD) and to identify the potential predictors of OSA. Methodology: 104 ESRD patients in this cross sectional study (6 months) were assessed for risk of OSA using ESS, BQ, SBQ, SACS. Duration-frequency of HD were assessed to predict the risk of OSA. ESRD in no of Years Mean SBQ score SD < 5 years 3.12 1.51 > 5 years 3.19 1.37 P value 0.84 t 0.1995 df 62 unpaired t test

Results:

Eligible 64 ESRD patients data were analyzed, which showed high risk of OSA in 43.7 % (n=28), 15.6 % (n=10), 3.1 % (n=2), 3.1 % (n=2), of patients according to BQ, SBQ, SACS, ESS respectively with a significant increase in risk of OSA with duration and frequency of HD.

Conclusion:

We found that sleep apnea is common in ESRD patients undergoing HD. More aggressive volume removal would achieve a similar outcome to use of CPAP in those with kidney failure with high risk of OSA.

Title: A STUDY OF SLEEP RELATED BREATHING DISORDER PATTERNS IN PATIENTS OF DIFFUSE PARENCHYMAL LUNG DISEASE IN A TERTIARY CARE HOSPITAL

Name of Presenter: **DR. RAHUL GHOSH**

Authors (or Co-authors): **PROF.(DR) SUSMITA KUNDU**

Institution/Author Organization: **R.G. KAR MEDICAL COLLEGE AND HOSPITAL,KOLKATA**

Introduction:

Sleep related breathing disorders(SRBDs) are characterized by abnormal respiratory patterns during sleep. Their association with Diffuse parenchymal lung disease(DPLD)is not well described.

Aims & Objectives:

To understand the prevalence of SRBDs among DPLD patients, the relation of SRBDs, comorbidities and complications with DPLD types and to observe the effects of Non-invasive ventilation(NIV) therapy among these patients.

Materials & Methods:

54 consecutive DPLD patients were evaluated with history taking, clinical and laboratory examination and Polysomnography. SRBD affected DPLD patients were followed up after 6 months to study the effects of NIV therapy.

Results and Analysis:

Majority of patients were between 61-70 years, 72.2% were males and 51.9% had IPF. Sleep-related hypoxemia was the most common SRBD (84.2%) followed by excessive daytime sleepiness(EDS) and snoring. IPF was most strongly associated with SRBDs. There was significant improvement of SRBDs and dyspnea but no improvement in declining forced vital capacity levels with PAP therapy.

Conclusion:

SRBDs are more common in DPLD, and more-so in IPF with Sleep-related hypoxemia being

the most common SRBD. Respiratory failure and Pulmonary hypertension are important complications. NIV is beneficial for SRBDs and dyspnea but does not seem to improve declining lung function in DPLD.

Title: PREVALENCE OF PULMONARY HYPERTENSION IN OBSTRUCTIVE SLEEP APNOEA AND OVERLAP SYNDROME PATIENTS LIVING IN RURAL AND SUB-URBAN AREAS OF NORTH INDIA

Name of Presenter: **DR. SAURABH MISHRA**

Authors (or Co-authors): **PROF. G. N. SRIVASTAVA, DR. RITAMVARA OLI**

Institution/Author Organization: **INSTITUTE OF MEDICAL SCIENCES, BANARAS HINDU UNIVERSITY, VARANSI**

INTRODUCTION:

OSA is a neglected and underdiagnosed disease in rural and sub-urban India. COPD associated with OSA is termed as overlap syndrome. OSA and COPD both causes pulmonary hypertension which further aggravates nocturnal hypoxia.

OBJECTIVES:

To estimate prevalence of PH in OSA and overlap syndrome.

METHODOLOGY:

Patients coming to our OPD with symptoms of OSA were selected by STOP-BANG criteria for PSG. 100 patients with AHI ≥ 5 with symptoms and AHI ≥ 15 without symptoms were taken for PFT and chest X-ray to rule-out COPD. Thereafter, 2D-echo was done to see cardiac changes and assessment of pulmonary artery pressure.

RESULTS:

Out of 100 patients in study group 10% (n=10) had mild, 12% (n=12) had moderate and 78% (n=78) had severe OSA. Overlap syndrome was present in 60% (n=60) of the patients. PH was present in 24% (n=24) of cases, mild (n=10) and moderate (n=10) PH each were 10% and severe (n=4) PH was present in 4% of the cases. Whereas, 36.67% (n=22) of the patients with overlap syndrome had PH and only 5% (n=2) of the cases with OSA had PH.

CONCLUSION:

Nearly one-fourth of the patient with OSA and overlap syndrome have PH. Prevalence of PH is 7 times higher in overlap syndrome than in OSA alone.

===== Poster =====

Title: Evaluation of Obstructive sleep apnea in Chronic obstructive pulmonary disease patients

Name of Presenter: **Dr.A.Shashi Kumar**

Authors (or Co-authors): **Dr.A.Mahilmaran, Dr.A.Sundararajaperumal**

Institution/Author Organization: **Institute of Thoracic Medicine**

Introduction:

In patients with COPD and OSA have a high risk of death and exacerbations if OSA remains untreated. So the purpose of the study was to estimate the frequency of undiagnosed OSA in a population of COPD patients

Aim:

ESTIMATE THE PREVALENCE OF OBSTRUCTIVE SLEEP APNEA IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE.

Methodology:

Sixty patients who were diagnosed as COPD and those who satisfied the inclusion and exclusion criteria were enrolled. Physical parameters, PFT and overnight sleep study performed to the study group, based on the AHI value OSA diagnosed

Results:

Among 60 patients, 22 comes under no OSA, 18 comes under mild OSA, 13 comes under moderate OSA and 7 comes under severe OSA.

Conclusion:

Our study showed that the prevalence of OSA was higher in patients of COPD about 63%. The severity of OSA increased with increasing severity of COPD among the OSA COPD overlap patients.

Title: KNOWLEDGE ATTITUDE AND PRACTICE OF OBSTRUCTIVE SLEEP APNOEA AMONG NONPULMONARY MEDICINE RESIDENT DOCTORS

Name of Presenter: **Dr Amrutha Mohan V**

Authors (or Co-authors): **Dr Thomas George, Dr Muraly C P, Dr O K Mani, Dr Parvathi Rajendran, Dr Elizabeth Mathai**

Institution/Author Organization: **Government Medical College, Thrissur**

BACKGROUND

Obstructive sleep apnea (OSA) is under diagnosed and is associated with metabolic syndrome, cardiovascular risks and depression which causes substantial morbidity[1]. Awareness about OSA among the doctors is crucial for early diagnosis, referral and treatment.

AIM

To analyse the knowledge and attitude of nonpulmonary medicine resident doctors about OSA

METHOD

Participants were given prevalidated questionnaire having 10 knowledge related, 2 attitudinal and 2 practice related questions about OSA

RESULT

Among the residents participated, 65% lack adequate training in undergraduate level about OSA. Only 50% know that polysomnography is the diagnostic tool and only 30% are aware of scoring systems in OSA. 35% of participants are unaware that OSA is a risk factor for hypertension and automobile crashes. 37% screen for OSA in patients preoperatively. 87% of participants consider OSA as an important clinical disorder.

CONCLUSION

There exists a huge knowledge gap about OSA among resident doctors which contributes to under diagnosis of the same. A positive attitude towards it is helpful. Periodic training programmes and changes in medical curriculum to provide adequate emphasis on the subject and inclusion of OSA in the assessment system is essential.

REFERENCE

1. Himanshu W(2020 Sep 15).Obstructive Sleep Apnea (OSA).

Title: A STUDY ON UTILITY OF THE EPWORTH SLEEPINESS SCALE (SSC) IN IDENTIFYING OBSTRUCTIVE SLEEP APNOEA (OSA) IN COMPARISON WITH POLYSOMNOGRAPHY IN ADULT PATIENT WITH SYMPTOMS OF SLEEP DISORDERED BREATHING IN A TERTIARY CARE CENTER

Name of Presenter: **ASHISH RANJAN**

Authors (or Co-authors): **Dr. Suman Khangarot, Dr. Anil Saxena, Dr.shinu A**

Institution/Author Organization: **Government medical college**

Background:

Excessive daytime sleepiness is a key symptom in patient with sleep-breathing disorder and represents a new major public health issue due to its repercussions. The ESS is a simple and validated method, which measures the probability of falling asleep in variety of situation

AIMS & OBJECTIVE:

To study the accuracy of EPWORTH SLEEPINESS SCALE questionnaire in identification of obstructive sleep apnoea in patients with symptoms of sleep disordered breathing in a tertiary care center

MATERIAL & METHODS:

The present study was conducted in Dept. Of respiratory medicine, Govt. medical college, Kota on 70 adult patients who presented with symptoms and underwent Type 2 polysomnography after answering Epworth Sleepiness score in Hindi language

RESULTS:

Epworth Sleepiness scale was found effective in predicting excessive daytime Sleepiness in 60% of patients with ESS score, more than 10 taken as cut off. Mean value of in the study was 10.78. 35.71% of the patients had severe OSA and 30% patients had moderate OSA. Mild OSA was detected in 7.14% patients. Sensitivity of the ESS score >10 in diagnosing OSA was found to be 72.5%. Specificity of the scale was 73.6%

CONCLUSION:

The study concludes that ESS has got good relevance in predicting OSA in patients with sleep disordered breathing

Title: Prevalence of Obstructive Sleep Apnea in Patients of with Chronic Obstructive Pulmonary Disease

Name of Presenter: **Dr Dipanshu Jain**

Authors (or Co-authors): **Dr Anil Saxena, Dr Suman Khangarot**

Institution/Author Organization: **Government Medical College, KOTA**

Introduction-

Obstructive Sleep Apnea (OSA) and chronic obstructive pulmonary disease (COPD) coexist in the so called "Overlap syndrome", a high risk for morbidity and mortality has been reported.

Aims and objectives

1) To investigate objective measures of sleep disordered breathing in patients with COPD 2) To test the hypothesis that COPD is associated with an increased prevalence of OSA Methodology- inclusions criteria Age 40 years or older, COPD confirmed by spirometry, smoke exposure >10 pack years, overnight polysomnography exclusions criteria age <40 years or younger, smoke exposure <10 pack years, history of MI, Angina and Surgeries, other sleep related disordered, psychiatric illnesses Descriptive Analysis patients enrolled 78 Gold severity grading total 59 mild 14 moderate 20 severe 21 very severe 4 AHI >5

in mild case 2 in moderate 19 in severe 21 and in very severe 4 now measured prevalence rate 2.56% , 24.35%,26.92%,5.12% respectively total 58.97% Results - AHI>5 is seen 58.97% of patients with COPD, mild COPD patients has prevalence rate almost equals to OSA in general population as well as younger than moderate to severe COPD all most all patients of severe and very severe COPD had moderate to severe OSA

Conclusions -

OSA is highly prevalent in moderate to severe COPD

Title: THE PREVALENCE OF DIABETES MELLITUS IN OBSTRUCTIVE SLEEP APNEA SYNDROME

Name of Presenter: **Dr Kanmani MK**

Authors (or Co-authors): -

Institution/Author Organization: **TNMC and BYL NAIR CHARITABLE HOSPITAL**

INTRODUCTION

Obstructive Sleep Apnea syndrome (OSAS) is a common and under diagnosed clinical entity. Obesity predisposes to both OSAS and disorders in glucose metabolism. OSAS is associated with impairment of glucose metabolism and predisposes the individual to the development of diabetes mellitus (DM) while DM serves as a risk factor for OSAS. OSAS and type 2 diabetes mellitus (T2DM) are two interacting epidemics both with high prevalence and morbidity.

AIM AND OBJECTIVES

To assess the prevalence of DM in cases of OSAS referred to the outpatient department in a tertiary care hospital.

METHODS

A cross sectional study was conducted at tertiary care hospital. Fifty patients were enrolled in this study with clinical history of loud snoring, excessive day time sleepiness, unrefreshing sleep, witnessed apneas. Validated questionnaires were used for screening and to triage subjects according to the pretest probability score for PSG. The subjects were evaluated with fasting glucose, HbA1c, thyroid function test and fasting lipid profile and supervised overnight polysomnography. Data was analyzed in percentages and mean.

RESULTS

Of the 50 patients enrolled; 33 (66%) patients were men while 17 (34%) were women. Mean age of the study group was 50 years, age range 23-74 years. Mean BMI was 27.6+3.2kg/

m2. Sleep Apnea Clinical Score(SACS) was moderate to severe (>43 points) in all 50(100%) indicating high pretest probability. Although mean Epworth Sleepiness Scale (ESS) was normal, 37(74%) had excessive daytime sleepiness. All 50 patients were diagnosed as cases of OSAS with a positive sleep study (AHI>5). The severity of OSAS was found to be mild in 22 (44%), moderate in 13 (26%) and severe in 15 (30%) patients. Of the 50; 39 (78%) had DM and 11 (22%) did not have DM. The prevalence of DM was 78% in OSAS. Among the DM 18(46%) had mild, 9(23%) moderate and 12 (30%) had severe OSAS.

CONCLUSION:

The findings of our study reveals that DM is highly prevalent in OSA. High prevalence leads to increased severity of OSAS and early detection can halt progression and prevent complications. Both OSAS and DM regardless of whether they are additive, or synergistic are well established to be completely modifiable by lifestyle measures and other specific therapies.

Title: Prevalence and clinical features of REM OSA: a cross-sectional analysis of a hospital based population in south India

Name of Presenter: **NIDHI SUDHAKAR**

Authors (or Co-authors): **Nithya Haridas, Akhilesh Kunoor,Tajik Mohamed Shafi,Asmita Mehta,Tisa Paul**

Institution/Author Organization: **AMRITA INSTITUTE OF MEDICAL SCIENCES**

Background

Usually patients classified based on AHI tend to be considered as mild OSA. When REM AHI/NREM AHI was taken into consideration in the same group,they were found to be of moderate OSA.Thus the prevalence and clinical significance of REM OSA is under defined in the Indian population.

Aim

To estimate the prevalence of REM OSA in patients evaluated for sleep disordered breathing Methodology In this cross-sectional study, we evaluated adults referred for a polysomnogram for suspicion of sleep disordered breathing. REM OSA was defined as overall apnea-hypopnea index (AHI) ≥ 5 with AHIREM/AHINREM > 2 . Clinical & demographic characteristics of the patients were studied Results 157 consecutive adults referred for a polysomnogram for suspicion of SDB were studied. Mean age of study population was 52.71 yrs. Mean BMI of the study population was 30.28.Male : female ratio 132:25. The prevalence of REM OSA was 14%.Mean age of REM OSA was 54.63yrs. Male: Female ratio 18:4.

Mean BMI of REM OSA was 30.6 Mean REM AHI 48.14 and Mean Non REM AHI 9.22

Conclusion

REM-related SDB was more prevalent in men, middle aged and obese individuals with BMI ≥ 30

Title: HYPOXIC BURDEN AND COMORBIDITIES IN OBSTRUCTIVE SLEEP APNEA[OSA]

Name of Presenter: **DR. NITHIN KUMAR REDDY**

Authors (or Co-authors): **DR.UMA M**

Institution/Author Organization: **ST.JOHN'S INSTITUTE OF MEDICAL SCIENCES**

INTRODUCTION

OSA is known to cause sympathetic surge which can lead to complications like Diabetes Mellitus[DM],Systemic Hypertension, Dyslipidemia and Ischemic heart disease[IHD]

OBJECTIVES

To correlate polysomnographic parameters[Percentage time spent below 90 saturation T-90,Mean saturation and Lowest saturation during sleep with prevalence of comorbid illnesses in OSA.

METHODOLOGY

Polysomnographic data of 80 patients with confirmed OSA was analysed to determine the correlation between oxygenation indices[T-90,Mean saturation and Lowest spO₂] and comorbid illnesses.

RESULTS

Of eighty patients,66 % were men, Mean age 49.8 years[± 12.8 SD]. Overall prevalence of comorbid illnesses was 70 %[52 % -Hypertension, Dyslipidemia -51% , DM-25% and IHD 8 %] . There was significant correlation of Systemic Hypertension to T-90 [p value-0.03] and Dyslipidemia to T-90[p value -0.01],Mean saturation [p value 0.01],and lowest spo₂ [p value-0.04].]. Prevalence of DM and IHD had no correlation to any parameters. Overall Prevalence of comorbid illnesses had significant correlation to all the three parameters-T 90[p value-0.016],Mean spo₂[p value-0.03] and lowest spo₂[p value-0.018]

CONCLUSION

Hypoxic burden correlated with prevalence of comorbid illnesses and evidence was strong in favour of Dyslipidemia followed by Systemic Hypertension.

Title: ASSESSMENT OF DEPRESSION ,ANXIETY AND SLEEP DISTURBANCE IN COVID -19 PATIENTS AT TERTIARY CARE CENTRE OF NORTH INDIA

Name of Presenter: **DR PRASHANT YADAV**

Authors (or Co-authors): **DR ADESH KUMAR , DR RAMAKNT YADAV, DR ASHISH GUPTA, DR ADITYA GAUTAM.**

Institution/Author Organization: **UP UNIVERSITY OF MEDICAL SCIENCES, SAIFAI, ETAWAH, UTTAR PRADESH**

Background -

The novel corona virus pneumonia outbreak in Wuhan, China in December 2019 and disseminated quickly throughout the globe. In recent available literature, most of the studies were done to estimate the burden of psychiatric problems among general population due to this pandemic.

Aim & Objective:

This study was planned to assess depression, anxiety and sleep disturbance among Corona Virus Disease -2019 (COVID-19) patients.

Material and method:

A hospital based cross sectional study was done from June 2020 to August 2020 in 100 COVID-19 patients. Assessment of depression, anxiety and sleep disturbance were done by Patient Health Questionnaire -9 scale, Generalized Anxiety Disorder -7 scale and Pittsburg Sleep quality Index respectively.

Results:

This study reveals that depression was in 27%, anxiety in 67% and sleep disturbance was in 62% among all the patients. Depression and anxiety were found significantly associated with presence of comorbidity and severity of illness ($P < 0.05$). The association of sleep disturbance with severity of illness was also found statistically significant ($p < 0.05$).

Conclusion:

The risk of psychological stress is high in COVID -19 patients. Therefore in this present pandemic situation it is more important to identify these psychological problem among COVID -19 patients so that better care and timely interventions can be done in respect to psychological issues.

Title: STUDY OF QUALITY AND PATTERN OF SLEEP IN COPD PATIENTS AND ITS CORRELATION WITH SEVERITY OF DISEASE

Name of Presenter: **Dr Prateek Agrawal**

Authors (or Co-authors): **Dr Girija Nair, Dr Abhay Uppe**

Institution/Author Organization: **DR DY PATIL**

MEDICAL COLLEGE, NERUL, NAVI MUMBAI

Aims and Objective:

- 1) Identifying the various stages of sleep in COPD patients
- 2) Correlating severity and presence of sleep disordered breathing with disease severity

Materials and Method:

SAMPLE SIZE - At least 50 cases of known stable or newly diagnosed COPD on spirometry with or without complaints of changes in sleep pattern or quality.

Detailed clinical history including the symptoms, occupation and associated risk factors history was taken.

The patients underwent polysomnography using ALICE 6 machine in the sleep lab.

The various stages of sleep including REM and stages of NREM were identified and were classified using AASM criteria.

Observation -

Patients with COPD had reduced REM sleep. 70 % patients had REM sleep of 2% or less of total sleep.

Stage N3 was increased, on an average 80 % of patients had 50% of stage N3 (of total sleep)

The quality and pattern of sleep are altered in COPD patients. Sleep latency (time taken to fall asleep) was increased in patients with all grades of COPD obstruction.

Most patients did not have or had minimal REM sleep, and went straight from wakefulness to NREM.

Conclusion -

Distortion of sleep structure may aggravate depression, anxiety, loss of memory, difficulty concentrating already present in COPD patients, therefore treatment of sleep disorders in COPD patient may help in alleviating these symptoms.

Title: QUALITY OF SLEEP AND DAYTIME SLEEPINESS IN COPD AND ASTHMA

Name of Presenter: **DR RAHUL**

Authors (or Co-authors): **DR NITIN GOEL, DR RAJ KUMAR**

Institution/Author Organization: **VALLABH BHAI PATEL CHEST INSTITUTE**

Introduction:

Nocturnal symptoms are common and important in both asthma and COPD.

Objective:

To compare sleep quality and daytime sleepiness in asthma and COPD and to explore its relation to diseases' characteristics.

Methods:

In this cross-sectional study, we examined 269 diagnosed with Asthma and COPD at Vallabhshai Patel Chest Institute Delhi. All patients completed PSQI and ESS.

Results:

Study included 149 patients with asthma, 120 patients with COPD, and 120 healthy controls. Lung function parameters were better in asthma as compared with copd.

The mean PSQI score in Asthma was, whereas, in COPD was (5.10 ± 2.25) and the difference between the two was statistically significant indicating that Asthma patients have a better sleep quality than COPD patients and also Control group had better sleep quality than Asthma and COPD ($p < 0.001$)

The mean ESS was 3.07 ± 2.72 in Asthma and 5.05 ± 2.48 in COPD and statistically significant ($p < 0.001$) that implies daytime sleepiness was more common in COPD as compared to Asthma.

CONCLUSION

uncontrolled asthma and COPD groups B and C and D have reduced sleep quality. Daytime sleepiness was more common in COPD as compared to Asthma.

Title: Modes of ventilation in treatment of OSAS

Name of Presenter: **Dr Sarang Patil MD**

Authors (or Co-authors): -

Institution/Author Organization: **MUHS Nashik**

Background:

Long term compliance is generally suboptimal in the treatment of obstructive sleep apnea syndrome (OSAS)

Objectives:

Efficacy and adherence of CPAP and BiPAP was compared in patients diagnosed with moderate-to-severe OSAS.

Methodology:

After diagnostic polysomnography (PSG) and titration in 20 patients, patients were treated with CPAP and BiPAP for 8 weeks. Compliance and leakage were analysed night by night. Results: The reduction in AHI and ESS score was more in patients on BiPAP compared to patients on CPAP. Leakage time was also lesser with BiPAP compared to CPAP Compliance and patient comfort was good with BiPAP compared to CPAP

Conclusion:

Treatment efficacy and adherence was better with BiPAP. Also there was a trend of lesser leakage with BiPAP therapy. Patients preferred BiPAP over CPAP

Title: To determine the existence and pattern of sleep related breathing disorders in diagnosed patients of Bronchial Asthma

Name of Presenter: **Dr Saroj Meena**

Authors (or Co-authors): **Dr. Rajnish Gupta, Dr. MM Puri**

Institution/Author Organization: **National Institute of TB and Respiratory Diseases**

Background and Objectives:

Asthma and Obstructive Sleep Apnea are common prevalent diseases and both can co-exist to result in an overlap syndrome, where a bidirectional relationship can adversely affect each other. The aim of this study is to determine the existence, prevalence, and pattern of sleep-related breathing disorders in patients with Bronchial Asthma.

Methodology:

This is a prospective observational study, conducted at a tertiary care Institute, in diagnosed cases of Bronchial Asthma with proven bronchodilator reversibility, above 18 years of age. Subjective assessment of sleepiness was done using the Epworth Sleepiness Scale (ESS) and all subjects underwent overnight polysomnography (PSG) in a designated sleep laboratory.

Results:

A total of 30 patients were enrolled between September 2018 till April 2019, among them 63%(19/30) had OSA and 10%(3/30) had Nocturnal Oxygen Desaturation while none had sleep hypoventilation. The majority (57%) of the patients were sleep asymptomatic. Patients with OSA had a higher BMI, co-morbid Allergic Rhinitis, severe Bronchial Asthma and a worse FEV1% predicted. Conclusion: The study shows a high prevalence of OSA in Bronchial Asthma patients. Hence asthma patients who have poor control of asthma symptoms should be evaluated for OSA.

Keywords:

OSA, Bronchial Asthma, ESS, PSG, Nocturnal oxygen desaturation.

Title: A STUDY ON THE RELATIONSHIP BETWEEN THE MALLAMPATI SCORING SYSTEM , THE BERLIN QUESTIONNAIRE , AND EPWORTH SLEEPINESS SCALE IN ADULT PATIENTS WITH SYMPTOMS OF

SLEEP DISORDERED BREATHING IN A TERTIARY CARE CENTRE

Name of Presenter: **Dr SATYAM AGARWAL**

Authors (or Co-authors): **DR ANIL SAXENA,DR NEERAJ KUMAR NAGAR**

Institution/Author Organization: **GMC KOTA**

INTRODUCTION

Obstructive sleep apnoea(OSA), a type of sleep disordered breathing, is characterized by frequent episodes of upper airway collapse during sleep, causing recurrent arousals, intermittent hypoxaemia, sleep fragmentation Two instruments currently used as prescreening tools are the Berlin Sleep Questionnaire (BSQ) and the Epworth Sleepiness Scale (ESS). A third instrument, which is controversial in its relationship to OSA, is the Mallampati scoring system (MSS).

OBJECTIVES

To study the Relationship between the Mallampati scoring System (MSS) ,The Berlin Questionnaire (BSQ) , and the Epworth sleepiness scale (ESS) in adult patients with symptoms of sleep disordered breathing

METHODOLOGY

This present study will be conducted on 100 adult patients who presented with symptoms of Sleep Disordered Breathing and underwent Type 2 Polysomnography and asked to complete BSQ and ESS score and were assessed using the MSS through direct visual examination of the oral cavity. Results ESS score >10 has sensitivity 78.46% ,Specificity 82.86% ,MSS score >2 has sensitivity 84.13 % and Specificity 59.46 % , And MSS>2 and BSQ>=2 has sensitivity 90.20 % and Specificity 70.83 % , in predicting OSA.

Conclusion

Epworth Sleepiness Scale, MSS score and Berlin Questionnaire has good utility in predicting the presence of sleep related breathing disorder.

Title: Comparison of cardiovascular parameters in COPD patients with and without sleep related breathing disorders

Name of Presenter: **Dr. Vipul Prakash**

Authors (or Co-authors): **Dr Mayank Mishra, Prof Ravi Gupta, Dr Lokesh Saini, Prof. Girish Sindhwani, Dr Ruchi Dua, Dr Prakhar Sharma, Dr Barun Kumar**

Institution/Author Organization: **AIIMS, Rishikesh**

Introduction-

COPD and sleep related breathing disorders(SRBDS) both are associated with

hypoxemia and are known to adversely affect cardiovascular system(CVS). Their cumulative effect on CVS should be more severe. Aim-To compare cardiovascular parameters amongst COPD patients with and without sleep related breathing disorder.

Methodology-

Clinically stable 30 COPD patients were included in study after applying inclusion and exclusion criteria. All COPD patients did undergo level 1 attended poly-somnography (PSG), 2D echo, pre and post sleep ABG and PFT. Patients were divided into two groups based on whether they had SRBD or not and into subgroups based on severity of SRBDs and compared with respect to cardiovascular and other studied parameters. Results- 1)Sleep efficiency in COPD patients was subnormal 2)Sleep related hypoxemia was not found in any of the patient. 3) OSA was the only SRBD found 4)RVSP (Right ventricular systolic pressure) which is a surrogate of pulmonary hypertension, was significantly higher in SRBD group. 5)Time spent below SPO2 <90% and minimum SPO2 during sleep was significantly higher in SRBD group however baseline SPO2 was comparable 6) On subgroup analysis SRBD was found to be prevalent in COPD patients with all BMI groups.

Conclusion-

COPD-OSA overlap is associated with increased risk of pulmonary hypertension.

Title: ASSESSMENT OF RESPIRATORY HEALTH IN FLOURMILL WORKERS

Name of Presenter: **AMAL RAJ**

Authors (or Co-authors): **TUSHAR SAHASRABUDHE**

Institution/Author Organization: **Dr. D.Y. Patil Medical college, Pune, Maharashtra**

Background:

Flour mill workers are exposed to variety of organic dusts, generated during the grinding process, making them susceptible to respiratory illness. We therefore assessed the respiratory health of flour mill workers by clinical, radiological and functional methods.

Materials and methods:

Total 100 flour mill workers with minimum work exposure of 4 years were enrolled in this cross sectional study. Their worksite was inspected for dust density and surroundings. A study specific validated questionnaire was used to assess the history, symptomatology and quality of life. The respiratory health was assessed by clinical examination, Chest X-ray and high resolution CT scan of thorax. Lung function was assessed using six minute walk test and spirometry.

Results:

10/100 had pre-existing Asthma/ COPD and they were using inhalers. 54/100 subjects had frequent cough and 24/100 had exertional dyspnoea. Spirometry revealed airway obstruction in 20 participants (12 reversible and 8 irreversible), CT scan showed Interstitial Lung disease in 6 participants (4 UIP and 2 NSIP pattern). 4/6 ILD desaturated on 6 minute walk test.

Conclusion:

Flour mill workers are at an increased risk of respiratory illness even after adjusting for genetic and environmental factors.

Title: ARE WE HANDLING USED METERED DOSE INHALERS SAFELY? – A CALL FOR ACTION TO ADDRESS AN ENVIRONMENTAL HAZARD

Name of Presenter: **Anas S**

Authors (or Co-authors): **Dr. Beena Thomas, Dr. P. Sukumaran, Dr. Mathew Ninan, Dr. Midhun**

Institution/Author Organization: **Pushpagiri Institute of Medical Sciences, Thiruvalla**

Background:

Metered dose inhalers are preferred treatment

for asthma and chronic obstructive pulmonary disease. The used MDI canisters are to be disposed off in appropriate manner to prevent environmental pollution. In this study, the disposal methods followed by the patients were investigated.

Methodology:

This study was conducted in out-patient setting in department of pulmonary medicine of a tertiary MC leaching hospital in south Kerala. Any patient who was using MDI for at least past one year was enrolled into the study. Exhaustive sampling was done over a period of six months to obtain interviews of 883 patients. Age, gender and educational status of participants, disposal methods they followed for MDI canisters and the source of information for the disposal methods were enquired

Results:

Among the 883 patients who were interviewed, 46% were females and 54% were males and 57% were older persons (age above 60 years). All of them were using MDI for at least past one year. None of them were informed about the correct methods of disposal of used MDI canisters (recycle or incineration or plasma pyrolysis). Majority (79%) of the participants disposed them in the waste bins or into the general waste heaps. 13.7% of the participants bunted them in their courtyard and 7 (0.8%) participants stored them and 3 (0.4%) used to flush down them in the toilet.

Conclusion:

MDI canister disposal is an unaddressed environmental hazard. Take back programs need to be initiated to recycle them or at least to incinerate them safely according to Biomedical Waste Management a Handling Rules. 'Complete the Cycle' scheme in United Kingdom can be a model for a recycling project venture. Incineration is currently possible through IMAGE project (1MA Goes Eco-friendly) which is currently run in Kerala.

Title: To assess the success of a standardized pharmacotherapy based treatment plan for smoking cessation among individuals motivated to quit smoking

Name of Presenter: **Dr Divyanshi Rana**

Authors (or Co-authors): **Dr Lancelot Pinto**

Institution/Author Organization: **PD Hinduja National Hospital and MRC**

AIM-

To determine the success of a standardized

smoking cessation treatment plan at 3 months from initiation of therapy.

METHOD-

A prospective cohort study, conducted at the Pulmonary Medicine Department outpatient clinic and the Health check up OPD at P.D. Hinduja Hospital, Mahim, Mumbai. During follow up visits level of exhaled CO was checked and to determine the adequacy of control of withdrawal symptoms NWS was used. The total duration of the treatment was 3 months following which patients were observed.

Results-

After categorisation of patients into Varenicline+NRT, Varenicline +Bupropion +NRT and NRT alone we found that smoking was completely stopped in 41.2%, reduced to half in 21.6% and relapse occurred in 21.6% of patients.

CONCLUSION-

NRT, may be viewed as attenuating the positive and/or negative reinforcing effects of smoking. NRT that exists for more than two decades has proved to be harmless and efficacious for stopping smoking. Effective treatments pooled with behavioural support and the 5 As framework of smoking cessation should be presented to every smoker who is interested to stop smoking

Title: Clinical Evaluation of Dispersion and Deposition of Exhaled Droplets during Nebulization Using 3-D Gamma Scintigraphy

Name of Presenter: **Gaurav Kumar Jain**

Authors (or Co-authors): **Nilesh Chandra, Rajiv Dhand**

Institution/Author Organization: **Delhi Pharmaceutical Science and Research University**

Background:

During the COVID-19 pandemic, there is apprehension that nebulizer therapy could increase aerosol dispersion and enhance transmission of SARS-CoV-2 infection.

Objectives:

A prospective, clinical study using 3-D gamma scintigraphy to characterize dispersion of radiolabeled exhaled droplets during nebulization.

Methodology:

After obtaining EC approval and written

informed consent, eight healthy subjects were administered nebulized technetium radiolabeled saline (Tc-saline), followed by gargling and instillation of Tc-saline into each nostril. The subjects were divided into a control group (no nebulizer) and 3 other groups who received nebulized saline with a facemask and with and without exhalation filter or a face-shield. We studied dispersion patterns of radiolabeled exhaled droplets during tidal breathing, and induced sneezing and coughing by 3-D gamma imaging (Fig. 1). Data were analyzed by one-way ANOVA and p<0.05 was considered significant.

Results:

3D-images were transformed and data presented as percentage radioactivity (Table 1). During tidal breathing, aerosol dispersion with and without nebulization showed no differences (p>0.05). Sneezing and coughing increased dispersion by 83.1% and 77.3%, respectively, whereas an exhalation filter (64.8-66.0%) or face-shield (72.7-73.5%) over the facemask reduced aerosol dispersion. We observed radioactivity on facemask, exhalation filter, and face-shield; however, there was no deposition in the nebulizer tubing.

Clinical Implication:

Our findings provide reassurance that nebulizer therapy does not increase dispersion of exhaled droplets. Use of an exhalation filter or face-shield with nebulization reduces the spread of respiratory droplets. With appropriate precautions, nebulizers could be safely employed in patients with COVID-19.

Fig. 1 [A] Study protocol for gamma imaging and [B] Representative gamma image showing demarcation into different zones for determination of dispersion of radioactive exhaled droplets

Table 1. Data depicting dispersion of radiolabeled droplets (transformed from 3-D images)

Conditions	RADIOACTIVITY (%)			
No Nebulization (Control)				
Nebulization + Mask	Nebulization + Mask + Filter	Nebulization + Mask + face shield		
Tidal Breathing				
Zone 1	46.15 ± 1.63	53.1 ± 1.27		
	51.65 ± 0.21	51.7 ± 0.28		
Zone 2	47.45 ± 2.19	39.35 ± 1.06		
	38.1 ± 0.0	39.7 ± 0.28		
Zone 3	6.40 ± 0.57	6.6 ± 0.14	6.6 ± 0.42	6.6 ± 0.42
	4.05 ± 0.35			
Gown	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.95 ± 0.21
Mask	NA	0.95 ± 0.07	1.1 ±	

0.0	2.2 ± 0.14			
Filter/ Face-shield	NA	NA	2.55 ± 0.21	
1.4 ± 0.28				
Post Sneezing				
Zone 1	21.75 ± 2.47	37.6 ± 0.57		
	35.75 ± 0.49	46 ± 0.28		
Zone 2	35.75 ± 2.19	40.5 ± 0.28		
	41.0 ± 0.57	32.75 ± 1.6		
Zone 3	37.95 ± 4.31	14.65 ± 0.92		
	12.9 ± 0.85	10.05 ± 1.6		
Gown	4.55 ± 0.35	2.7 ± 0.14	2.35 ± 0.21	
	3.35 ± 0.35			
Mask	NA	4.55 ± 0.07	4.7 ± 0.14	
	4.85 ± 0.21			
Filter/ Face-shield	NA	NA	3.3 ± 0.28	
3.0 ± 0.14				
Post Coughing				
Zone 1	28.95 ± 2.90	41.6 ± 0.42		
	41.65 ± 1.20	42.15 ± 0.64		
Zone 2	40.05 ± 1.63	39.15 ± 0.21		
	39.6 ± 1.98	39.9 ± 1.13		
Zone 3	28.25 ± 1.48	12.65 ± 0.21		
	9.95 ± 1.2	7.7 ± 0.85		
Gown	2.75 ± 0.21	1.6 ± 0.14	1.3 ± 0.14	
	2.7 ± 0.14			
Mask	NA	5.0 ± 0.14	4.7 ± 0.14	3.85 ± 0.07
Filter/ Face-shield	NA	NA	2.8 ± 0.14	
3.7 ± 0.14				

Title: EVALUATION OF THE EFFICACY OF MODIFIED HOME BASED PULMONARY REHABILITATION

Name of Presenter: **Dr. Krishnika Ravichandran**
 Authors (or Co-authors): **Prof. Dr. Aruna Shanmuganathan, Prof. Dr. Meenakshi, Dr. Nisha, Dr. Fathima, Dr. Sahana**
 Institution/Author Organization: **Chettinad Hospital and research institute**

BACKGROUND:

Pulmonary Rehabilitation (PR) is multidisciplinary non-pharmacological evidence based tool to reduce symptoms and improve quality of life in patients with chronic respiratory diseases. COVID 19 has posed challenges in delivery of Hospital based PR. Present study was undertaken as these patients may be exposed to covid19 in hospital settings and community; hence the need to continue PR at home.

AIM:

To evaluate modified pulmonary rehabilitation parameters in patients with chronic respiratory diseases through social media; to identify the barriers in implementing the same.

METHODS:

Prospective interventional study-50 patients enrolled into home based PR. Baseline subjective parameters (SGRQ, Borg, DASS, single breath count, snider match test, 3 minute walk test and flight of stairs) recorded/ reassessed monthly for 3 months using mobile phone.

RESULTS:

Among 50 patients,6 dropped out – lack of accessibility to mobile phones and absence of direct supervision. All subjective parameters showed statistically significant improvement. (p value of SGRQ was 0.0004, borg was 0.0001, single breath count was 0.0001 and for 3 minute walk test - 0.0001.)

CONCLUSION:

Modified home based pulmonary rehabilitation can serve as an alternative to hospital based PR in situations like COVID19 pandemic, where accessibility to hospital services is not possible.

Title: A cross-sectional observational study of cases of acute dyspnoea in chronic silicosis patients to plan better management strategy

Name of Presenter: **Dr Momkesh Bairwa**
 Authors (or Co-authors): **Dr R K Jenaw**
 Institution/Author Organization: **Institute of Respiratory diseases, SMS medical college, Jaipur**

Background:

Silicosis is an occupational lung disease caused by inhalation of dust containing crystalline silica particles of size 0.5-5 microns in diameter. Acute dyspnoea is common occurrence overlapping chronic dyspnoea and sometimes ignored by patient as well as physician. We planned this study to ascertain, study, and analyse causes of acute dyspnoea in such patients.

Aim:

To study causes of acute dyspnoea in chronic silicosis patient for finding out newer and better management strategy.

Methodology:

49 patient of acute dyspnoea in background chronic silicosis patient were thoroughly evaluated for cause of dyspnoea with historical, clinical examination, radiology and required investigations.

Results:

In 49 patient of chronic silicosis with acute dyspnoea recruited till now. The most common cause of dyspnoea found is tuberculosis (45%) followed by pneumothorax (37.5%). Other

Cause were pneumonia (10%), COPD (22.5), Asthma (7.5), other causes

Conclusion:

our study shows that common cause of acute dyspnoea in in background of chronic silicosis patients, is tuberculosis and pneumothorax. The occurrence of tuberculosis may be prevented with preventive chemoprophylaxis. For this we recommend a randomised controlled study.

Title: A COMPARISON AMONG THREE GROUPS OF COVID 19 RTPCR POSITIVE SYMPTOMATIC PATIENTS WITH CLINICAL, HEMATOLOGICAL AND RADIOLOGICAL PARAMETERS.

Name of Presenter: **Dr. Natesh G**

Authors (or Co-authors): **Dr. Sathish Kumar, Dr. V Gangadharan, Dr. Anbumaran**

Institution/Author Organization: **SAVEETHA MEDICAL COLLEGE**

INTRODUCTION:

COVID 19 a pandemic viral disease, first identified in China caused by a novel coronavirus (SARSCov2) has affected nearly 60.6 million people and caused 1.42 million deaths, with India in second position in total number of cases.

AIM:

To Categorise and find out the significant Clinical, hematological and radiological parameters in COVID 19 patients.

METHODOLOGY:

This is a retrospective, observational, comparative study among 70 COVID 19 RTPCR positive, symptomatic patients admitted in Saveetha medical college hospital, Chennai, Tamilnadu. Patients were categorised into three groups based on comorbidities and oxygen dependence. Initial symptoms, hematological (IL6, ESR, CRP, D-DIMER, S.FERRITIN, Total counts) and radiological parameters (Xray, CT thorax) were taken and analysed among groups.

RESULT:

In our study most common symptoms are Fever(84.3%) followed by Breathlessness(55.7%), myalgia(31.4%), dry cough(27.1%), sore throat(24.3%), cough with expectoration(20%), loose stools(12.9%) and loss of taste and smell(11.4%). D-DIMER had significant variation, ESR and CRP had mild variation among groups. X ray and CT thorax had significant variation among groups with CT findings CORDS and CTSS, Consolidation, crazy paving pattern, vascular dilatation having high variation among groups.

CONCLUSION:

Treating Doctors must categorise COVID 19 patients for ease of treatment and emphasis on Radiological parameters with D DIMER to patients requiring O2 support aids in treatment.

Title: THE COMPARISON OF EFFECTIVENESS OF CASE BASED LEARNING WITH CONVENTIONAL TEACHING IN UNDER GRADUATES IN RESPIRATORY MEDICINE DEPARTMENT

Name of Presenter: **Dr. Ratan Kumar**

Authors (or Co-authors): -

Institution/Author Organization: **JKH & LNMC**

INTRODUCTION:

Sound knowledge of the medical subjects with clear understanding of its clinical application is important to create strong foundation of sound clinical practice¹ in medical students. Apart of conventional teaching method efforts are being made to improve the student learning by using various methodologies including case based learning(CBL).

OBJECTIVES:

To introduce case based learning for MBBS students in department of Respiratory medicine. To compare the effectiveness of CBL in Respiratory medicine with conventional learning methods. To access the perception of students regarding case based learning.

MATERIALS AND METHODS:

comparative observational study study was conducted in 110 student MBBS in L N Medical College & Research Centre, Bhopal. In 2 sessions. Total enrolled 110 students were divided into two batches of 55 students each. For post teaching session, questionnaire and feedback paper according to Likert scale for student perception were prepared. Conclusion: It was observed that being student centered interactive teaching learning method, students scored better with CBL than conventional teaching. Feedback response showed that majority of student found very positive to learn by CBL teaching method. CBL method can help students to become lifelong learner, so in judicious combination with conventional teaching it can be fruitful to make more competent Indian medical graduates

Title: Efficacy of Oscillating Positive Expiratory Pressure (OPEP) therapy in patients with Bronchiectasis – A Prospective clinical study

Name of Presenter: **DR CHANDRASEKAR .S**

Authors (or Co-authors): **DR T.P.RAJAGOPAL, DR A.MOHAMED MUSTHAFA**

Institution/Author Organization: **GOVERNMENT MEDICAL COLLEGE, KOZHIIKODE**

INTRODUCTION

Airway clearance techniques are important part of routine care of patients with Bronchiectasis in addition to antibiotics and adequate nutrition. Oscillating positive expiratory pressure therapy has been proposed as an alternative to more conventional chest physiotherapy techniques.

OBJECTIVES

To determine the efficacy of Oscillating Positive Expiratory Pressure (OPEP) Therapy compared with Conventional chest physiotherapy (CCPT) in maintaining respiratory health in patients with Bronchiectasis by measuring the number of pulmonary exacerbations (PEs) requiring antibiotics, Lung functions, quality of daily life activity and healthy status

METHODOLOGY

A Prospective clinical study was conducted in 133 patients after randomly assigning them to perform either OPEP or CCPT for one year.

RESULTS

Out of 133 patients 65 were randomised to OPEP and 68 to CCPT and there were 3 dropouts. There were significant differences between the groups in mean number of PEs (1.77 for OPEP vs 2.23 for CCPT), time to first PE (212 days for OPEP vs 191 days for CCPT) and St George Respiratory Questionnaire (47 for OPEP vs 56 for CCPT). There was no significant difference in lung function improvement.

CONCLUSION

The results of study favours OPEP compared to CCPT in patients with bronchiectasis.

Keywords:

Bronchiectasis, OPEP, CCPT, Pulmonary exacerbation.

Title: PULMONARY CAVITIES – AN ARRAY OF DIVERSE PRESENTATIONS IN 153 PATIENTS IN A TERTIARY CARE HOSPITAL

Name of Presenter: **DR SEJAL B RADIA**

Authors (or Co-authors): -

Institution/Author Organization: **OSMANIA MEDICAL COLLEGE**

INTRODUCTION:

Tuberculosis is the most common cause of pulmonary cavities. However, spectrum of diseases range from acute - chronic infections,

systemic disorders, malignancies.

OBJECTIVES:

To determine the aetiology and evaluate the characteristics of pulmonary cavities

METHODOLOGY:

153 patients with pulmonary cavities radiographically, were evaluated with all the necessary investigations. Definitive diagnosis was obtained and cavity characteristics were described including size, number, location, wall thickness, margins, content, surrounding lesions.

RESULTS:

Out of 153 cavities, Tuberculosis was the most common cause (41.9%) but primary / secondary lung cancers and certain other rare causes like Granulomatosis with Polyangiitis, Pulmonary thromboembolism were also encountered. Most common location of cavities was Right upper lobe (57.5%). The inner/ outer cavity wall margins, thickness ($P < 0.001$), age (mean – 63.80 ± 10.76), smoking history ($P < 0.005$), clubbing & lymphadenopathy ($P < 0.001$) were strongest predictors to differentiate benign vs malignant cavities. Wall thickness $< 5\text{mm}$ was more common in benign, thickness $> 15\text{mm}$ was purely seen in malignancy, cavities with 5-15mm thickness were mixed. Cavity location, content and surrounding lesions aid in identifying certain pathologies.

CONCLUSION:

Malignant cavities are misdiagnosed as TB and vice versa. It's important to be well versed with features of cavities in different pathological conditions, so that the diagnosis can be accurate.

Title: Unilateral lung hypoplasia in adult male :a rare case report

Name of Presenter: **Adil Jokhi**

Authors (or Co-authors): **Dr.DPS SUDAN**

Institution/Author Organization: **SGT UNIVERSITY GURUGRAM**

Introduction :-

Pulmonary hypoplasia of lung is rare congenital condition in that exact cause is unknown. Incidence of this disease is 1-2/12000.

Case report :-

A 18 year old male patient came to sgt hospital with chief complaints of breathlessness on and off since childhood nor aggravated since 2 days cough with expectoration since 2 days and loss of appetite. Patient's thorough clinical examination was done. Patient xray

was suggestive of right sided loss of volume with homogeneous opacity with right sided diaphragm raised. CT was done which was suggestive of hypoplasia of right lung. Echocardiography done which suggestive of normal valves and no other abnormalities with LVEF 55%. Patient was treated with antibiotics and other supportive treatment. And discharged with routine follow up advise.

Discussion :-

Hypoplasia of lung is rare condition and we have to detect it on early stages. Around half of the patient having cardiovascular malformation.

Conclusion :-

Some of patient have silent childhood disease which can only manifest in adulthood of life. Thus people need to aware of this disease and early treatment and early diagnosis.

Title: SCIMITAR SYNDROME: A RARE CASE

Name of Presenter: **Dr. B. AKSHAYA NAGINI**

Authors (or Co-authors): **Dr. Md. Mateenuddin Saleem, Dr. Tanzil Rahman**

Institution/Author Organization: **KAMINENI INSTITUTE OF MEDICAL SCIENCES, NARKETPALLY**

INTRODUCTION:

Scimitar [Hypogenetic Lung] Syndrome is a rare congenital anomaly characterized by anomalous pulmonary venous drainage into inferior vena cava and hypoplasia of right lung and has a variable presentation ranging from an asymptomatic, to symptoms of congestive heart failure and/or respiratory failure. HISTORY: Scimitar syndrome was first described by George Cooper in 1836. It's incidence is estimated to be 1 to 3 in 100,000 births. It has a female predominance with female/male ratio of 2:1.

PRESENTATION:

A 23year old male presented with cough and hemoptysis since 10days. No history of recurrent respiratory infections in the past. DIAGNOSIS: Chest radiograph showed right lung hypoplasia, dextroposition of heart and computed tomography of chest was performed, which showed Scimitar Vein, hypoplastic right lung, hypoplastic right pulmonary artery, dextroposition of heart. Echocardiography was normal.

MANAGEMENT:

Symptomatic treatment in form of cough suppressant and oral ethamsylate was started. Hemoptysis subsided in three days.

COMPLICATIONS:

There were no complications.

LEARNING POINTS:

This case is being presented for its rarity.

Title: Unilateral Pulmonary Hypoplasia: a rare clinical presentation

Name of Presenter: **DR. CARISHMA S**

Authors (or Co-authors): **DR. Suresh Koolwal, DR. Govind Singh Rajawat, DR. Gulab Singh Yadav, DR. Sudhir Katta**

Institution/Author Organization: **Institute of Respiratory Disease, SMS Hospital Jaipur**

INTRODUCTION

Pulmonary Hypoplasia is a bronchopulmonary segment anomaly characterized by decrease in number of size, airways, vessels and alveoli. Incidence of unilateral pulmonary agenesis is approximately 15,000 live births with no gender prevalence.

MATERIALS AND METHODS

A 21 year old female patient presents with fever, diffuse chest pain and productive cough since 7 days. On examination chest expansion was reduced on left side and palpation revealed left side shifted trachea. Resonant percussion was heard on precordial region and dull in left axillary area. Bronchial breath sounds was heard over left axillary and infrascapular region. Radiological evaluation shows complete collapse of left lung with right lung hyperinflation and herniation to contra-lateral side, mediastinal shift to left and narrowing of left pulmonary artery. On FOB, left main bronchus stenosis was found.

RESULTS

A diagnosis of left lung hypoplasia was made. Patient was managed conservatively and advised to report hospital whenever she has respiratory symptoms to prevent further deterioration.

CONCLUSION

Unilateral lung hypoplasia is very rare in adulthood and can present in late adolescent life as an infective pathology when pulmonary function is compensated. Such cases need to be managed to prevent further deterioration of the only functional lung.

Title: A RARE CASE OF PULMONARY HYPERTENSION DUE TO PARTIAL ANOMALOUS PULMONARY VENOUS DRAINAGE

Name of Presenter: **DR. GAYATHRI GOPINATH**

Authors (or Co-authors): **DR. A. MAHILMARAN, DR. A. SUNDARA RAJAPERUMAL**

Institution/Author Organization: **INSTITUTE OF THORACIC MEDICINE, MADRAS MEDICAL COLLEGE**

INTRODUCTION:

Partial anomalous pulmonary venous drainage describes connection of at least one pulmonary vein but not all to systemic venous system or right atrium resulting in left to right shunt. Prevalence is 0.4-0.7%. More common on right side.

CASE REPORT:

A 52 year old male non smoker presented with breathlessness Grade 3 MMRC since 3 months. Associated with dry cough.No h/o fever.On general examination JVP was elevated.SPO2-89%with room air.Systemic examination revealed loud s2.ESM.RS-Bilateral air entry present.CXR-enlarged pulmonary artery.ECG-Right axis deviation.RVH and incomplete RBBB. ECHO RA and RV dilated.Moderate pulmonary hypertension TRPG-55mmHG.TAPSE-12mm. RVD.USG ABDOMEN Mild Ascites.CT chest-cardiomegaly .CTPA-anomalous drainage of left superior pulmonary vein to left brachiocephalic vein.Mild pulmonary hypertension..Started on diuretics and is on regular follow up.

CONCLUSION:

Heart failure due to PAPVD is managed with diuretics,cardiac glycosides after load reduction and beta blockade.This patient is currently managed with diuretics. However definitive treatment of PAPVD is surgery .

Title: MIDDLE LOBE APLASIA : A RARE CASE REPORT

Name of Presenter: **DR. KRUNAL VINODCHANDRA THUMAR**

Authors (or Co-authors): **DR.NIMIT KHARA, DR.YAGNANG VYAS, DR.DHAVAL PRAJAPATI, DR.SATEESH PATEL, DR.RAJIV PALIWAL**

Institution/Author Organization: **DEPARTMENT OF RESPIRATORY MEDICINE, PRAMUKHSWAMI MEDICAL COLLEGE, KARAMSAD.**

INTRODUCTION:

Aplasia of lung is a very uncommon congenital anomaly and it presented in adulthood with an incidental finding on chest radiography. Left side aplasia is more common than right side with longer life expectancy. However our case has right side aplasia.

HISTORY:

Diagnosed as dextrocardia since last 3 years on

chest radiography.

PRESENTATION:

Presented with C/o dry cough and dyspnea.

DIAGNOSIS:

Bronchoscopy S/o two lobes in right lung similar to left lung, Virtual bronchoscopy s/o short blind ending rudimentary right middle lobe bronchus .Chest radiograph S/o reduction in right lung volume with ipsilateral shifting of mediastinum with elevated right hemidiaphragm. CECT Thorax S/o absent oblique fissure with rudimentary right middle lobe bronchus without lung parenchyma or vasculature with left upper lobe crossing midline with hyperinflation, No other vascular abnormality. PFT S/o moderate obstructive abnormality.DLCO and 2D Echo are normal.

MANAGEMENT:

Patient treated with antibiotics for infections and bronchodilators.Surgery needed only for associated congenital anomalies. Prophylactic pneumococcal and influenza vaccinations are recommended.

COMPLICATIONS:

Lung fibrosis due to recurrent chest infection. Right lung aplasia occurs with more severity due to pronounced carina and cardiac malformation.

CLINICAL IMPLICATIONS:

Pulmonary aplasia must be borne in mind in chest radiograph with opaque or partial opaque hemithorax. Cardiac evaluation should be routinely done in every patient with respiratory complaints.

Title: SCIMITAR SYNDROME IN ADULT - A RARE CASE REPORT

Name of Presenter: **DR VITHALA SAI NAVYA**

Authors (or Co-authors): **DR GANAPATHI REDDY, DR MEHABOOB KHAN**

Institution/Author Organization: **GOVERNMENT AND GENERAL CHEST HOSPITAL, ERRAGADDA HYDERABAD TELANGANA**

Introduction

Scimitar syndrome is a rare congenital disease characterized by dextrocardia, hypoplasia of right pulmonary artery, right lung hypoplasia with abnormal connection of right pulmonary veins to IVC-right atrial junction and anomalous systemic arterial supply to right lower lung. Incidence is 1-3 in 100000 live births.

Case report

A 19 year old female presented with cough with expectoration and right sided chest pain since 2 weeks. Chest X ray showed loss of volume on the right and shift of mediastinum and heart to right. A CT chest scan showed hypoplastic right lung and a curvilinear enlarged anomalous right inferior pulmonary vein draining into IVC.

Discussion

Scimitar syndrome comprises about 3–5% of all cases of partial anomalous pulmonary venous connection. Women are more commonly affected (2:1). Adult form of scimitar syndrome is usually asymptomatic. Symptoms If present are fatigue, exertional dyspnea, recurrent chest infections and pulmonary hypertension. Chest X-ray shows the characteristic “Scimitar sign” in almost 70% cases. Diagnosis may be confirmed by CECT chest, CT angiography or MRI angiography. The gold standard for diagnosis confirmation is cardiac catheterization. Asymptomatic adult patients usually do not require any surgical intervention.

Title: Saved by the Ultrasound: A case of mistaken identity

Name of Presenter: **PRAKHAR SHARMA**

Authors (or Co-authors): -

Institution/Author Organization: **AIIMS Rishikesh**

Introduction:

Transthoracic Lung Ultrasound (TUS) has added great armamentarium in field of pulmonary medicine. While it may allow us to make diagnosis and perform guided procedures, we found it useful in Not performing the thoracentesis.

Clinical presentation:

A young female was referred to OPD for management of a loculated left pleural effusion. She had occasional shortness of breath and recurrent rhinorrhoea with frontal headache since past three years. Her past history was insignificant for any illness/ medication. CXR depicted trachea and bronchi deviated to left side with herniation of right lung and homogenous opacity in mid to lower left lung zone.

Diagnosis:

TUS revealed the heart chambers approximating the chest wall. CT thorax and subsequent CTPA identified left lung collapse with non-visualized secondary segments of left lower lobe bronchus and secondary divisions of left main pulmonary artery. Bronchoscopy was performed which revealed absence of left lower lobe bronchus branches and was diagnosed as a case of Left lung lower lobe aplasia.

Management:

Patient was managed for rhinorrhoea with anti-histaminic and non-steroidal nasal spray along with pulmonary rehabilitation.

Clinical Implications:

Pulmonary aplasia is a rare disorder which may be confused with loculated pleural effusion. Blind thoracentesis may be detrimental.

Title: A rare case report of congenital cystic adenomatoid malformation (CCAM) of lung in an Adult

Name of Presenter: **Dr. Prashanthi . R**

Authors (or Co-authors): **Dr. K. Ramesh Kumar , Dr. D. Ranganath**

Institution/Author Organization: **Bhaskar Medical college and general hospital, Hyderabad**

Cystic adenomatoid malformation of the lung is a rare congenital developmental abnormality with unknown etiology or clear genetic association. Usually it is diagnosed on prenatal ultrasound. Commonest presentation in children is progressive respiratory distress. Cystic adenomatoid malformation in adults is very rare. We report here in the case of a 45 year old male complaining of dyspnea and cough with expectoration for last 2 months. The diagnosis was established from CT chest which shows cluster of cystic changes in lingular and posterior basal segments of left lung. The patient was diagnosed with focal cystic adenomatoid malformation and the respiratory tract infection was promptly treated with IV antibiotics and was discharged. On regular follow up, the patient was asymptomatic.

Title: A RAREST AND ATYPICAL OCCURENCE OF MARFAN'S SYNDROME WITH TETRALOGY OF FALLOT IN AN ADULT FEMALE PATIENT WITH BRONCHIECTASIS: A RARE CASE REPORT

Name of Presenter: **PUNEET SINGLA**

Authors (or Co-authors): **ANAND AGARWAL, KAMALJEET SINGH, SUNAINA KHARB, RISHI RANA**

Institution/Author Organization: **BPS GMC FOR WOMEN, KHANPUR, SONIPAT**

INTRODUCTION

Marfan's syndrome is autosomal dominant genetic disorder related to a mutation in fibrillin gene type 1 involving mainly the cardiovascular, ocular, skeletal and pulmonary systems. Almost all adults with Marfan's syndrome have cardiovascular abnormalities.

CASE REPORT

22 years old female patient presented with cough, blood stained sputum and fever for four months. On Physical examination patient was tall, moderately built. Clubbing and cyanosis were present. On skeletal examination, High arched palate, Arm-span higher than height, positive Finger thumb sign, Arachnodactyly, asymmetrical chest, skin striae were present. On auscultation, bilateral vesicular breath sound with coarse crepts and Pansystolic murmur in tricuspid area. Family history of Marfans syndrome was present. Echocardiography showed large VSD with aortic override and severe Pulmonary Stenosis. CECT thorax showed bronchiectatic changes. Periscopy showed mild central arteries stiffness and high normal aortic stiffness.

DISCUSSION

Marfan's syndrome with cardiovascular abnormalities usually have aortic dilatation, aortic regurgitation, aortic aneurysm, mitral valve prolapse, mitral regurgitation etc. Most dreaded complication is acute aortic root dissection. Manifestations usually occur in adulthood. In severe form of Marfans syndrome, known as Infantile Marfans syndrome cardiac failure occurs early life due to severe cardiac anomalies specially large septal defects. In this case report our patient have Marfans syndrome with Tetraogy Of Fallot.

CONCLUSION

Marfans syndrome is a disorder with varied manifestation and genetics. Association of Tetralogy of Fallot with Marfans syndrome is one of the rarest finding.

Title: A RARE CONGENITAL DEVELOPMENTAL LUNG DISORDER WITH A RARE ASSOCIATION

Name of Presenter: **SANGEETHA P**

Authors (or Co-authors): **Dr Subramanian (Professor), Dr.Nalini Jayanthi (Professor and HOD)**

Institution/Author Organization: **SRM MEDICAL COLLEGE HOSPITAL AND RESEARCH CENTER**

INTRODUCTION:

Developmental anomalies of the lung are usually detected in neonatal period and in early childhood. However, some are not encountered until adulthood. As some of these anomalies can be confused with more sinister abnormalities, an understanding of their features is needed. The knowledge of possible associated extra pulmonary developmental anomalies is necessary in evaluation and appropriate management.

HISTORY:

17 year old female presented with complaints of exertional dyspnea for 2 years. No other specific respiratory complaints. No significant past respiratory illness.

PRESENTATION:

Systemic examination of the Respiratory system revealed mediastinal shift to right side, otherwise normal. Cardiovascular system examination revealed mid diastolic murmur in mitral area. Other system examinations were normal.

DIAGNOSIS:

Chest X ray showed mediastinal shift to right, absent right hilar shadow, right lung volume loss, double density sign. CECT chest showed absent left pulmonary artery, collaterals from right subclavian and bronchial arteries, herniation of left lung, On further evaluation, 2D Echocardiogram showed severe mitral stenosis and pulmonary hypertension. Hence, final diagnosis of unilateral absence of right pulmonary artery associated with mitral stenosis was made.

CLINICAL IMPLICATION:

This case of Unilateral pulmonary artery agenesis is presented in view of its rare association with Mitral stenosis which has not been reported so far.

Title: A trio of congenital anomalies: A Rare Combination

Name of Presenter: **Tejas Sood**

Authors (or Co-authors): **Jagdish Rawat, Dev Singh, Anil Kumar, Ritisha Bhatt**

Institution/Author Organization: **Shri Guru Ram Rai Institute of Medical and Health Sciences, Dehradun, Uttarakhand India**

Introduction

Bronchopulmonary sequestration (BPS) is a rare congenital anomaly with aberrant formation of non- communicating segmental lung tissue. Situs inversus is another rare congenital anomaly with transposition of the thoracic and/or abdominal viscera. Pectus excavatum (PE) is the most common anterior chest wall deformity characterized by concave depression of sternum and anterior ribs. Here, we introduce a rare combination of all three anomalies.

CASE REPORT

A 14-year-old female presented with 10 days history of hemoptysis & recurrent chest infections since childhood. Radiographical evaluation was suggestive of dextrocardia

with intra-lobe BPS and pectus excavatum. Celiac trunk supplied the arterial branches to pulmonary sequestration with venous drainage into left inferior pulmonary artery. Cardiac apex was seen towards right side with no vascular anomalies. Haller's index was >3.5 suggestive of pectus excavatum.

Title: RARE CASE OF CONGENITAL CYSTIC ADENOID MALFORMATION WITH PULMONARY HYPOPLASIA

Name of Presenter: **TEJAWAT KUSHAL KUMAR**
 Authors (or Co-authors): **Dr A. PREM KUMAR M.D**

Institution/Author Organization: **Andhra Medical College, Visakhapatnam**

INTRODUCTION:

Congenital cystic lesions of lung are rare. The most common is congenital cystic adenoid malformation. The reported incidence of CCAM ranges around 1 in 35000 live births. Patients usually present in neonatal or early childhood and rarely in adolescent age with recurrent hemoptysis, recurrent chest infection or respiratory distress. Here, we present case of this rare lesion in a patient of 19 years.

PRESENTATION:

Came with chief complaints of left sided chest pain which is dull aching and non-radiating type in nature and grade 1 shortness of breath from 3 months, not associated with any postural or diurnal variations.

HISTORY:

History of recurrent upper respiratory tract infections since her childhood and had history of hospital admission twice when she was 5 & 9 years old for the same complaints.

DIAGNOSIS:

HRCT done which revealed left lung hypoplasia with CCAM(type1) in left lower lobe. It was followed by a CT pulmonary angiogram which revealed loss of lung volume on left side with narrowing of left pulmonary artery and CCAM of left lower lobe.

MANAGEMENT:

Initially patient was managed conservatively by IV antibiotics and fluids to control respiratory infection. Later patient was referred to CTVS department for surgical resection of left lower lobe.

Title: An unexpected "Rock Garden" in the lung : Tracheobronchopathia osteochondroplastica

Name of Presenter: **Dr. Abirami Dharmalingam**

Authors (or Co-authors): **Dr. Abdul Majeed Arshad, Dr. Irfan Ismail Ayub, Dr. C. Chandrasekar**

Institution/Author Organization: **Sri Ramachandra Medical college and Research Institute**

Introduction:

Tracheobronchopathia osteochondroplastica is a rare benign disease of unknown etiology. Most cases are diagnosed incidentally on chest imaging. Occasionally there may be non-specific respiratory symptoms, such as chronic cough, dyspnoea, hemoptysis, stridor, and recurrent pneumonia.

History:

A 44-year-old male with no comorbidities presented to the Pulmonology OPD following difficult intubation for an appendectomy. He was referred for evaluation of tracheal stenosis

Presentation:

He had no respiratory complaints and had no previous history of Atopy or wheeze. No h/o TB in the past. Physical examination was unremarkable. Chest Xray and PFT was normal. CT thorax was done which showed no stenosis, but multiple calcifications were noted involving lower 2/3rd of trachea with sparing of the posterior wall.

Diagnosis:

Bronchoscopy showed nodules of various sizes in the lower trachea and both main bronchi. In lateral and anterior walls, sparing the posterior walls. Biopsies from the lesions showed features of Tracheobronchopathia osteochondroplastica

Management:

No intervention was needed due to its benign nature. Patient underwent surgery with no further complications. Patient was reassured and advised follow up.

Clinical implication:

Rarely airway stenosis may occur for which bronchoscopic interventions may be needed – removal of nodules by forceps, laser ablation, cryotherapy, or external beam radiation.

Title: A CASE REPORT OF POSSIBLE PULMONARY LYMPHANGIOLEIOMYOMATOSIS WITH H1N1 INFECTION

Name of Presenter: **ALEKYA KALLA**

Authors (or Co-authors): **DR. M. G. Krishnamurthy, DR. T. Pramod kumar, Dr. P.**

Eshwaramma, Dr. G. Ramulu, Dr. V. Veena

Institution/Author Organization: **GANDHI HOSPITAL AND MEDICAL COLLEGE ,SECUNDERABAD,TELANGANA**

Lymph angioleiomyomatosis(LAM) is a rare multisystemic disorder predominantly affecting pre and post menopausal women, characterised by cystic lung lesions, abdominal angiomyolipomas and lymphatic abnormalities. Pulmonary manifestations include progressive dyspnea, cough, hemoptysis, pneumothorax and pleural effusions. It can be associated with tuberous sclerosis. 70 year female presented with symptoms of fever, cough, hemoptysis and SOB since 8 days, with Spo2-74% and bilateral wheeze. She had similar complaints of dyspnea since 8 years. She had a left pneumothorax 4 years ago and hysterectomised 15 years ago (?uterine mass). Her father died with intracranial tumour. Chest xray showed bilateral hyperinflated fields. CT chest revealed multiple bilateral cysts of varying sizes with interlobular septal thickening. Throat swab for H1N1 was positive. USG abdomen was negative for renal angiomyolipoma. She was treated with intravenous antibiotics, oseltamivir, bronchodilators and discharged with domiciliary oxygen and oral corticosteroids. There was no clinical/radiological evidence of recurrent pneumothorax during followup. Keeping in mind that a female of post menopausal age with progressive SOB and multiple cysts with history of pneumothorax and uterine mass, a possible diagnosis of LAM was made. LAM can lead to progressive airflow limitation, respiratory failure, cor pulmonale and death. It must be considered as differential diagnosis in menopausal women with progressive dyspnea having cystic lung disease. Antiprogesterone therapies, oophorectomy and Lung transplantation are implicated in treatment.

Title: Bloody Tale Of A Lilliputian Lung – A Case Of Swyer-James Syndrome

Name of Presenter: **Dr. Archit Krishna Manohar MD Respiratory Medicine II-Yr Post-Graduate**

Authors (or Co-authors): **Dr. P. Dhamodharan MD, Dr. V. P. Arivudai Nambi MD, Dr. R. Prabhakaran MD**

Institution/Author Organization: **Govt. Rajaji Hospital, Madurai Medical College, Madurai, Tamil Nadu, India**

Introduction:

Hemoptysis is an alarming respiratory symptom. Common causes include tuberculosis, bronchiectasis and cancer, and when combined with chest pain and tachycardia, pulmonary thromboembolism is considered.

Presentation & Diagnosis:

A 46-years old female presented with complaints of moderate hemoptysis and pricking, left-sided chest pain for 2 days. She had history of hospitalization in childhood for respiratory tract infection and followed by recurrent mild, intermittent respiratory symptoms sometimes with scanty hemoptysis that resolved spontaneously. Patient was tachypneic and clear on auscultation. ECG showed sinus tachycardia. Chest X-ray showed no obvious abnormality. CT-Chest with Pulmonary Angiogram was done to identify pulmonary pathologies and to rule out pulmonary thromboembolism. It revealed hyper-lucent, smaller left lung, left lower lobe tubular bronchiectasis and narrowing of the whole left lung's pulmonary vasculature without any filling defects. Hence, diagnosed as Swyer-James Syndrome.

Management:

Patient responded well to conservative treatment with antibiotics, antitussives and anxiolytics.

Learning Points:

Swyer-James Syndrome comprises of constrictive bronchiolitis secondary to a childhood infectious bronchiolitis, presents as a unilateral hyperlucent, small-sized lung with small ipsilateral pulmonary artery often with bronchiectasis. It is managed conservatively. Surgery is indicated in bronchiectasis with recurrent respiratory infections.

Title: A rare case of adult Kasabach-Merritt Syndrome

Name of Presenter: **Dr. Asha Undrajavarapu**
 Authors (or Co-authors): **Pondicherry Institute of Medical sciences**
 Institution/Author Organization: **Dr. K. H. Kisku**

BACKGROUND:

Kasabach-Merritt Syndrome (KMS) is characterized by a triad of rapidly developing vascular tumor, thrombocytopenia and Disseminated Intravascular Coagulation (DIC), commonly reported in infants and occurrence in adults is rare. We report a case of adult KMS presenting as mediastinal mass and managed with systemic corticosteroids.

CASE:

35year old male presented with breathlessness, productive cough, hemoptysis for 2 months. Icterus and clubbing were present. Chest X ray showed mediastinal widening and heterogenous opacities in the paracardiac

and parahilar region. CECT showed soft tissue density occupying anterior, middle and posterior mediastinum with airway compression, infradiaphragmatic extension. Ultrasound guided transthoracic biopsy showed dilated vascular spaces. Procedure was complicated by hemothorax and required a right sided chest tube. For the worsening coagulopathy he received blood transfusion. MRI was done to confirm hemangioma and to differentiate from fibrosing mediastinitis. Ruling out other conditions after Multi Disciplinary meet, diagnosis was narrowed down to Adult Kasabach-Merritt syndrome. Significant symptomatic and radiological resolution was seen with Pulse Steroids. Need for Chemotherapy and possible surgery was discussed, and patient was referred to Oncology center for further management.

CONCLUSION:

Although extremely rare, mediastinal hemangiomas must be considered differential diagnosis for mediastinal masses as KMS is a complicated disease and management can greatly vary.

Title: A rare case of Hamman Syndrome

Name of Presenter: **Dr. Astha Guliani**
 Authors (or Co-authors): **Dr. Prem Parkash Gupta, Dr. Lokesh Lalwani, Dr. Vishal Raj**
 Institution/Author Organization: **PGIMS, Rohtak**

Idiopathic spontaneous pneumomediastinum, also called Hamman Syndrome is a rare self-limited condition that mostly affects young men and is associated with pleuritic type of substernal pain. Its precipitating factor is increased airway pressure which leads to alveolar rupture. Named after the scientist Louis Hamman, it was described in 1939 and has been estimated to be present in 1 in 30,000 Emergency Department referrals. A 14-year-old boy presented with sharp chest pain which radiated to neck and back and swelling over the chest, neck, and face. On examination, there was palpable crepitus over the anterior chest, neck and shoulders. Auscultation revealed clicking sound synchronous with the heartbeat called Hamman sign. There was no history of trauma, alcohol intake, inhalational drug abuse, or foreign body. Chest X-Ray showed subcutaneous emphysema which was followed by CT Chest, that additionally revealed pneumomediastinum and a small pneumothorax. A normal Barium Swallow ruled out esophageal perforation. He was put on oxygen therapy using face mask and bilateral subcutaneous nicks were given after which the condition resolved both clinically and radiologically. It is a benign, non-recurrent

condition without any complications.

Title: RIGHT SIDED PNEUMOTHORAX IN A KNOWN CASE OF CASTLEMAN'S DISEASE WITH THYMOMA WITH LICHEN PLANUS : A RARE CASE REPORT

Name of Presenter: **DR.JAGRUTI AHIR**
 Authors (or Co-authors): -
 Institution/Author Organization: **B. J. MEDICALCOLLEGE, AHMEDABAD**

INTRODUCTION:

CASTLEMAN'S disease is a rare lymphoproliferative disorder that can involve one or multiple lymph node. The mediastinum is the most common location. HHV 8 infection has been implicated in the Pathogenesis of multicentric disease

CASE REPORT: A 32 year old Hindu female patient EA's admitted for gradual onset of breathlessness, dry cough, fatigue, night sweat, weight loss since 2 months she was a known case of lichen planus since 2018 and was taking tab. Wyosolone and tab. Mycophenolate mofetil on regular basis. All basic investigations were within normal limits CXR PA view suggestive of right sided pneumothorax was resolved after putting icd and kept for 3 days.

CONCLUSION:

We described a patient with CD who presented with anterior mediastinal mass causing respiratory symptoms. Lung involvement is rare. We confirmed diagnosis by Open biopsy of mediastinal mass which shows highly vascular type of UCD of CASTLEMAN'S disease.

Title: PULMONARY ARTERIOVENOUS FISTULA AN UNUSUAL CAUSE OF HEMOTHORAX

Name of Presenter: **K. PRIYANKA**
 Authors (or Co-authors): **Vengadakrishnaraj, Hemalatha**
 Institution/Author Organization: **Stanley Medical College and Hospital**

Introduction

Pulmonary AV fistula (PAVF) in the lung is unusual. PAVF is described as abnormally dilated vessels that provide right to left shunt between pulmonary artery and vein. History 60 years old female admitted in emergency department with sudden onset breathlessness and chest pain for 1 day. Diagnosis CXR showed left lung homogenous opacity with mediastinal shift to right. CECT showed aneurysmal outpouching measuring 3.3x3.3x3.8cm noted in left lower lobe, communicating with left pulmonary artery

and pulmonary vein. Management Emergency left lower lobectomy was done. Intraoperative findings were congestion of left lower lobe, a soft globular pulsatile mass approximately 5x4 cm feeded by multiple branches from left pulmonary artery and vein were noted. About 1500ml of hemorrhagic fluid drained.

Complication and clinical implications:

Patient became hemodynamically unstable on 3rd post operative day. On 5th POD, patient went in for sudden cardiorespiratory arrest.

Title: A RARE CASE OF CASTLEMAN DISEASE VARIANT OF POEMS SYNDROME WITH PULMONARY TUBERCULOSIS

Name of Presenter: **KRISHNAPRIYA S KUMAR**

Authors (or Co-authors): **S. P. AGNIHOTRI, GOVIND S. RAJAWAT**

Institution/Author Organization: **SAWAI MANSINGH MEDICAL COLLEGE, JAIPUR, RAJASTHAN**

Introduction-

POEMS syndrome is a rare multisystem disorder characterized by polyneuropathy, organomegaly, endocrine abnormality, monoclonal gammopathy and skin changes. Castleman disease variant has no clonal plasma cell disorder and little peripheral neuropathy. Treatment with immunosuppressants increase risk for opportunistic infections. Case report- A 52yr old male, known case of Castleman disease and chronic inflammatory demyelinating polyneuropathy on immunosuppressants for 2 years presented with 2 months history of dyspnea, cough with expectoration, loss of weight and appetite. He is a known case of hypothyroidism on medication. Chest X-ray and CECT thorax showed thick walled cavitating lung lesions. Sputum was negative for mycobacteria but lung biopsy revealed tubercular pneumonia. After detailed workup, patient diagnosed as Castleman disease variant of POEMS syndrome by the presence of polyneuropathy, Castleman disease, hepatosplenomegaly, lymphadenopathy, pedal edema, hypothyroidism, hyperpigmentation, hypertrichosis and clubbing. Patient was put on treatment with anti-tubercular drugs and improved symptomatically.

Conclusion-

Diagnosis of this syndrome is a great challenge and require high index of suspicion. Early diagnosis results in excellent prognosis. This case shows both the importance of evaluation for this rare syndrome in patients with multisystem involvement and the need for follow-up after initiating immunosuppressant therapy to early diagnose and treat opportunistic infections like

tuberculosis.

Title: Vogt-Koyanagi-Harada Syndrome With cavitory lung disease

Name of Presenter: **Mohammed Abdul Basith**

Authors (or Co-authors): **Syed Mahmood; Aleemuddin Naveed; Fahad Abdulla; Ashfaq Hassan**

Institution/Author Organization: **Deccan College of Medical Sciences**

VKH syndrome is a sight-threatening disease and a common cause of noninfectious panuveitis, described as a multisystemic, granulomatous inflammation related to T-cell-mediated autoimmune dysregulation, affecting melanocyte containing tissues in eye, inner ear, CNS and skin in genetically susceptible patients. We are presenting a Female patient already, diagnosed with VKH syndrome; with ongoing immunosuppressive therapy since then, presented with subacute onset of symptoms such as Fever, cough, s.o.b and chest pain, and radiologically with right sided multilobar patchy consolidation with Right upper lobe cavity; Bronchoscopy was done and BAL fluid revealed staphylococcus growth on cultures. To summarize immunocompromised patients on immunosuppressive therapy don't always develop opportunistic infections but rather may have common bacterial pathogens which responds rapidly to simple antibiotics.

Title: FAMILIAL SPONTANEOUS PNEUMOTHORAX - A DIAGNOSTIC CHALLENGE

Name of Presenter: **R THANUJA**

Authors (or Co-authors): **Dr. P. YUGANDHAR**

Institution/Author Organization: **ASRAM MEDICAL COLLEGE**

INTRODUCTION

Familial spontaneous pneumothorax is rare. Over 10% of patients with primary spontaneous pneumothorax report positive family history. Spontaneous pneumothoraces have been described in inherited disorders as Birt-Hogg-Dube syndrome, alpha-1-antitrypsin deficiency, Marfan's syndrome, Ehlers Danlos syndrome, Fabry disease.

CASE REPORT

A 50 year male presented with sudden onset of dyspnoea and pleuritic chest pain. Detailed family history suggested that his son also suffered spontaneous pneumothorax at 14 years age, which recurred post-pleurodesis for which he underwent thoracotomy and bullectomy with wedge resection of lung. Patient's niece of 22 years, also presented

with right pneumothorax two years ago for which tube thoracostomy followed by pleurodesis was done. Her HRCT chest showed cystic changes, suggestive of possible lymphangiomyomatosis. In this patient there was no history of smoking or tuberculosis, no history of consanguineous marriages. No marfanoid features. No skin lesions. HRCT chest showed right sided pneumothorax with bilateral multiple bullae/cysts. Normal alpha-1-antitrypsin levels in all of them. Intercostal chest drain was placed and pleurodesis done. Patient is not willing for lung cryobiopsy or genetic mutation screening and is under follow up.

CONCLUSION

Commonest cause of familial spontaneous pneumothorax is Birt-Hogg-Dube syndrome and these families need to be screened for FLCN gene mutation. At times, pneumothorax is initial manifestation of syndromes which have serious extrapulmonary complications. Screening tests and/or treatment are available for most disorders, thus establishing diagnosis is critical.

Title: Spontaneous Esophagopleural fistula-A rare case report

Name of Presenter: **Dr. RADHIKA MUDUGANTI**

Authors (or Co-authors): **Dr. Sravan kumar, Dr. Phani kumar, Dr. Ravi**

Institution/Author Organization: **Kakatiya Medical College**

INTRODUCTION

Esophagopleural fistula is a rare entity which usually formed secondary to esophagopleural instrumentation, surgery, malignancy. Spontaneous development of fistula between pleura and esophagus is very rare. In this case report we describe a case of a pulmonary Koch's defaulted ATT presented with subcutaneous emphysema diagnosed as esophagopleural fistula.

History and Clinical presentation

A 54 year old male patient presented with one episode of vomiting followed by swelling of the neck, SOB, chest pain. He was diagnosed as PTB 2 months ago but defaulted treatment after 1 month.

Physical Examinations

There was a diffuse neck swelling extending to left arm and left chest wall. On palpation there were crepitations. On auscultation there were decreased breath sounds, decreased vocal fremitus in left infrascapular area and infraaxillary area. Crackles in b/l interscapular area. Investigation and diagnosis Chest x ray

multiple cavitary lesions in left lower zone with air fluid level and surrounding consolidation with cp angle blunting. Right upper zone cavity. Repeated CXR after 2days demonstrated left hydropneumothorax. CT Chest with oral nonionic contrast demonstrated a esophagopleural fistula.

Management

Patient was treated with high flow oxygen and higher antibiotics and chest tube insertion , drained fluid containing food particles. Patient was referred to gastro surgery, managed by performing feeding jejunostomy and ATT.

Title: A CASE REPORT OF ACQUIRED BRONCHO-BILIARY FISTULA

Name of Presenter: **RAVINUTHALA PURNIMA**
 Authors (or Co-authors): **Dr. Ashish Deshmukh**
 Institution/Author Organization: **MGM INSTITUTION AND COLLEGE**

INTRODUCTION:

BRONCHO-BILIARY FISTULA IS A RARE DISORDER. IT REFERS TO ABNORMAL INTERCONNECTION BETWEEN BILIARY TRACT AND BRONCHIAL TREE. IT MAY BE CONGENITAL OR ACQUIRED. COMMON CAUSE OF ACQUIRED BRONCHO-BILIARY FISTULA ARE HYDATID CYST OR AMOEBIC DISEASE OF LIVER, HEPATIC ABSCESS, OBSTRUCTION TO BILIARY TRACT AND NEOPLASM.

HISTORY AND PRESENTATION:

A 42 YEAR OLD MALE WAS PRESENTED TO OPD WITH THE COMPLAINTS OF COUGH WITH YELLOWISH EXPECTORATION , BREATHLESSNESS ON EXERTION, FEVER AND LOSS OF APPETITE SINCE 1 1/2 MONTH.

DIAGNOSIS:

BRONCHOSCOPY REVEALED YELLOWISH SECRETIONS Oozing from right middle lobe. Patient had further undergone MRCP which confirmed communication between middle lobe of right lung and segment 4A of liver.

MANAGEMENT:

ERCP WAS DONE IN WHICH DOUBLE PIGTAIL PLASTIC CBD STENT PLACED ACROSS HEPATOBILIARY COMMUNICATION

Title: Solve me if you can-instant orthopnea revisited

Name of Presenter: **Dr. S. Pugazhendhi**
 Authors (or Co-authors): **Dr. S. Subramaniyan**
 Institution/Author Organization: **SRM Medical College Hospital and Research Centre**

Overlap syndrome is a multisystem and multiorgan autoimmune disease. They present with features of more than one active connective tissue disease at the same time. Scleromyositis is considered one of the overlap syndromes with clinical features and immunological findings suggestive of Systemic Sclerosis and polymyositis. In scleromyositis involvement of proximal muscle weakness is more common. Here we discuss a case of 54-year-old female who presented with respiratory insufficiency due to diaphragm weakness without the involvement of any other proximal muscles who was later diagnosed as scleromyositis overlap syndrome. Overlap Syndrome is an entity that satisfies the criteria of at least two connective tissue diseases. This case is discussed because of its unusual presentation and rarity with isolated Diaphragm Muscle weakness causing acute respiratory failure requiring intubation with well-preserved power in limb muscle is very rarely seen in Scleroderma Myositis Overlap Syndrome.

Title: A discreet pancreatic pseudo cyst presenting as recurrent pleural effusion

Name of Presenter: **Sanjai Narayanasamy**
 Authors (or Co-authors): **Kasturba Medical College, Manipal**
 Institution/Author Organization: **Vyshak Uddur Surendra, Aswini Kumar Mohapatra**

Background:

Pleural effusion secondary to pancreatic disease were observed in patients with history of pancreatitis. However the case presented here is unusual in respect with no history of pancreatitis. A history of alcoholism, and recurrent pleural effusion despite multiple therapeutic thoracentesis within a period of month, paved to investigate in lines of pancreatic disease causing pleural effusion.

Case Details:

A 50 yr old male with history of smoking and alcoholism presented with left sided chest pain for 2 months duration. Pleural fluid amylase was 8385U/L and lipase was 20275U/L. CT chest and abdomen with contrast showed loculated pleural fluid along anterior, posterolateral costal pleura diaphragmatic pleura and along the fissure on the left side and an intercommunicating retroperitoneal collection along the left crura of diaphragm, into the tail of pancreas. MRCP revealed the communication of the well-defined collection in the lesser sac, with the main pancreatic duct in the tail region – likely Pancreatic pseudocyst. Patient was managed with Octreotide. Discussion: Though pancreatic pseudocyst causing pleural effusion is known, prior history of pancreatitis was seen,

unlike the case here.

Conclusion:

Suspicion of pancreatic cause of pleural effusion in alcoholic patients leads to timely diagnosis and appropriate treatment.

Title: Mounier-Kuhn Syndrome- A Rare Case Report

Name of Presenter: **Dr. Ujwal Jain**
 Authors (or Co-authors): **Dr. Kusum V. Shah, Dr. Yash Rana, Dr. Sonal Goyal**
 Institution/Author Organization: **S.B.K.S. MEDICAL INSTITUTE & RESEARCH CENTRE**

Introduction:

Mounier-Kuhn syndrome, also known as Tracheobronchomegaly (TBM), is a rare condition that occurs when the airway wall elasticity is lost/reduced; and the walls specifically the trachea and bronchi become weak leading to airway narrowing or collapsibility, which is associated with recurrent respiratory tract infections. It is usually acquired in late decades of life.

History:

A 70 years old male, farmer, presented with productive cough since 4 months, progressive breathlessness, weight loss and loss of appetite since 3 months. Sputum for AFB smear & CBNAAT were negative. Bronchoscopy showed a dilated trachea. CT thorax showed multiple nodular opacities in both lung fields predominantly posterior segment of right upper lobe. Tracheal diameter measures approx. 22mm (AP), 34mm (Maximum Luminal diameter) just above the carina. Mildly dilated trachea and right main bronchi seen.

Conclusion:

The diagnosis of TBM is quite challenging clinically as the symptoms closely resemble obstructive airway diseases & parenchymal infections. Often, patients might worsen and hence, require serial CT evaluation and appropriate timely management. Early diagnosis and newer treatment modalities have led to improvement in prognosis and quality of life.

Clinical Implications:

TBM can cause acute airway collapse, and can be life-threatening; hence prompting rapid evaluation and appropriate treatment.

Title: JOBS SYNDROME-A RARE CASE REPORT

Name of Presenter: **VARAYURI AKHILA**

Authors (or Co-authors):-

Institution/Author Organization: **Osmania Medical College**

Introduction

Hyper Ig E syndrome is a rare primary immunodeficiency disorder characterised by clinical triad of atopic dermatitis, recurrent staphylococcal infections and recurrent pulmonary infections. This syndrome is due to mutation in STAT3 gene in more than two third of the cases.

Case Report

A 15 year old male presented with complaints of cough with sputum ,right sided chest pain and breathlessness since 1 month. He had past history of recurrent respiratory tract infections and right sided empyema 5 years back and 2 years back for which intercoastal drainage was done. The patient had history of recurrent skin infections since birth. Genetic testing of the patient showed mutation in the STAT 3 gene. Culture sensitivity of the empyema fluid showed streptococcus pneumonia which was treated with antibiotics. Discussion Jobs syndrome is characterised by defects in immunity with eczematous and non immunologic system disorders. Ante natal diagnosis is theoretically possible. The treatment at the moment is purely symptomatic .A biological or gene therapy in future could change the prognosis. References Hafsi W, Yarrarapu SNS. Job Syndrome. [Updated 2020 Jul 17]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-

Title: TWO SIBLING WITH KARTAGENER'S SYNDROME TREATED AS BRONCHIAL ASTHMA

Name of Presenter: **DR. AHMED SAFWAN. M**

Authors (or Co-authors): **DR. SONAM SPAGAIS, PROF. RAJKUMAR**

Institution/Author Organization: **VALLABHBHAI PATEL CHEST INSTITUTE**

Background

Kartagener's syndrome is a subgroup of primary ciliary dyskinesia, an autosomal recessive inherited disorder comprising the clinical triad of chronic sinusitis, bronchiectasis, and situs inversus. Abnormal ciliary morphology or function leading to impaired ciliary motility is the main pathophysiologic problem in Kartagener's syndrome, leading to recurrent chest infections, ear/nose/throat symptoms, and infertility

Case

Two sisters (15-year-old and 17-year-old) from Haryana was presented to pulmonary medicine department of vallabhbhai patel

chest institute with clinical history of chronic cough with sputum and repeated cold since birth. Both of them had breathlessness for last 3 years. They were misdiagnosed as asthma and was on ICS plus LABA for last 5 years. Clinical and imaging findings revealed chronic sinusitis, bronchiectasis, dextrocardia, and situs inversus. Both of them were treated with orally administered antibiotics, mucolytic, and chest physiotherapy. They were symptomatically better with the above therapy

Conclusions

Correct diagnosis of Kartagener's syndrome often delayed by years especially in developing countries. Failure to diagnose this may cause unnecessary repeated admissions, investigations and inappropriate treatment with reduced quality of life.. Early diagnosis and management of this condition help to prevent irreversible lung damage and prevent chronic lifelong sequelae.

Title: An adult infertile male with KARTAGENER syndrome developing Cor pulmonale: A rare syndrome with serious complication.

Name of Presenter: **Dr AIYUSH JAIN**

Authors (or Co-authors): **Prof G. N. Srivastava**

Institution/Author Organization: **Department of TB and respiratory diseases , Institute of medical sciences, BANARAS HINDU UNIVERSITY.**

INTRODUCTION:

KARTAGENER Syndrome is a rare autosomal recessive disorder involving a triad of situs inversus ,chronic sinusitis, and bronchiectasis. Situs inversus totalis is a congenital condition in which there is a mirror image transposition of both abdominal and thoracic viscera. Primary ciliary dyskinesia is seen in these patients causing infertility and recurrent Chest infections. Cor pulmonale is defined as an alteration in the structure and function of the right ventricle of the heart caused by the primary disorder of the respiratory system. Cor pulmonale relates to right sided heart failure secondary to pulmonary artery hypertension.

CASE PRESENTATION:

A 41 year old adult male presented with dyspnea dry cough and fever for last 7 days. Dextrocardia was seen in chest X ray .CECT Thorax and Abdomen confirmed bronchiectasis with situs inversus totalis and dilated pulmonary trunk and pulmonary arteries. Echocardiography confirmed right Atrioventricular dilatation with severe pulmonary arterial hypertension.

CONCLUSION:

We report a case of rare entity with serious complications in adult age. An infertile adult male with situs inversus with bronchiectasis with chronic sinusitis developing cor pulmonale . According to available literature, pulmonary arterial hypertension leading to cor pulmonale being a serious complication is reported in very few cases around the world in correlation with KARTAGENER syndrome.

Title: AN UNUSUAL CAUSE OF BRONCHIECTASIS IN A MIDDLE AGED MAN

Name of Presenter: **Dr CHANDRA PRAKASH SHARMA**

Authors (or Co-authors): **Dr SURESH KOOLWAL, Dr S P AGNIHOTRI, Dr GOVIND SINGH RAJAWAT, Dr GULAB SINGH YADAV, Dr SUDHIR KATTA**

Institution/Author Organization: **SMS MEDICAL COLLEGE AND HOSPITAL, JAIPUR (RAJASTHAN)**

INTRODUCTION

Bronchiectasis is irreversible dilatation and destruction of medium sized bronchi. Kartagener's Syndrome, an autosomal recessive disorder, is a subset of primary ciliary dyskinesia. Triad of situs inversus, bronchiectasis and chronic sinusitis. Incidence: 1 in 32,000 live births.

CASE REPORT

A 52 yr old male, smoker, married since 25 years with no children, presented with complaints of breathlessness, productive cough since 2 years with history of recurrent upper and lower Respiratory tract infections lead to multiple hospitalisations in the past. Examination revealed apex beat on right side and bilateral crepitations. Chest Radiograph revealed cardiac apex and aortic arch on right side. Right middle, lower lobe bronchiectatic changes with reversed position of spleen and liver associated with right aortic arch and dextrocardia were present in HRCT chest. An ultrasound of abdomen revealed normal liver with gall bladder on left and spleen on right side. CT scan of PNS was suggestive of pansinusitis. Hence Kartagener Syndrome diagnosed. Patient was put on antibiotics and got improved.

Conclusion

Kartagener syndrome is a genetic defect leading to impaired ciliary motility causing stasis of secretions and colonisation by pathogenic organisms leading to bronchiectasis. Complications include recurrent infections, respiratory failure and cor-pulmonale. Early diagnosis and interventions can reduce morbidity and mortality.

Title: KARTAGENER'S SYNDROME- UNUSUAL PRESENTATIONName of Presenter: **DR.D.SHIVA KUMAR NAYAK**Authors (or Co-authors): **Dr. M. SRAVAN KUMAR, Dr. B. PHANI KUMAR, Dr. P. RAVI**Institution/Author Organization: **KAKATIYA MEDICAL COLLEGE****BACKGROUND/INTRODUCTION**

Kartageners syndrome is rare, Autosomal Recessive disorder characterized by ciliary abnormality comprising the triad of situs inversus, chronic sinusitis, bronchiectasis. Abnormal ciliary structure or function leading to impaired ciliary motility is the main pathophysiologic problem in kartageners syndrome.

HISTORY AND CLINICAL PRESENTATION

A 36 year old male presented to the department with 10 days history of cough with expectoration, fever, dyspnea, chest pain. History of recurrent respiratory tract infections since childhood. He was seen by ENT specialist 3 years back, diagnosed with chronic sinusitis, was treated with antibiotics and intranasal steroid. patient had 2 childrens- 16 years and 10 years.

PHYSICAL EXAMINATION AUSCULTATION

bilateral rhonchi, crackles on left mammary, interscapular area. Heart sounds on right side of chest.

INVESTIGATIONS AND DIAGNOSIS

Chest X-ray shows dextrocardia with gastric bubble on right side, Left upper zone bronchiectatic changes, right hyperinflated lung. HRCT CHEST- Bronchiectasis in left lingular segments, situs inversus total with lung isomerism 2D ECHO-dextrocardia USG ABDOMEN- situs inversus BRONCHOSCOPY- Isomerism present. Right lung-only upper lobe, lower lobe bronchus noted. Left lung -upper, intermediate, lower lobe bronchus noted. Saccharin test-delayed. Sperm count-normal. All other routine investigations were normal.

MANAGEMENT-

Symptomatic management CONCLUSION Patient with recurrent respiratory tract infection, one has to look for kartageners syndrome for early diagnosis and screening for family members. kartageners syndrome usually associated with infertility, but our case is fertile male and situs inversus totalis.

Title: A CASE OF PRIMARY CILIARY**DYSKINESIA WITH KARTAGENER SYNDROME**Name of Presenter: **Dr. G. Sivakalyani**

Authors (or Co-authors): -

Institution/Author Organization: **Katuri Medical College and Hospital****INTRODUCTION**

Primary ciliary dyskinesia is a rare autosomal recessive disorder characterised by impaired ciliary function leading to chronic sinopulmonary disease, persistent middle ear infection, situs inversus and infertility

CASE REPORT

A 45 year old male patient with no known comorbidities presented to Pulmonary medicine department, katuri medical college with cough with expectoration, shortness of breath and fever since 7 days. History of recurrent episodes of similar complaints and rhinitis present since childhood. Non smoker. Married, second degree consanguineous marriage, no children. Chest x-ray showed cystic lesions in bilateral lower zones and dextrocardia. ECG revealed features of dextrocardia with right axis deviation and poor R wave progression and findings were normal when chest leads are placed on right side. CT CHEST showed cystic and tubular bronchiectasis predominantly in bilateral lower lobes, right middle and lingular lobes and situs inversus totalis with right sided aortic arch, dextrocardia and total transposition of abdominal viscera. CT PNS showed mucosal thickening suggestive of chronic sinusitis involving bilateral maxillary, sphenoid and ethmoid sinuses. Frontal sinuses are under pneumatized. PFT moderate obstructive and mild restrictive pattern. Seminal fluid analysis showed normal volume and count with only 15% of sperms actively motile, 55% nonmotile and 30% sluggishly motile sperms

Title: A CASE REPORT OF KARTAGENER'S SYNDROMEName of Presenter: **DR. Gyan Prakash Verma**Authors (or Co-authors): **DR. kumar Girendra , DR. Abhijeet Khandelwal , DR. Mudra khare**Institution/Author Organization: **INDEX MEDICAL COLLEGE HOSPITAL AND RESEARCH CENTRE****INTRODUCTION-**

Kartagener syndrome is a rare autosomal recessive genetic ciliary disorder comprising triad of Situs inversus , chronic sinusitis and Bronchiectasis. Mainly due to defective movement of cilia , leading to recurrent chest infection, ear , nose , throat symptom and infertility.

CASE REPORT –

20 yr old female patient presented with complains of recurrent episode of common cold , sneezing and cough with expectoration.

On examination - clubbing , Apex beat and heart sound on right side indicating dextrocardia.

On auscultation - B/L basal crackles were heard. ECG SHOW dextrocardia, with right axis and poor R wave in left side leads.

CXR PA VIEW- Revealed cardiac apex and aortic arch on right side suggest dextrocardia and left lower lobe cystic changes suggesting Bronchiectasis,

XRAY PNS (WATERS VIEW) Maxillary sinusitis with absence of frontal sinus

CT PNS- gross deviation of nasal septum on left side.

CONCLUSION-

Thus any patient with history of recurrent cough , cold and bronchiectasis should be examined for KARTAGENER syndrome which is a part of primary ciliary dyskinesia (PCD)

Title: KARTAGENER'S SYNDROME: A CASE SERIES OF VERSATILE PRESENTATIONS AT A TERTIARY CARE HOSPITAL IN KANCHIPURAMName of Presenter: **DR. INDRANIL BANERJEE**Authors (or Co-authors): **DR. CH. RADHIKA (Assistant Professor)**Institution/Author Organization: **MEENAKSHI MEDICAL COLLEGE HOSPITAL & RESEARCH INSTITUTE****INTRODUCTION:**

Kartagener's Syndrome a subset of PCD, is an autosomal recessive disease characterized by the triad of sinusitis, bronchiectasis, and situs inversus.

CASE SUMMARIES:

A 60-year old man presented with acute SOB and productive cough for 2 weeks. H/O recurrent respiratory tract infections. Nasal passages obstructed. Coarse crackles were heard on auscultation. HRCT Chest showed dextrocardia and bronchiectasis along with situs inversus. A 37-year-old woman married for the last 12 years having no children, was referred to us with cold, cough with copious expectoration, headache, and SOB for last 5 years. Received ATT but with no relief. Auscultation revealed coarse crackles. X-ray PNS-sinusitis. HRCT-Bronchiectasis and situs inversus. A 24 year old man with a 1 month history of hearing loss and recurrent childhood infections presented with hemoptysis for 5 days. On auscultation, coarse crepitations heard. HRCT-Bronchiectasis with situs inversus. X-Ray PNS showed chronic sinusitis. A 35 year

old female presented with SOB, headache, cough with copious expectoration for 4 weeks and H/O recurrent childhood infections. On auscultation, coarse crepitations were heard. HRCT-Bronchiectasis with situs inversus. X-Ray PNS showed chronic sinusitis.

CONCLUSIONS:

Kartagener's syndrome should be a part of the differential diagnosis of patients with chronic infections of the respiratory system.

Title: A rare case of kartagener's syndrome presenting at tertiary care center

Name of Presenter: **Dr. Jignesh Gengadiya**

Authors (or Co-authors): **Dr. Parul Vadgama, Dr. Bhumika Patel**

Institution/Author Organization: Government Medical College, Surat

Background:

Kartagener syndrome is inherited autosomal recessive disorder characterised by impaired ciliary dysfunction of cilia of the respiratory tract, sperms and other cells, which causing impairment of mucociliary clearance, situs inversus, bronchiectasis, sinusitis, impaired sperm motility and otitis media. Prevalance is 1:32000 live birth.

History and presentation:

A 24 year male patient present with past history of repeated nasal blockage, thick nasal secretion and headache since childhood, presenting to us with complain of cough with expectoration and fever since 4 days. On examination apex beat was palpated on right side and liver was palpable on left side. On Auscultation he had bilateral infrascapular crackles. Routine blood investigation was normal. Sputum culture and sensitivity, AFB and Gene expert report was normal. Semen analysis was suggesting of azoospermia. ECG was normal but 2D ECHO report suggest mild RA and RV dilated. Chest Xray was suggesting of dextrocardia. HRCT was suggestive of bronchiectasis, CT PNS suggestive of Pansinusitis. Patient was treated with antibiotics according to culture report, chest physiotherapy with cough expectoration was given. Patient was advice to get vaccination on followup

Result and Conclusion:

A young male patient presenting with chronic sinusitis and bronchiectasis should be fully investigate for kartagener's syndrome as it is a rare condition. Other Systems involvement should be evaluated. Management of bronchiectasis and sinusitis should be optimum and recurrence of infection should be prevented.

Title: A case of primary ciliary dyskinesia with kartegeners syndrome

Name of Presenter: **Oruganti Sindhu**

Authors (or Co-authors): -

Institution/Author Organization: **Siddhartha Government Medical College**

A 45years old male with dyspnea, cough, rhinitis since childhood, on radiological examination situs inversus was found.

Title: A RARE CASE OF SIEWERT'S SYNDROME PRESENTED WITH FULL BLOWN BRONCHIECTASIS

Name of Presenter: **DR. DORA SAI SATYA VENKATA SRIDEVI**

Authors (or Co-authors): **DR. S RAGHU, DR. D. SUDHEER**

Institution/Author Organization: **GUNTUR MEDICAL COLLEGE, GUNTUR**

INTRODUCTION:

Siewert's syndrome or Kartagener's syndrome (KS) is a subset of a larger group of ciliary motility disorders called primary ciliary dyskinesias (PCDs). It is a genetic condition with an autosomal recessive inheritance, comprising a triad of situs inversus, bronchiectasis and sinusitis.

CASE REPORT:

A 35-year-old non-smoker male, presented with 4 episodes of massive hemoptysis. H/O recurrent URTI since childhood, recurrent otitis media, cough with expectoration, not having children despite being married for last 10 years. O/E: Clubbing and apex beat on the right side. Bilateral wheeze and B/L basal crackles, with heart sounds being best heard on the right side of the chest.

INVESTIGATIONS:

CXR: Cardiac apex and aortic arch on the right side, B/L cystic lesions seen. CT CHEST: Situs inversus totalis and Bronchiectasis with bronchoceles seen.

BRONCHOSCOPY:

Mucous plugging seen. CBP: Low HB%. Sperm analysis : Oligospermia.

TREATMENT:

Hemoptysis controlled, long term bronchodilators, long term low dose Azithromycin, postural drainage, vaccination.

CONCLUSION:

KS is a rare autosomal recessive disease with a triad of situs inversus, bronchiectasis, recurrent sinusitis, frequently troubled by repeated infection episodes. infertility is also one important aspect that needs to be adequately addressed in their evaluation.

==== Poster=====

Title: PERIL OF PULMONARY ARTERY – AFFLICTION AWAITED A RARE CASE REPORT

Name of Presenter: **Dr. A. S. ARUN**

Authors (or Co-authors): **Dr. A. MAHILMARAN, Dr. A. SUNDARARAJAPERUMAL, Dr. D. NANCY GLORY, Dr. G. ALLWYN VIJAY**

Institution/Author Organization: **MADRAS MEDICAL COLLEGE, CHENNAI - 600003**

BACKGROUND:

PULMONARY ARTERY ANEURYSMS (PAA) ARE VERY RARE CLINICAL ENTITY WITH REPORTED INCIDENCE OF 1:13,696 IN AUTOPSY CASE SERIES. PAA PRESENTS AS LIFE THREATING HEMOPTYSIS WHICH NEEDS PROMPT DIAGNOSIS & IMMEDIATE INTERVENTION IN ORDER TO PREVENT FATAL OUTCOMES.

CASE REPORT:

A 52-YEAR OLD MALE PRESENTED WITH HEMOPTYSIS 1 EPISODE 300ML OF FRESH BLOOD. NO H/O FEVER, CHEST PAIN, DYSPNOEA. K/C/O SHT & DM ON MEDICATION, CHRONIC SMOKER & ALCOHOLIC. CBC, RFT, LFT WITHIN NORMAL LIMITS. CXR SHOWS RIGHT HILAR PROMINENCE. VIRAL MARKERS, VDRL – NONREACTIVE. CEPT CHEST-LARGE SACCCULAR ANEURYSM (5.2*5.6*4.3CM) FROM SEGMENTAL BRANCH OF RIGHT LOWER LOBE PULMONARY ARTERY. BRONCHOSCOPY- NO E/O ANY OBSTRUCTION OR BLEEDING. BRONCHIAL WASH CYTOLOGY, C/S, AFB, CBNAAT & FUNGAL C/S WERE ALL NEGATIVE. PATIENT WAS DIAGNOSED AS PULMONARY ARTERY ANEURYSM. SYMPTOMATIC MEDICAL MANAGEMENT & ANTIBIOTICS WERE GIVEN. MULTI-DISCIPLINARY APPROACH – VASCULAR SURGERY, CTVS, INTERVENTION-RADIOLOGY, ANAESTHESIA, CARDIOLOGY (ECHO NO E/O PHT/PS/AS/MS/MR) OPINION WERE OBTAINED. PATIENT PLANNED FOR EMERGENCY ENDOVASCULAR EMBOLIZATION. UNDER PULMONARY ANGIOGRAM GUIDANCE COILING OF ANEURYSM DONE WITH TWO-2 MM, ONE-3 MM & ONE-8MM COILS. POST PROCEDURE VITALS STABLE. PATIENT IS ON REGULAR FOLLOW-UP & ASYMPTOMATIC AT PRESENT.

CONCLUSION:

PAA ARE RARE ENTITY NOT CONSIDERED IN MANY CLINICAL SITUATION. WITH MODERN IMAGING MODALITY EARLY DIAGNOSIS &

APPROPRIATE INTERVENTION ARE NECESSARY TO PREVENT FATAL LIFE THREATENING COMPLICATIONS OF ANEURYSMAL RUPTURE. EMPHASIS MUST BE DONE ON MULTI-DISCIPLINARY APPROACH AS IN OUR CASE TO INCREASE SURVIVAL & MINIMIZE PROCEDURE RELATED MORTALITY & MORBIDITY.

Title: THE VANISHING LUNG: About a case

Name of Presenter: **ABDUL ARAFATH**

Authors (or Co-authors): **Dr K Rajendra Kumar MD DTCD, Dr M Kiran MD**

Institution/Author Organization: **RANGARAYA MEDICAL COLLEGE**

Introduction:

Vanishing lung syndrome (VLS), also known as idiopathic giant bullous emphysema represents a rare form of irreversible damage to the pulmonary parenchyma often due to chronic obstructive pulmonary disease (COPD). Patients with this condition typically have a long history of smoking or COPD but may also be younger with a history of marijuana use or have alpha-1 antitrypsin deficiency.

Aims / Objectives:

To give a message about the entity VLS and how important is to differentiate from pneumothorax.

Methodology:

My case was a 52 year old male chronic smoker for 25 years, He is a known case of COPD and having repeated admission for acute exacerbations who was admitted from emergency department Since patient was symptomatic and CXR was like pneumothorax we planned for intercostal drainage tube insertion. But patient was Stable after Bronchodilator therapy. Next day he was sent for CT Chest for evaluation of pathology.

Results:

The patient was diagnosed to have giant bulla which is also known as the VLS. He was saved from unwanted ICT insertion & treated with Bronchodilators only. He was offered to higher centre for further management of VLS
Conclusion :Every doctor who is attending emergency department must know the entity called Vanishing Lung which must be differentiated from pneumothorax. By which unwanted ICT insertion can be avoided and further complications of Bulla rupture can be avoided and patient Can be saved with bronchodilators only.

Title: A CASE OF MULTIPLE PULMONARY ARTERIO VENOUS MALFORMATIONS

Name of Presenter: **Dr Ajeet Singh Thakur**

Authors (or Co-authors): **Dr Bhavya Atul Shah, Dr Arti Julka, Dr Ashutosh Singh, Dr Sunil Yadav**

Institution/Author Organization: **R. D .Gardi Medical College, Ujjain, M.P., India**

INTRODUCTION-

Spontaneous hemothorax is a rare entity and most commonly caused by metastatic pleural disease. Other rare causes include anticoagulation therapy, rupture of aortic aneurysm, pleural endometriosis, extramedullary hematopoiesis, hemophilia, thrombocytopenia, spontaneous pneumothorax, acute pancreatitis, and PAVM. Pulmonary Arteriovenous Malformations (PAVMs) are rare abnormalities of pulmonary vascular system characterized by an abnormal communication between the pulmonary artery and vein, resulting in low resistant right-to-left shunt.

PRESENTATION-

A 40 year old female, reported to emergency with complain of increase in dyspnea with palpitations and dry cough since last 7 days. She was short of breath at rest and not able to carry out routine work.

HISTORY-

She had similar breathlessness on and off since last eight years. DIAGNOSIS-Chest X-ray showed opaque left hemithorax with shift of mediastinum to right. CECT thorax was suggestive of multiple pulmonary arterio-venous malformation with feeding arteries from pulmonary artery and draining into pulmonary veins. Moderate left pleural effusion (hemothorax) with cardiomegaly and finding of Hepatic AVM.

MANAGEMENT-

Considering that the patient had multiple PAVMs and a severe hypoxemia, we adopted a conservative approach in managing this patient.

CLINICAL IMPLICATIONS-

Although pulmonary arteriovenous malformations are relatively rare, it should be a differential diagnosis of patient with hypoxemia, dyspnea on exertion with pulmonary nodules.

Title: A CASE OF DRY "LIP"

Name of Presenter: **Dr. Akilan. M**

Authors (or Co-authors): **Dr.K.Krishnamoorthy, Dr. S. Muthukumar, Dr. E. Mathan, Dr. O. M. Rahman Shahul Hameed**

Institution/Author Organization: **Department**

of Respiratory Medicine, Tirunelveli Medical College Hospital

Introduction:

"Rare diseases are rare but not the rare diseased patients"-this quote reminds us to make every attempt to reach the diagnosis for the well being of patient.

History:

A 29 year old female, non smoker, teacher by occupation presented with the complaints of progressive dyspnea from grade 1 to 2, cough with scanty serous expectoration for 2 years not responding to antibiotics and anti-allergic medications. Nil other specific complaints and co-morbidities.

Presentation:

On examination patient was mildly dyspneic, tachypneic, grade 2 clubbing present. Spo2-95% at room air, RR-24/min, Pulse rate-120/min. Systemic examination and chest X-ray was normal. CT scan revealed diffuse GGO with thin walled cysts predominantly involving the bilateral lower lobes suggestive of Lymphocytic interstitial pneumonia. PFT showed restrictive pattern. 6MWT revealed 60% of predicted value. ANA, RA factor were negative. ENA profile showed SS-A as strongly positive. Salivary gland biopsy revealed lymphocytic infiltration. Ophthalmic examination revealed Schirmer's test positive for dryness of eyes. Diagnosis: A case of LIP associated with Sjogren's syndrome
Management: Patient was started on hydroxychloroquine, Rituximab, artificial tears and oral prednisolone after obtaining Rheumatologist opinion.

Complications:

Dry eyes, dry mouth, myalgia, fatigue, dental caries and hypoxia, respiratory failure are frequently encountered complications of Sjogren's syndrome and untreated LIP respectively.

Learning points:

From this case I learnt that respiratory symptoms may be presenting features of various systemic diseases and These symptoms shouldn't be neglected until a definitive diagnosis is made.

Title: A CASE REPORT OF RECURRENT SPONTANEOUS PNEUMOTHORAX IN A PATIENT WITH MARFANOID HABITUS

Name of Presenter: **ALEKYA KALLA**

Authors (or Co-authors): **DR. M. G. Krishnamurthy, DR. T. Pramod kumar, Dr. P. Eshwaramma, Dr. G. Ramulu, Dr. V. Veena**

Institution/Author Organization: **GANDHI HOSPITAL AND MEDICAL COLLEGE,**

SECUNDERABAD, TELANGANA**INTRODUCTION-**

Spontaneous pneumothorax is of two types- primary spontaneous pneumothorax(PSP) in clinically normal lungs without apparent cause and secondary spontaneous pneumothorax(SSP) in underlying lung disease.. Marfanoid habitus is associated with marfans syndrome,Shprintzen Goldberg syndrome,Lujans fryns syndrome and congenital contractual arachnodactyly

HISTORY-

A 20 year male non smoker presented with sudden onset of left sided chestpain after lifting heavy weight associated with dyspnea and cough since 7days On examination,he had marfanoid features ie., tall and thin built ,long thin face ,armspan: height=1.04 ,upper segment:lower segment=3 , arachnodactyly,positive wrist and thumb sign. Oxygen saturation was 98% R/A with decreased breathsounds in left SSA.No cardiac murmurs. ophthalmological examination was normal

DIAGNOSIS-

Chest xray and CT chest showed left apical pneumothorax with pleural thickening.2D ECHO and other investigations were normal. total score on revised ghents criteria<7.

MANAGEMENT-

He was managed conservatively and discharged. After 15months ,he developed SOB with dry cough and found to have bilateral spontaneous pneumothorax.bilateral ICD was placed and bilateral VATS with pleurectomy was done .procedure was uneventful. Right lung expanded,right ICD removed and discharged with left icd insitu.

COMPLICATIONS-

Pulmonary manifestations of marfans syndrome include recurrent spontaneous pneumothorax,emphysema,bullae and apical blebs.

LEARNING POINTS-

Any patient with marfanoid habitus and sudden onset of SOB, pneumothorax should be a differential diagnosis.

Title: LYMPHANGIOLEIOMYOMATOSIS IN TUBEROUS SCLEROSIS COMPLEX

Name of Presenter: **Dr. AMENA TAHSEEN**

Authors (or Co-authors): **Dr. S A. RAFI**

Institution/Author Organization: **SHADAN INSTITUTE OF MEDICAL SCIENCES**

INTRODUCTION:

LAM is seen in about 1/3rd of women with tuberous sclerosis. LAM is a proliferation of abnormal smooth muscle like cells (LAM cells) that tend to form abortive muscle or lymphatic channels in many organs and cysts in the lung. The fundamental defect in LAM is a mutation in the tuberous sclerosis complex 1 or complex 2 genes (TSC1 , TSC2) which control cell growth, mortality and invasiveness. LAM exists in 2 forms sporadic (S-LAM) and Tuberous sclerosis with LAM.

HISTORY AND PRESENTATION:

Here presenting a case of 49 year old female with complaints of tremors since 1year, change in voice since 1 year, memory disturbances since 1year, non productive cough since 3 months.

DIAGNOSIS:

HRCT chest showed multiple cysts in the lung parenchyma , MRI Brain showed multiple subcortical hyperintensities , USG Abdomen showed left renal cyst and serum autoimmune panel was negative.

MANAGEMENT:

started on SIROLIMUS.

COMPLICATIONS:

In Lung pneumothorax, pleural effusion, chylothorax, lung collapse.

Title: MARFAN SYNDROME AS AN UNCOMMON ETIOLOGY OF PRIMARY SPONTANEOUS PNEUMOTHORAX IN AN ADOLESCENT MALE

Name of Presenter: **AMIT CHAUHAN**

Authors (or Co-authors): **DR. RAJENDRA CHANDEL, DR. NARENDRA KHIPPAL,DR. JAVED QURESHI, DR. GEETA SOLANKI**

Institution/Author Organization: **SMS MEDICAL COLLEGE,JAIPUR**

INTRODUCTION

Primary spontaneous pneumothorax (PSP) is a relatively rare condition in the paediatric population with a bimodal peak age of occurrence, with most cases occurring either in the neonatal period or in late adolescence. In children.

CASE REPORT

A 16-year-old male, previously healthy, was admitted to our hospital with complaints of left thoracic pain. There was no history of previous trauma, smoking or illicit drug use, fever, cough or shortness of breath; however, he had myopia. On examination patient was

tall and thin, with long tapered extremities. He presented with arachnodactyly, increased arm span with positive wrist (Walker) and thumb (Steinberg), stretch marks sign. Pneumothorax managed with chest tube drainage. On examination revealed high arched palate, myopia & subluxation of lens and pulmonary artery hypertension.

DISCUSSION

Marfan syndrome is autosomal dominant connective tissue disorder who affect the cardiovascular,eyes, skeleton,lung and skin system. Pulmonary manifestations include congenital bronchial malformations, bronchiectasis, bullous emphysema and spontaneous pneumothorax . Prognosis is highly related to cardiovascular complications. Marfan syndrome causal gene,FBN1, encodes elastic fibres in lung. Abnormalities of fibrillin result in PSP in these individual. Early diagnosis of this condition and a multidisciplinary approach to these patients reduce morbidity.

Title: PULMONARY ALVEOLAR PROTEINOSIS (PAP) SYNDROME: A case Report

Name of Presenter: **Dr ANURAG SHARMA**

Authors (or Co-authors): **Dr MANOHAR LAL GUPTA, Dr SHYAM SUNDAR YADAV**

Institution/Author Organization: **SANTOKBA DURLABHJI MEMORIAL HOSPITAL, JAIPUR**

Introduction:

Pulmonary alveolar proteinosis (PAP) syndrome is characterized by the presence of massive quantities of proteinaceous eosinophilic periodic acid/ Schiff-positive material and by an excess of surfactant components in the alveoli and terminal airways resulting in hypoxemic respiratory failure. Typically presents as progressive dyspnea of insidious onset in previously healthy adults between the ages of 20 and 50 years, but has presented in children as young as 3 years old and in the elderly. In several series, dyspnea occurred in 67% to 94% of patients, followed by cough (23%–66%) and fatigue (49%) whereas fever (4%–11%) and sputum production (1%–4%) were less common. Although not specific, high-resolution computed tomography shows a characteristic “crazy paving” pattern. In most cases, bronchoalveolar lavage findings establish the diagnosis. Whole lung lavage is the most effective therapy, especially for autoimmune disease.

Case:

A 50 years old female patient presented with dyspnea, cough, weakness, weight loss who was diagnosed with Pulmonary alveolar proteinosis based on HRCT CHEST and BIOPSY

findings. Patient was treated with GMCSF and whole lung lavage, followed up for 2-3 months, showed improvement in dyspnea, weakness and weight loss.

Title: SPONTANEOUS ESOPHAGEAL PLEURAL FISTULA: ROAD LESS TRAVELLED

Name of Presenter: **Anurag Tripathi**

Authors (or Co-authors): **Dr. Malay Sarkar, Dr R S Negi, Dr Sunil Sharma**

Institution/Author Organization: **INDIRA GANDHI MEDICAL COLLEGE**

Background:

Oesophageal perforation causing oesophageal pleural fistula is a potentially life-threatening clinical situation. Oesophagus rupture is usually iatrogenic, but in about 15% of the cases, there is spontaneous rupture with no known pre-existing pathology of the oesophagus.

Aim:

To familiarise with spontaneous esophageal pleural fistula (EPF) as a cause of esophageal pleural fistula

Methodology:

We describe a case series of two patients who were managed as pyo-pneumothorax with intercostal drain (ICD) insertion and then referred to our institution as the condition continued to deteriorate. Both cases presented differently in first case presence of food particles in ICD bag probed for further investigation and in second case despite of appropriate management increase in distress caused us to investigate for pulmonary embolism which lead to the diagnosis of EPF

Result:

On CT thorax, esophageal pleural fistula was suspected and confirmed on oral contrast and upper gastrointestinal endoscopy. Both patients had no past history of esophageal pathology or intervention and were managed with placement of self-expandable metallic stents and later expired. Conclusion: We must consider EPF as a possible cause of nonresolving empyema, even in a patient who may not have predisposing factors. Early diagnosis (< 24 hours) is essential for good outcome.

Title: PULMONARY ARTERIO-VEINOSUS MALFORMATION ASSOCIATED WITH PULMONARY ALVEOLAR HAEMORRHAGE: A RARE CASE REPORT

Name of Presenter: **Dr. Arjunsinh Asvinsinh Gohil**

Authors (or Co-authors): **Dr. Arjunsinh**

Asvinsinh Gohil

Institution/Author Organization: **B J Medical College, Ahmedabad**

Intoduction:

PAVMs refer to an abnormal fistulous connection between arterial and venous branches, without a Customary intervening capillary network that is vital for gas exchange.

Case Report:

A 26 year old young male patient presented with recurrent hemoptysis of about 500 ml. CXR was done and all other causes of hemoptysis were ruled out. CECT Thorax shows av malformation which is confirmed in CTPA CTPA:- 95x10x5 mm and 5x4x6 mm sized tangle of dilated tortuous vessel noted in subpleural location of lateral basal segment of right lower lobe which is supplied by segmental branch of Right Pulmonary Artery and drained by segmental tributary of right pulmonary vein,s/o AV malformation.similar sized characteristic multiple lesions in other regions of right lower lobe. Associated ground glass opacity with septal thickening in right middle and lower lobe with crazy pavement pattern s/o pulmonary hemorrhage.

Discussion:

PAVM are rare pulmonary vascular anomalies. Patient may present with hemoptysis, shortness of breath and hypoxemia. There is a strong association between PAVM and hereditary haemorrhagic telangiectasia. CTPA is the gold standard. Therapeutic options include angiographic embolisation with metal coil or balloon occlusion and surgical excision. Conclusion:-Early identification and treatment will improve patient symptoms and prevent major complications.

Title: A RARE CASE OF BILATERAL PLEURAL EFFUSION SECONDARY TO BILATERAL PANCREATICO-PLEURAL FISTULA

Name of Presenter: **ARUL KUMAR V**

Authors (or Co-authors): **DR. SAILAJA, DR. A. S. SREEKANTH, DR. NAGASREEDHAR RAO, DR. AJAY KUMAR**

Institution/Author Organization: **KURNOOL MEDICAL COLLEGE**

INTRODUCTION

Pancreatico-pleural fistula is a rare entity with incidence of 0.4% seen both in patients with acute and chronic pancreatitis or may follow trauma or surgical disruption of pancreatic duct.Here we report a case of massive pleural effusion secondary to bilateral pancreatoco-pleural fistula.

HISTORY AND PRESENTATION

A 28 years old female, a known case of chronic pancreatitis presented with breathlessness since 15 days without any abdominal symptoms.

DIAGNOSIS

On examination signs of pleural effusion elicited on both sides.Pleural fluid amylase and lipase elevated.Recurrent accumulation of pleural fluid present. CECT chest and abdomen showed bilateral pancreatoco-pleural fistula.

MANAGEMENT

Patient was treated with Intercostal drainage and with somatostatin analogue Octreotide.

CLINICAL IMPLICATIONS

Pancreatoco-pleural fistula is difficult to diagnose because of predominant chest symptoms and require a high index of clinical suspicion to diagnose, particularly in the setting of recurrent pleural effusion with coexisting history of pancreatitis or alcohol abuse.The optimal treatment strategy traditionally has been medical management with octreotide and ERCP if failed, operative therapy.

Title: A bone to pick from the lungs : dendriform pulmonary ossification

Name of Presenter: **Dr. Athira Satheesh**

Authors (or Co-authors): **Dr. Mahesh PA , Dr. Jayaraj BS**

Institution/Author Organization: **JSS Medical college, Mysuru**

A 54 year old male patient came with complaints of cough since 1 month , dry in nature- non progressive. History of fever present - mild intermittent since 1 month .relieved by medications. patient previously had no respiratory symptoms on examination: vitals stable RS- reduced breath sounds in the right suprascapular area and left infrascapular area. chest xray - right upper zone, left middle and lower zone homogenous opacity noted- s/o loculated effusion ct thorax- large well defined multiloculated cystic lesion in the right upper lobe and left lower lobe. patient underwent excision of the lesion gross examination - multiloculated areas of hemorrhage, calcification and fibrosis microscopy - lung sections with large areas of hemorrhage, congested blood vessels, fibroblastic proliferation , osteoclastic giant cells and foamy macrophages. ossification noted in the intraalveolar septae and within the lesion. Diffuse pulmonary ossification - characterized by ectopic mature bone formation . incidence is 1.63 cases / 1000 autopsies two types - dendriform and nodular

dendriiform pulmonary ossification - branching spicules of bone involving the interstitium and alveolar septae with sporadic invasion into the lung parenchyma.

Title: Coal workers' pneumoconiosis

Name of Presenter: **Dr Athira Krishna Sugesh**
 Authors (or Co-authors): **Proff Dr KVV Vijayakumar MD, Asso Proff Dr Suryakumari MD, Asst Proff Dr K Preethi MD**
 Institution/Author Organization: **Government Hospital of chest and communicable diseases, Visakhapatnam**

INTRODUCTION:

Pneumoconiosis is a class of interstitial lung diseases where inhalation of dust causes interstitial fibrosis. It is an occupational lung disease from years of dust exposure in mining, sandblasting etc.

CASE REPORT:

A 54 year old male patient came with shortness of breath and cough with expectoration for 2 weeks. He had history of pulmonary tuberculosis 6 years back and was on ATT. He worked in limestone mine for 18 years, not a smoker. On admission, he had SpO₂ of 95% with bilateral rhonchi. All baseline investigations were normal. Chest xray showed right upperlobe consolidation & left upperzone mass lesion ("Category r" according to ILO International classification of radiographs of pneumoconioses). HRCT chest showed loss of volume in RUL and mass in LUL. USG guided biopsy of lung mass in LUL was done and reported as pneumoconiosis with anthracotic pigment on HPE (coal workers pneumoconiosis). In Bronchoscopy, extensive compression of right middle and lowerlobe bronchi and black pigment was seen in Left main bronchus. Patient was explained to wear a mask at workplace. The need for yearly pneumococcal and influenzavaccines was advised.

DIAGNOSIS:

Coal workers' pneumoconiosis

COMPLICATIONS:

PMF, Lung Ca, Pneumothorax, Cor pulmonale, Haemoptysis

DISCUSSION:

Pneumoconiosis is due to exposure to dust typically over or equal to 20 years. Here patient worked in limestone mine for 18 years (<20 years) which was less than the period of exposure required

CONCLUSION:

Prolonged exposure to dust can lead to pneumoconiosis.

Title: Idiopathic Pulmonary Arterial Hypertension – A rare presentation

Name of Presenter: **Dr Ayesha Chaturvedi**
 Authors (or Co-authors): **Dr. Tushar Sahasrabudhe**
 Institution/Author Organization: **Dr. DY Patil Medical College and Research Centre, Pune**

INTRODUCTION

Idiopathic Pulmonary Arterial Hypertension represents a rare entity classified under Group 1 of the NICE classification and is essentially a diagnosis of exclusion. AIMS - To highlight remarkable outcomes with conservative treatment in this disease

CLINICAL COURSE

24 year non smoker old male presented with frequent episodes of mild to moderate haemoptysis and breathlessness for 5 years. Clinical examination was normal except loud P2. Except mild hypoxemia (PaO₂- 75.7), all other hematological and biochemical parameters were normal. Chest X Ray and CT chest showed dilated pulmonary artery. A 2D-Echo and Trans-Oesophageal Echocardiography confirmed severe PAH (PASP = 116 mm Hg) with dilated right heart chambers. Detailed history and diagnostic workup including spirometry, DLCO, Polysomnography, lower limb doppler, collagen workup etc ruled out all known causes of pulmonary artery hypertension; leading to the diagnosis of Idiopathic Pulmonary Arterial Hypertension - WHO Functional Class III.

RESULTS

As per current ERS/ESC guidelines, he was started on a combination of Ambrisentan and Tadalafil along with diuretics and digitalis. He has shown significant symptomatic improvement over last 18 months and PASP is now normalized (PASP = 25), with WHO FC II.

CONCLUSION

The uniqueness of this case is male gender, uncommon presentation with hemoptysis and remarkable resolution with treatment.

Title: SWYER-JAMES-MACLEOD SYNDROME: A CASE REPORT

Name of Presenter: **DR. AZAZMOHMAD ISMAILBHAI MEMON**
 Authors (or Co-authors): **DR. NIMIT KHARA, DR. YAGNANG VYAS, DR. DHAVAL PRAJAPATI, DR. SATEESH PATEL, DR. RAJIV PALIWAL**
 Institution/Author Organization:

DEPARTMENT OF RESPIRATORY MEDICINE, PRAMUKHSHWAMI MEDICAL COLLEGE, KARAMSAD.

Introduction:

Swyer-James-MacLeod syndrome is an uncommon syndrome of unilateral functional hypoplasia of the pulmonary vasculature and emphysema, with or without associated bronchiectasis. Most patients are clinically asymptomatic. The characteristic radiographic findings include unilateral hyperlucent lung along with decreased bronchovascular markings, small hilar shadow and slight displacement of mediastinum to affected side.

History and Presentation:

A 70 year old male came with breathlessness and cough with chronic respiratory illness hypertension and factory worker by occupation.

Diagnosis:

The patient was positive for bilateral expiratory wheezes, crepitation and rales at the base of the left hemithorax on pulmonary auscultation. Chest radiographs showed hyperlucency of the left lung. CT scan of thorax suggestive of hypoplasia of left main pulmonary artery and branches and diffused decreased attenuation of left hemithorax with expiratory air trapping. Based on the clinical and radiologic features, the diagnosis of SJMS was established.

Management:

Patients started inhaled corticosteroids and long acting beta agonist, vaccines to prevent respiratory infections were administered and airway clearance techniques were taught.

Complication:

Recurrent infection, lung abscesses, and spontaneous pneumothorax.

Clinical Implication:

It is important that various diagnoses one must be mindful of, when approaching any patient who presents with unilateral lung hyperlucency. Inaccurate diagnoses can lead to inappropriate therapy.

Title: REPORTING A RARE CASE OF KIKUCHI'S DISEASE IN A SYSTEMIC LUPUS ERYTHEMATOSUS PATIENT

Name of Presenter: **B.RAMYA KRISHNA**
 Authors (or Co-authors): **D Pradeep Kumar, C. N. Prasad, Satish Chandra.**
 Institution/Author Organization: **PRATHIMA INSTITUTE OF MEDICAL SCIENCES**

INTRODUCTION:

Kikuchi's disease (KD) is a rare, self-limited, benign condition of unknown etiology. KD is rarely associated with systemic lupus erythematosus (SLE), Still's disease and Sweet's syndrome. Kikuchi's disease can develop before or after onset of SLE manifestations.

HISTORY:

A 19-year-old female patient presented with low grade fever, multiple neck swellings and polyarthritis of one month duration. There is no past history of tuberculosis.

PRESENTATION:

Presented with bilateral multiple lymph nodes at Ib, IIa and V levels on ultrasonography neck. Associated features include dyspnea on exertion, facial rash, facial puffiness and pedal edema.

DIAGNOSIS:

Fine needle aspiration cytology of the cervical node was suggestive of Reactive Lymphadenitis. Histopathological examination (HPE) of the cervical lymph node showed Necrotizing Lymphadenitis and features suggestive Kikuchi's disease. Serum Antinuclear Antibody were positive and urine albumin was elevated (3+). Renal biopsy suggestive of Lupus Nephritis (Class V).

MANAGEMENT:

Medical management.

COMPLICATIONS:

Nil.

CLINICAL IMPLICATIONS:

There are varied differentials for cervical lymphadenopathy, most common being Tuberculosis in India. Though rare, Kikuchi's must be considered among the differential diagnosis when a young female patient presents with Fever and Cervical lymphadenopathy.

Title: Mounier kuhn syndrome: a rare cause of tracheobronchial dilatation

Name of Presenter: **Dr. Basa Dhanusha**

Authors (or Co-authors): **Dr. A. Siva Prasad**

Institution/Author Organization: **MNR MEDICAL COLLEGE AND HOSPITAL**

A 36 yrs old male presented with exertional breathlessness and productive cough since 2 months, blood tinged sputum 2 episodes in past 2 weeks, recurrent respiratory tract infections since childhood. On examination grade 2 clubbing, on auscultation bilateral coarse crackles were heard. CBP showed neutrophilic predominant leukocytosis, sputum for AFB was negative. Chest x-ray :cystic changes in both

lower zones. HRCT chest showed extensive bronchiectatic changes in both lower lobes and increase in trachea and both major bronchial diameters Trachea – 36.1mm, Right main bronchus diameter- 27.3mm, Left main bronchus diameter :29.9mm. Bronchoscopy revealed tracheal and bronchial dilatation and expiratory collapse of trachea is seen.

Conclusion is diagnosis of mounier Kuhn syndrome should be considered in instances of recurrent pneumonias. The relevant literature is reviewed

Title: SINISTER SPONTANEITY-ACUTE SEVERE BREATHLESSNESS IN A 15 YEAR OLD

Name of Presenter: **DR BASEERAHMMAD WALIKAR**

Authors (or Co-authors): **DR VISHNU SHARMA M, DR SAMBRAM SHETTY, DR HARSHA D S, DR ABHINANDAN K , DR ABHISHEK**

Institution/Author Organization: **AJ INSTITUTE OF MEDICAL SCIENCES AND RESEARCH CENTRE, MANGLORE, KARNATAKA**

INTRODUCTION:

Simultaneous bilateral spontaneous pneumothorax(SBSP) is a very rare condition, accounting for 1% of all pneumothoraces. It should be considered as one of the differential diagnosis for any patient presenting with acute breathlessness.

CASE PRESENTATION:

A 15 year old male with no significant past medical history presented to Emergency Room with sudden onset breathlessness and chest discomfort with no obvious inciting cause.. Physical findings were suggestive of pneumothorax. Chest x-ray was done which showed bilateral pneumothoraces. Immediate bilateral intercostal tube(ICT) was inserted and patient was stabilized. HRCT thorax was done which showed apical bullae in both lungs. He underwent video assisted thoracoscopic plication of the bullae with surgical pleurodesis on both sides. He made uneventful recovery.

DISCUSSION:

SBSP is a rare medical condition that requires prompt diagnosis and intervention. Due to its potentially life threatening nature, early diagnosis and emergent intervention is of utmost importance. Physical examination may miss small bilateral pneumothoraces, unless a high index of suspicion is kept in mind. Although the placement of ICT may resolve initial symptoms ,surgical intervention and VATS is accepted as the gold standard to prevent recurrence as the condition can be fatal.

Title: A CASE REPORT – AN UNCOMMON CAUSE OF MASSIVE EXUDATIVE PLEURAL EFFUSION

Name of Presenter: **DR. D. PRIYA**

Authors (or Co-authors): **Dr. Gangadhar Reddy, Dr. C. Sujith Reddy, Dr. Sirisha,**

Institution/Author Organization: **MNR MEDICAL COLLEGE AND HOSPITAL**

INTRODUCTION:

Acute pancreatitis rarely causes pleural effusion which is more on left side. We report a case of left sided pleural Effusion in a patient with acute pancreatitis with pseudocysts.

CASE REPORT:

A 50yr old male alcoholic, smoker presented with breathing difficulty of grade 3 MMRC, dry cough and loss of Appetite for 2weeks.Two week back he had abdominal distension with pain and fever for 1week.On examination vitals were stable with diminished chest movements, stony dullness on percussion, and absent Breath sounds were noted all over left hemi thorax. Chest X-Ray showed massive left sided pleural effusion. Diagnostic pleural aspiration confirmed exudative pleural effusion with raised pleural fluid amylase levels of 1600IU/L. CECT abdomen shows pancreatic Pseudocysts with passive collapse of left lung lower lobe. The left sided pleural effusion was treated with intercostal tube drainage, broad spectrum Antibiotics, oxygen supplementation and other supportive care.

DIAGNOSIS:

Left sided pancreatic pleural effusion

CONCLUSION:

We conclude that in our case, acute pancreatitis presented as a left sided massive pleural effusion on chest xray,with the help of proper evaluation and CT Imaging.

Title: AN EXTREMELY RARE CASE OF ISOLATED RIGHT PULMONARY ARTERY ATRESIA WITHOUT ANY OTHER CONGENITAL ANOMALIES

Name of Presenter: **DR. DARSHAN HIMMATBHAI NIMAVAT**

Authors (or Co-authors):**DR. NIMIT KHARA, DR. YAGNANG VYAS, DR. DHAVAL PRAJAPATI, DR. SATEESH PATEL, DR. RAJIV PALIWAL**

Institution/Author Organization: **DEPARTMENT OF RESPIRATORY MEDICINE, PRAMUKHSWAMI MEDICAL COLLEGE, KARAMSAD**

INTRODUCTION:

Pulmonary atresia is a rare congenital anomaly. It may be at the tricuspid valve, involve the main pulmonary artery or involve interruption of right or left pulmonary artery proximally or at the hilum. Incidence rate is 0.01%.

HISTORY AND PRESENTATION:

Patient presented with C/o hemoptysis, right sided chest pain and dyspnea on moderate exertion since 1-2 months.

DIAGNOSIS:

CECT Thorax with CTAP suggestive of abrupt narrowing of right pulmonary artery with non-opacification of the distal right pulmonary artery branches—more likely to be secondary to congenital proximal interruption of right pulmonary artery, rather than chronic pulmonary thromboembolism. Systemic to pulmonary collaterals (SPC) from bronchial, right internal mammary and subdiaphragmatic arteries. Cath Angio S/o MPA dilated. RPA complete occlusion just after origin. Arch angio S/o few collaterals from RT SCA to RPA. 2D Echo S/o LVEF-60%, Trivial TR, No PAH.

MANAGEMENT:

Surgical management was avoided. Currently patient is on conservative management and stable.

COMPLICATIONS:

Infective Endocarditis, Heart failure, Death.

CLINICAL IMPLICATIONS:

Congenital pulmonary vascular anomalies are typically found in infancy or early childhood however, some may remain silent and present in adult patients.

Title: A rare Case Of Swyer-James-MacLeod syndrome

Name of Presenter: **Devendra Pratap Yadav**
 Authors (or Co-authors): **Govind Narayan Srivastava**
 Institution/Author Organization: **INSTITUTE OF MEDICAL SCIENCES, BHU**

Introduction

Swyer-James-MacLeod Syndrome (SJMS) or unilateral hyperlucent lung syndrome is a rare entity associated with postinfectious bronchiolitis obliterans occurring in childhood [1]. It is characterized by hypoplasia and/or agenesis of the pulmonary arteries resulting in pulmonary parenchyma hypoperfusion, showing a characteristic radiological pattern, such as translucent or hyperlucent unilateral lung [2].

History and Presentation

A 45-year-old married woman from a village of North India presented to the chest OPD with a 3 month history of progressive dyspnea on exertion, productive mucoid cough, generalized body swelling. Her medical history suggestive of recurrent pulmonary infections in childhood. No other significant medical history of own and her family members. On physical examination she was well conscious. Her blood pressure was 116/82 mm Hg, pulse rate of 72 beats per minute, respiratory rate of 24 breaths per minute with an oxygen saturation of 92% on room air. On auscultation fine crepits were present in left infra axillary and infrascapular regions. Bilateral Pedal Edema was present and JVP was elevated. The remaining physical examination was normal.

Diagnosis

She had a white-cell count of 8200 per mm³, Hemoglobin 12.1 gram, platelet count was 148,000 per mm³. Levels of serum electrolytes, creatinine, urea, hepatic transaminases, CRP were normal. Cardiac enzymes were unremarkable. Electrocardiogram shows Sinus Tachycardia and Normal axis. Chest Xray Shows multiple cystic, hyperlucent pattern. Sputum examination for AFB stain was negative. A chest high resolution computed tomography (HRCT) scan showed hyperlucency and diminished vascularity in the left upper and lower lobe with hyperinflation of the pulmonary parenchyma with reduced size of peripheral vessels suggestive of SJMS.

Management

Patient was admitted in chest ward. She was given supplemental oxygen inhalation with face mask. Parenteral antibiotics, bronchodilators, diuretics were given. Patient improved in due course of hospitalization.

Conclusion

SJMS is very rare disorder. It may remain undiagnosed when we are solemnly dependent on Chest x ray (3). Diagnosis rely on advanced imaging like HRCT and Pulmonary angiography.

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Title: A RARE CAUSE OF OPAQUE HEMITHORAX

Name of Presenter: **Durga Devi**
 Authors (or Co-authors): **Dr. K. Rajendra kumar, Dr. M. kiran, Dr. Chakravarthi, Dr. Naga lakshmi, Dr. G. Ramya**
 Institution/Author Organization: **Rangaraya Medical College**

Introduction:

Achalasia cardia is a rare esophageal motility disorder characterized by esophageal aperistalsis and impaired relaxation of lower esophageal sphincter during deglutition.

Case report:

A 56 year male presented to outpatient department with history of chest pain, weight loss and decreased appetite for 2 years. On general examination patient malnourished and physical examination revealed decreased air entry on right hemithorax. Chest X ray showed opacified right hemithorax with no mediastinal shift. He was further investigated with CT thorax which showed dilated esophagus throughout its length. Barium swallow was done and it showed dilated esophagus with bird beak narrowing at gastroesophageal junction.

Conclusion:

An opacified hemithorax may not necessarily indicate pulmonary pathology. Other organs/systems should always be kept in mind to prevent delay in diagnosis and treatment.

Title: AN UNUSUAL MEDIASTINAL MASS

Name of Presenter: **FASIL N**
 Authors (or Co-authors): -
 Institution/Author Organization: **INSTITUTE OF CHEST DISEASES CALICUT, KERALA**

History:

- 23 Year old antenatal female G3P2L2A1
- During 7th Month of gestation Presented with c/o DOE X 2Weeks Cough with scanty Mucoid expectoration x 2weeks No Orthopnoea/PND

Examination:

Breath sound and VR decreased at Right IFSA

INVESTIGATIONS:**CECT Thorax:**

- An enhancing Well defined Soft tissue

Density lesion noted involving the posterior mediastinum measuring 6x3.8x5.8 cm with mild Right Pleural effusion-Possibility of a Neurogenic Mediastinal/Pleural lesion.Suggest Tissue correlation

FOB and Trucut biopsy from the lesion was inconclusive

Pleural fluid study was Exudative Lymphocytic and Low ADA

Patient underwent Thoracotomy after her delivery and HPE of the mass came as Castleman Disease –Hyaline Vascular type(Angiofollicular Lymphoid hyperlasia)

Discussion:

- Angio follicular Lymphnode hyperplasia
- Two types-Solitary and Multicentric

SOLITARY	MULTI-CENTRIC
Incidental	In HIV/HHV8 infection
Asymptomatic,Incidental	Symptomatic-Fever, Sweating,Anemia,Lymphadenopathy,Hepatosplenomegaly
Young to middle aged of either gender	In fourth and fifth decades
HPE-Hyaline vascular morphology-Prominent Lymphoid follicles with small atrophic germinal centers penetrated by hyalinized venules with plump endothelial cells	HPE-Peribronchovascular Interstitial thickening and Centrilobular nodules,Honey comb changes
Treatment-Excision-leads to disappearance of symptoms	Treatment-Non surgical-Chemtherapeutic regimens with or without immunotherapy,Including Anti-IL-6 and Anti-CD 20 monoclonal antibodies

Reference:

Fishmans Pulmonary Diseases and Disorders
Prepared by Dr Fasil N ICD Calicut Kerala

Title: GRANULOMATOSIS WITH POLYANGITIS -A RARE IMPERSONATION OF LUNG CARCINOMA

Name of Presenter: **GOWTHAM KUMAR V**

Authors (or Co-authors): **Ashwini Chauhan, Neha Kharangate, Uday C Kakodkar**

Institution/Author Organization: **GOA MEDICAL COLLEGE**

Abstract:

Granulomatosis with polyangitis , formerly known as Wegeners Granulomatosis is one of the rare vasculitis with annual incidence of 1 in 4,75000. The cytoplasmic anti-neutrophilic antibodies(C-ANCA)associated vascular

disorder has varied signs and symptomatology , the most common being persistent nasal obstruction, saddle nose deformities, Extracapillary Necrotising Glomerulonephritis with skin and central nervous system manifestations in 10-25 percent cases. Common pulmonary manifestations of the same include pulmonary nodules and alveolar haemorrhage. We report a rare presentation of a 50year old male presenting with a lung mass, masquerading as Lung carcinoma on clinical presentation and computed tomography of thorax only to be further evaluated and diagnosed as Granulomatosis Polyangitis.

Keywords:

Granulomatosis with Polyangitis , C-ANCA.

Title: Unusual cause of incidental lung nodules- Unravalled

Name of Presenter: **Dr Harshavardhini P**

Authors (or Co-authors): **Dr. S. Subramanian (Professor), Dr. N. Nalini Jayanthi (Professor and HOD)**

Institution/Author Organization: **SRM Medical College Hospital and Research Centre**

INTRODUCTION:

Granulomatosis with Polyangitis (GPA) is a rare multisystem autoimmune disease, characterized by necrotizing granulomatous vasculitis classically involving ENT, lungs and kidney. Atypical presentation of this disease delays the diagnosis, thus increases the morbidity though there is no immediate threat to patients life.

HISTORY:

19 year old female presented with hemoptysis, productive cough and fever for 1 week with nasal discharge and hard of hearing for 5 months.

PRESENTATION:

General and Respiratory examination revealed no abnormality. ENT examination revealed mulberry appearance of septal mucosa bleeding on touch and conductive hearing loss.

DIAGNOSIS:

Laboratory tests revealed normal WBC count, increased inflammatory markers. Renal function tests - normal. Chest Radiology showed multiple lung nodules in both lung fields. Bronchoscopy and microbiological evaluation was negative for TB, other infections and malignancy. Serological tests showed C-ANCA and PR3 positivity. Nasal mucosal biopsy showed necrotizing epitheloid granulomatous inflammation with leucocytoclastic vasculitis confirming the diagnosis of Limited

Granulomatosis with Polyangitis.

MANAGEMENT:

Patient was started on prednisolone, mycophenolate mofetil and co-trimoxazole and showed good clinical response and radiological resolution.

CLINICAL IMPLICATION

This case is presented to enhance the knowledge of atypical presentation of pulmonary vasculitis which helps the clinician to diagnose early and alter the natural course of illness.

Title: A case report of PULMONARY ALVEOLAR PROTEINOSIS

Name of Presenter: **HIMAJA REDDY KAPUTHIMMA REDDY**

Authors (or Co-authors): -

Institution/Author Organization: **MNR MEDICAL COLLEGE AND HOSPITAL**

Pulmonary Alveolar Proteinosis(PAP) is a rare lung condition which is characterized by accumulation of surfactant composed of proteins and lipids resulting in hypoxic respiratory failure. A 32 year old female patient came to the hospital with complaints of exertional dyspnea since 1 year and breathlessness grade 4 (mMRC) since 2 months, cough with scanty sputum, increased fatigue, weight loss(>15 kgs over 3 months) since 2 months. On examination, Pallor+, clubbing +, Pulse rate: 100/min, BP: 100/70mmHg, Oxygen Saturation on room air: 72% with 5lit oxygen 88%, RespiratoryRate: 30 breaths/minute, on auscultation of lungs: Bilateral crackles +, Chest xray – showed bilateral alveolar opacities with perihilar and basal distribution, Sputum for AFB AND CBNAAT were negative, CT chest showed bilateral ground glass opacities with interseptal thickening -crazy paving pattern, Connective tissue disease profile: negative, Bronchoscopy done and Bronchoalveolar lavage (BAL) fluid cytology showed increased cellularity with increased lymphocytes and macrophages and BAL Fluid Periodic acid sciff(PAS) staining was positive. Patient diagnosed to have PULMONARY ALVEOLAR PROTEINOSIS. The patient succumbed to the disease during the course of treatment.

Keywords:

pulmonary alveolar proteinosis, crazy paving pattern, BAL PAS stain

Title: A Rare case of Anasarca in a patient of Lupus Nephritis

Name of Presenter: **Dr. Hrishikesh Barui**

Authors (or Co-authors): **Prof. Dr. Santanu Ghosh , Dr. Pronoy Sen**

Institution/Author Organization: **BURDWAN MEDICAL COLLEGE AND HOSPITAL, PURBA BURDWAN, WEST BENGAL**

INTRODUCTION

Lupus Nephritis is one of the manifestations of SLE with considerable influence in patient outcome. Here we present an unusual presentation of Lupus Nephritis as anasarca.

HISTORY

A 40 year old Muslim , female , homemaker presented with shortness of breath, multiple joint pain , swelling of face, abdominal distension , pedal edema which was gradually progressive.

PRESENTATION

On examination malar rash was found. She had massive bilateral pleural effusion which was confirmed by USG Thorax. USG of whole abdomen showed ascites. Echocardiography showed moderate pericardial effusion.

DIAGNOSIS

Diagnostic Thoracentesis showed transudative fluid and ascitic fluid had low SAAG. High BUN, low serum albumin markedly increased urine albumin creatinine ratio was present. Serum Hypocomplementemia with elevated ESR and CRP was also found. Serum Anti dsDNA was positive which confirmed the diagnosis of SLE. CT guided renal biopsy was done which revealed advanced stage lupus nephritis class 6 with global glomerulosclerosis.

MANAGEMENT

The patient was given pulse dose of intravenous methylprednisolone for 3 days as per body weight followed by 1 mg/kg/day of oral prednisolone. The patient was followed up after one month where there was significant improvement.

LEARNING POINTS

Corticosteroids play an important role in management of Lupus Nephritis.

Title: Pulmonary alveolar microlithiasis - A case reports

Name of Presenter: **Dr. INEX ANN JOSEPH**

Authors (or Co-authors): **Dr. KVV Vijaya Kumar MD, Dr. V Suryakumari, Dr. K Preethi**

Institution/Author Organization: **Andhra Medical College**

Introduction

Pulmonary alveolar microlithiasis (PAM) is a

rare autosomal recessive lung disease in which calcium phosphate deposits which accumulate in the distal airspaces Case report 56 year old male who is a farmer by occupation non smoker and non alcoholic presented with shortness of breath and cough with expectoration of 2 years duration.on clinical examination grade 2 digital clubbing was present .Bilateral pitting pedal oedema was present. Routine investigations were normal.sputum AFB and sputum CBNAAT were negative. Chest X ray showed multiple confluent opacities in calcified densities with bilateral black pleura sign. HRCT chest showed extensive hyperdense nodular opacities in calcified density in bilateral lung fields with black pleura sign.broncho alveolar lavage for cytology showed inflammatory cell infiltrates with foreign body giant cells. Diagnosis: pulmonary alveolar microlithiasis

Management:

definitive management is lung transplantation. Use of sodium editronate is also recommended.

Discussion:

Usually there will be a delay in the diagnosis of PAM and most of the times, this disease can be misdiagnosed as Pulmonary tuberculosis. its a rare genetic condition which also has familial incidence. Patients usually asymptomatic in the younger age, become symptomatic in the third or fourth decade.

Conclusion:

Even though it is a rare condition we earlier diagnosis will help for the evaluation of the preventive strategies that may improve the outcome.

Title: HEPATOPULMONARY SYNDROME A RARE CASE REPORT

Name of Presenter: **DR.JAGRUTI AHIR**

Authors (or Co-authors): **DR.RAHULKUMAR**

Institution/Author Organization: **DEPARTMENT OF PULMONARY MEDICINE, B. J. MEDICALCOLLEGE , AHMEDABAD**

INTRODUCTION:

Hepatopulmonary syndrome is defined as the triad of liver disease , pulmonary gas exchange abnormalities leading to arterial deoxygenation and widespread intrapulmonary vascular dilatation (IPVD) .When cirrhotic patients have no sign of cardiovascular disease,severe hypoxemia (PO₂ < 60 mmHg) strongly indicates HPS. A diagnosis is established when patient present with liver disease associated with IPVD and arterial gas exchange abnormalities.

CASE REPORT:

A 14 year old Hindu male patient was admitted

for gradual onset of breathlessness with peripheral cyanosis and digital clubbing since 2 years,which was progressively increased since past 2 months.there was presence of platypnea and orthodeoxia which was confirmed with ABGA in supine and standing position. all basic investigations were within normal limits. CXR, USG abdomen ,2D ECHO,CTPA ,BUBBLE CONTRAST enhanced TTECHO was done.

CONCLUSION:

No known medical treatment for HPS exists and patient with HPS have a poorer prognosis than patients with liver disease without HPS. HPS is an indication for and is curable by liver transplantation.

Title: A CASE OF CAPLAN SYNDROME: A SEQUELAE OF SILICOSIS

Name of Presenter: **DR JEEVA BABU**

Authors (or Co-authors): **DR SURESH KOOLWAL, DR GOVIND SINGH RAJAWAT**

Institution/Author Organization: **SMS MEDICAL COLLEGE JAIPUR**

INTRODUCTION

Caplan's Syndrome, first described in Welsh coal miners is the combination of pneumoconiosis nodules and seropositive Rheumatoid Arthritis. It is usually seen in Coal Worker Pneumoconiosis but rarely reported in silicosis patients.

MATERIALS AND METHODS

A 36-yrs-old non-smoker male, minor by occupation with chronic exposure to silica for the past 15 years, presented with dyspnoea since 2yrs and multiple joint pains since 1 yr. On examination patient was tachypneic with swelling of 2nd& 3rdPIP joints, bilateral knee and ankle joints. On auscultation basal-lung fine crepitations present. Radiograph revealed multiple bilateral micro nodules distributed throughout lungs, mainly in lower zones. HRCT Chest showed nodules in bilateral lung fields with fibrotic changes and the patient was positive for Rheumatoid factor along with high titre of anti-CCP.

RESULTS

Based on clinic-radiological and serological findings, the diagnosis of Caplan's Syndrome was made. Patient was started on DMARDs and symptomatically improved.

CONCLUSION

Rheumatoid nodules which are asymptomatic, subpleural, single /multiple nodules seen incidentally on imaging. Differentials include malignancy, infectious granulomatous diseases. Early interventions are needed in patients with pneumoconiosis to avoid further exposure and

complications.

Title: A CASE OF BRONCHOGENIC CYST – HIDDEN CAUSE OF PERSISTENT COUGH & CHEST HEAVINESS.

Name of Presenter: **DR. JIGAR J. KHANPARA**
 Authors (or Co-authors): **DR. NIMIT KHARA, DR. YAGNANG VYAS, DR. DHAVAL PRAJAPATI, DR. SATEESH PATEL & DR. RAJIV PALIWAL.**
 Institution/Author Organization: **SHREE KRISHNA HOSPITAL AND PRAMUKHSWAMI MEDICAL COLLEGE, KARAMSAD, ANAND**

INTRODUCTION:

Bronchogenic-cysts are congenital-broncho-pulmonary-foregut-malformation presenting as solitary-mediastinal-mass, lined by secretory-respiratory-epithelium & wall consists of cartilage, elastic-tissues, mucous-glands & smooth-muscle. Bronchogenic-cysts contains fluid (proteinaceous-material/blood-products/calcium-oxalate) & are less likely air-filled.

HISTORY:

A 41 years old/male with no known comorbidities visited CTVS-Department, Shree-Krishna-Hospital, Karamsad, Anand (Gujarat), after being referred by outside physician with complaint of persistent-cough, chest-heaviness and right-shoulder-pain since 6-months. There were no other respiratory-complaints like fever, shortness-of-breath (SOB), hemoptysis, anorexia on evaluation.

PRESENTATION:

On admission, patient was vitally/hemodynamically stable with normal initial laboratory-profile, ABG, ECG & 2D-Echo findings. General-Examination findings were normal with no evidence of Clubbing/Lymphadenopathy. Respiratory-examination showed normal inspection, palpation, percussion & auscultation findings. Patient had complaint of cough which was dry, non-productive & intermittent in nature & had no-association with posture/diurnal-variation.

DIAGNOSIS:

Chest X-Ray showed soft-tissue density rounded-structure in the right-hemithorax. HRCT-Thorax showed well defined, lobulated, cystic density space-occupying-lesion (SOL) with no solid-contrast-enhancement in right-hemithorax at paravertebral-region (D5-D7, vertebral-bodies) with no adjacent bony-erosion/lung-parenchyma-involvement. Finding suggestive of ?Bronchogenic-Cyst/?Neurenteric-Cyst.

MANAGEMENT:

Right-sided postero-lateral-thoracotomy for

cyst excision was performed. Excision-biopsy section showed linings of ciliated-cuboidal-epithelium with scanty-lymphocytes & smooth-muscle-fibres in stroma. Histo-pathological-examination was consistent with clinical diagnosis of bronchogenic cyst. Post-surgery patient had significant reduction in presenting symptoms, which completely subsided on 10th/post-op day.

COMPLICATIONS:

Bronchogenic-cyst may develop secondary-infection, Bronchial-tree-fistula formation, Secondary-bronchial-atresia, Ulceration-Hemorrhage, Compressive-symptoms (dysphagia, dyspnea, dysphonia), Malignant transformation (rare-0.7%).

CLINICAL-IMPLICATIONS:

Choice of treatment is controversial. Some Surgeons advocate surgical excision as they tend to get infected/rarely undergo malignant transformation. Sometimes, Lung-abscess, Hydatid-cyst, Round-pneumonia, Infected-bulla, Meningococci, Thyroid-colloid-cyst, Thymic-cyst may also mimic as bronchogenic-cyst. Increasingly, such lesions are treated with CT-guided-transbronchial/percutaneous-aspiration for diagnostic/therapeutic purposes.

Title: AN UNUSUAL PRESENTATION OF WEGENER'S GRANULOMATOSIS DISEASE AS LUNG MASS

Name of Presenter: **DR. JITENDRA SINGH**
 Authors (or Co-authors): **DR. S. P. AGNIHOTRI, DR. SURESH KOOLWAL, DR. GULAB SINGH YADAV, DR. GOVIND SINGH RAJAWAT, DR. SUDHIR KATTA**
 Institution/Author Organization: **INSTITUTE OF RESPIRATORY DISEASES SMS MEDICAL COLLEGE JAIPUR**

Introduction

Wegener's granulomatosis is a multisystemic-necrotizing-granulomatous vasculitis that affects upper-lower respiratory tract, lungs, and kidneys.

Case Report

A 33 years old female presents with complaints of non-productive-cough, chest-pain, throat-pain, hemoptysis, reddish swelling over bilateral feet, loss-of-appetite, fever and rhinitis since two-months. She was on Anti-Tubercular-Treatment since 22 days. Patient was vitally stable and purpuric-lesions on both feet. X-ray-chest shows multiple opacities. High-resolution-computerized-tomography chest shows large well-defined-irregular soft tissue density-mass with mild contrast-enhancement, large area of

consolidation in right upper lobe parenchyma, multiple rounded masses in both lung-field. All routine investigations done, urine examination revealed protein+1, occult blood+3, red-blood-cells, sputum for acid-fast-bacilli and CBNAAT Negative, anti-neutrophil-cytoplasmic-antibody cytoplasmic-pattern (C-ANCA) is Positive and perinuclear-pattern (P-ANCA) is Negative. Ultrasonic-guided-biopsy of lung mass revealed caseating material, Inflammatory cells and few giant cells, suggesting granulomatous lesion. Fiber-Optic-Bronchoscopy done bronchial aspirate revealed inflammatory cells, macrophages and columnar cells, histopathologic examination of bronchial biopsy shows bronchial epithelium and fibrocollagen tissue. Skin biopsy revealed hyperkeratosis with necrosis, inflammatory cells and fibrin deposition suggestive Wegener's-granulomatosis. Anti-Tubercular-Treatment withheld put on steroid-rituximab based induction therapy.

Conclusion

Wegener's Granulomatosis is a systemic vasculitis and misdiagnosed as pneumonia, cancer and other diseases. Early diagnosis of it is important to manage symptoms, prevent recurrence and survival of patients.

Title: SKINNERS PNEUMOTHORAX

Name of Presenter: **K. LOGESWARI**
 Authors (or Co-authors): **Dr. KRISHNAMOORTHY, Dr. MUTHUKUMAR, Dr. MATHAN, Dr. RAHMAN SHAHUL HAMEED**
 Institution/Author Organization: **TIRUNELVELI MEDICAL COLLEGE**

INTRODUCTION:

Scleroderma is an inflammatory fibrotic disease that results in deposition of extracellular matrix in the skin and visceral organs. Lung involvement is seen in 70 to 100%. Pleural involvement is rare with effusion reported in 7% of patients, but spontaneous pneumothorax has been very rarely reported.

HISTORY:

35 years old female presented with H/o breathlessness and H/o Right sided chest pain

PRESENTATION:

on examination patient dyspneic and tachypneic, Spo₂ – 84% @ RA, Thickened skin, fish mouth appearance, RS- air entry reduced on right side, Bilateral infrascapular fine inspiratory crackles

DIAGNOSIS:

CXR- bilateral reticular shadows with right side pneumothorax. CT CHEST - bilateral reticular

thickening with diffuse honeycombing predominantly in lower lobe, Right pneumothorax with left Mediastinal shift. ANA - positive. ENA profile - scl 70, RO 52 and CNEP B strongly positive

MANAGEMENT:

patient was treated with immediate Intercostal drainage. Rheumatologist opinion obtained and started on Immunomodulator therapy.

COMPLICATIONS:

Pneumothorax.

LEARNING POINTS:

Pneumothorax may be the initial presentation of Scleroderma. Pneumothorax is one of the potential complications in Scleroderma patient with underlying Pulmonary fibrosis and subpleural cyst.

Title: A rare case of bilateral pulmonary artery pseudoaneurysms

Name of Presenter: **Dr. K. Premchand**

Authors (or Co-authors): **Dr. S. Raghu , Dr. D. Sudheer**

Institution/Author Organization: **GUNTUR MEDICAL COLLEGE**

Introduction:

BEHCETS DISEASE is a multisystemic and vasculitic disease of unknown etiology. The main features of pulmonary involvement includes arterial and venous thrombosis, pulmonary artery aneurysms, pulmonary infarction, recurrent pneumonia and pleurisy. Life threatening pulmonary artery aneurysms may show regression with medical treatment.

CASE REPORT:

45 year male presented with chest pain and recurrent episodes of hemoptysis for one month. History of recurrent painful scrotal and oral ulcers present for 1 year. He also had proximal DVT 10 years ago. On examination, he had oral ulcers and healed scars on the genitals are present. Vitals-stable, bilateral normal breath sounds heard

INVESTIGATIONS:

CXR- B/L hilar prominence present. CECT chest showed presence of bilateral pulmonary artery pseudoaneurysms. (right larger than left)

Diagnosis :

HUGHES STOVIN SYNDROME (BEHCETS DISEASE) TREATMENT :Steroid pulse and cyclophosphamide therapy.

CONCLUSION:

Combination of DVT and pulmonary or

bronchial artery pseudoaneurysms is called as HUGHES STOVIN SYNDROME. Commonest pulmonary manifestation of Behcets disease is pulmonary artery aneurysms, indicates poor prognostic factor with 25% risk of mortality.

Title: CAVITATING LESION ; A DIAGNOSTIC DILEMMA

Name of Presenter: **1) KAUMUDI DEVI , DNB RESIDENT**

Authors (or Co-authors): **2) MAHAVIR MODI , MD/DNB PULMONARY MEDICINE, CONSULTANT**

Institution/Author Organization: **RUBY HALL CLINIC**

INTRODUCTION

Cavities are frequently manifested in different age group patients with different possibilities, almost always diagnosed as tuberculosis or malignancy. But all cavitory lesions are not always tuberculosis or malignancy. We present a case of 26 year old female, who was first seen by an ENT surgeon for bilateral ear discharge, earache and occasional dry cough, with deviation of mouth to left. She was diagnosed with acute suppurative otitis media, which turned out to be involving lung with bilateral multiple cavitory lesions.

CASE REPORT

26 year old female admitted for myringotomy, had multiple bilateral cavitating lung lesions. She was intubated post myringotomy in view of acute respiratory failure. Her c-ANCA was positive and showed multiple bilateral cavitating lesions with tracheal narrowing but no evidence of embolism. Her hemoglobin dropped to 6.5 which requires blood transfusion. Blood culture had E-coli and ear swab culture had pan resistant pseudomonas, with urine showing proteinuria. Bronchoscopy revealed left main bronchus narrowing with histopathology showing necrosis with giant cells and vessels suggestive of granulomatosis polyangitis. Multi disciplinary approach involving rheumatologist, pulmonologist, nephrologist, and intensivist was commenced and given rituximab and plasmapheresis, following which patient was extubated and stabilised. Chest radiograph showed improvement dramatically.

DISCUSSION

Cavitating lesions are almost always considered as tuberculosis in Indian scenario. Every cavitating lesions should be evaluated and whenever possible, a tissue diagnosis also should be taken. Aggressive and timely management is very important in Wegener's granulomatosis which act as life saving in

patients.

Title: ISOLATED MEDIASTINAL LYMPHADENOPATHY ; A GREAT DECEPTION

Name of Presenter: **1) KAUMUDI DEVI, DNB RESIDENT**

Authors (or Co-authors): **2) , MAHAVIR MODI, MD/DNB PULMONARY MEDICINE, CONSULTANT**

Institution/Author Organization: **RUBY HALL CLINIC**

INTRODUCTION

Mediastinal lymph node enlargement can occur from a wide range of pathologies, either by its own or in association with other lung pathology. The spectrum of conditions that can result in mediastinal lymphadenopathy are tuberculosis, sarcoidosis, metastasis. The diagnosis is achieved by performing an EBUS-TBNA, as many times history and clinical features can be overlapping. Hence it is always advisable to get a tissue diagnosis of the nodes. Here we are presenting one unique and rare case of Rosai- Dorfman disease, which was initially treated as tuberculosis in a peripheral center, and later got a tissue biopsy done proving Rosai- Dorfman disease

CASE REPORT

45 year old male with history of high grade fever for 10 months and significant loss of weight. HRCT thorax showed mediastinal lymphadenopathy for which he underwent CT guided biopsy which was inconclusive and started on anti koch's treatment. However his symptoms persisted and he was referred to our center in view of lymphoma or tuberculosis, and we proceeded with EBUS- TBNA.

RESULTS

Histopathologic examination of the slides revealed sinus histiocytosis and EMPERIOPOLESIS which is specific for Rosai- Dorfman disease.

CONCLUSION

The diagnosis of every lymphadenopathy should be re-instated by a tissue diagnosis. Our case is unique and rare as there are only 4 cases of mediastinal lymphadenopathy reported as Rosai- Dorfman disease and the patient presented with isolated mediastinal lymphadenopathy, when all other reported cases had cervical and axillary lymphnode also as presentation.

Title: Case series of right sided pancreatic effusion

Name of Presenter: **Dr. Lakshmi**

Authors (or Co-authors): **Dr. Sravan Kumar, Dr. Phani Kumar**

Institution/Author Organization: **Kakathiya Medical college**

INTRODUCTION

Hemorrhagic pleural effusion, especially in the right hemithorax, rarely occurs as the sole manifestation of pancreatitis. Five cases of hemorrhagic pleural effusion secondary to pancreatitis are reported in the period of 6 months.

History and clinical presentation

These all cases presented to the hospital with common symptoms of right-sided pleuritic chest pain, dry cough and progressive dyspnoea and have common past history of chronic alcoholism.

Physical examination

On examination - decreased breath sounds, decreased vocal resonance, stony dull note on right hemithorax.

Investigations

Chest x ray shows massive right-sided pleural effusion with mediastinal shift to left side, and thoracentesis revealed dark red bloody effusion, exudative predominantly lymphocytic with low ADA. Pleural biopsy s/o non-specific inflammation. USG chest and abdomen s/o bulky pancreas. CT abdomen revealed chronic pancreatitis with pseudo-cyst formation in 3 cases, chronic pancreatitis with fatty liver in 1 case and acute pancreatitis in 1 case. Pleural fluid amylase ranges between and serum amylase values range between 2000 to 8000 U/L.

Management

Chest tube insertion and gastroenterologist referral.

Conclusion

Pancreatitis should be taken into consideration when hemorrhagic pleural effusion occurs, especially when it occurs concomitant with elevated amylase of pleural fluid.

Title: A RARE MASQUERADER OF CERVICAL LYMPHADENITIS-KIKUCHI FUJIMOTO DISEASE-CASE SERIES

Name of Presenter: **Dr LAKSHMI S**

Authors (or Co-authors): **Dr Manju R, Dr Oratap Upadhaya, Dr Vishnukanth Govindharaj, Dr Madhusmita Mohanty Mohapatra, Dr Dharm Prakash Dwivedi**

Institution/Author Organization: **JIPMER**

INTRODUCTION:

Kikuchi Fujimoto disease is a rare benign self-limiting disease of unknown aetiology. It was first described in Japan in 1972 characterised by subacute tender, cervical lymph node enlargement and systemic symptoms.

CASE DETAILS:

19-year-old female with fever and neck swelling. O/E had tender right cervical lymph node, initially treated with ATT. Biopsy showed histiocytic necrotising lymphadenitis consistent with Kikuchi's disease. 21-year-old female presented with similar complaints of 2-week duration not improving with antibiotics. FNAC from right showed similar picture. Both of them improved with NSAIDs and symptomatic management.

DISCUSSION

Kikuchi's disease presents with cervical lymphadenopathy, URTI, fever, weight loss, skin rashes and arthralgia more commonly among young females. Histology helps in diagnosis. Being alert of this possibility in a young female with cervical lymphadenopathy saves the patient from the burden of unwanted investigation and inappropriate treatment.

CONCLUSION

Kikuchi's disease is often underdiagnosed. Being a close mimicker of various immunological, infectious and malignant diseases, the condition leads to diagnostic dilemma. Identifying the disease early the burden of unwanted investigations and alternate treatment.

Title: A rare case of Pulmonary Alveolar Microlithiasis

Name of Presenter: **Dr. M. SANTOSHI REDDY**

Authors (or Co-authors): **Dr. Md Mateenuddin Saleem, Dr Tanzil Rahman**

Institution/Author Organization: **KAMINENI INSTITUTE OF MEDICAL SCIENCES, NARKETPALLY**

INTRODUCTION:

Pulmonary alveolar microlithiasis (PAM) is a rare autosomal recessive disorder characterized by the widespread intra-alveolar accumulation of microliths caused by mutation of SLC34A2 gene encoding Type IIb sodium phosphate cotransporter in alveolar type II cells. It is usually diagnosed between 20 and 40 years. These patients are mostly asymptomatic.

HISTORY:

First case reported in 1686, histopathological features described in 1918, Roentgen findings reported in 1932, defined "mikrolithiasis

alveolaris pulmonum" in 1933. In 2006 mutation of gene SLC34A2 was considered responsible. PAM is present globally particularly in Turkey, China, Japan, Italy, India, USA. Till June 2018, 86 cases reported in India. More than 1000 cases reported globally.

PRESENTATION:

35-year-old female presented with complaints of dry cough and fever since 10 days.

DIAGNOSIS:

Chest X-ray showed bilateral sand-like calcific micronodules (sandstorm lung). HRCT chest showed diffuse calcifications noted throughout both lungs with bilateral symmetrical pleural and interlobar septal calcifications and thickening giving a crazy pavement appearance. Bronchoscopy was normal.

MANAGEMENT:

Patient was managed with antibiotics and symptomatically and asked for follow-up.

COMPLICATIONS:

There were no complications.

LEARNING POINTS:

This case is being presented for its rarity.

Title: A Rare Case of Unilateral Hyperlucent Lung Mimicking Swyer-James Syndrome

Name of Presenter: **Dr. Meghna Rai Prasad**

Authors (or Co-authors): **Dr. Mahesh PA, Dr. Jayaraj B.S**

Institution/Author Organization: **JSS Medical College, Mysore**

Introduction:

Following an exanthematous infection in childhood can rarely cause permanent damage to developing bronchioles, leading to the development of obliterative bronchiolitis which often goes misdiagnosed inevitably leading to recurrent respiratory tract infections and sequelae.

Case report:

A 35-year-old female, no known comorbidities, with history of an episode of exanthematous infection during childhood followed by recurrent respiratory tract infections since childhood, who presented with history of increased non-productive cough with mild breathing difficulty. Clinical findings were predominantly normal with rhonchi heard on auscultation. Further imaging was carried out which showed diffuse narrowing of the left main bronchus and narrowing of left lower lobar pulmonary artery with paucity of segmental

vessels, bronchiectatic changes. Bronchoscopy was done which showed diffuse narrowing of left main bronchus and the scope could not be negotiated further. Virtual bronchoscopy showed narrowing of left main bronchus with subsequent generations reduced in number. The patient is being managed conservatively with bronchodilators and mucolytics.

Discussion:

This case emphasizes the importance of evaluating for rare presentations such as Swyer-James syndrome which was a consequence of childhood exanthematous infection in this patient wherein misdiagnosis can be detrimental due to recurrent symptoms, going on to have more severe and recurrent respiratory tract infections, eventually even requiring surgical interventions.

Title: A RARE CAUSE OF PNEUMONIA-TRACHEOBRONCHOPATHIA OSTEOCHONDROPLASTICA

Name of Presenter: **Y MONICA**

Authors (or Co-authors): **A Vinay Kumar, K Rajkumar**

Institution/Author Organization: **CHALMEDA ANAND RAO INSTITUTE OF MEDICAL SCIENCES**

INTRODUCTION

Tracheobronchopathia osteochondroplastica is a rare disorder with an unknown etiology. It is characterized by the accumulation of diffuse cartilaginous and osseous nodules protruding into the mucosa of the trachea and bronchus.

CASE HISTORY

A 50 years old male presented with chief complaints of fever since 7 days, cough and shortness of breath since 5 days. Respiratory System examination - a dull percussion note and coarse crepts in the right infra clavicular area. B/L rhonchi + in all the areas.

INVESTIGATIONS

CBP -Hb 9.1g% ; TLC 23,600cells/cumm ; Other hematological and biochemical investigations -normal limits. CXR - large non homogenous opacity with cavities on the right upper zone. . Bronchoscopy revealed multiple nodules protruding into the lumen of trachea from the anterolateral wall and purulent secretions were seen from the right upper lobe. BAL for AFB, CBNAAT - negative; Culture showed E.coli. Biopsy revealed epithelial squamous metaplasia, degenerating lymphocytes, histiocytes and few neutrophils in the subepithelial stroma; Osteocartilagenous fragments in the submucosa. CT Chest - Consolidation with cavities in the right

upperlobe, irregular thickening and nodularity of tracheal cartilage with calcification in the trachea and both main bronchi.

CONCLUSION

Based on bronchoscopy, radiology and clinicopathology a final diagnosis of Tracheobronchopathia osteochondroplastica with Post Obstructive Pneumonia was made.

Title: CONGENITAL BRONCHOBILIARY FISTULA IN A CASE OF CYSTIC BRONCHIECTASIS

Name of Presenter: **Muniza Bai**

Authors (or Co-authors): **Vishnukanth G, Dharm Prakash Dwivedi, Sunitha C, Midhusha Reddy**

Institution/Author Organization: **Jawaharlal Institute of Postgraduate Medical Education and Research**

INTRODUCTION

A bronchobiliary fistula (BBF) is a rare entity where there is a communication between the bronchi and biliary tract. They usually present with cough, bilipitysis, fever, and pain abdomen. It may be caused by hepatic abscess, hydatid disease, hepatic tumors, or as a complication of radiofrequency ablation of hepatic tumors, hepatic resection, or transcatheter arterial embolization. Congenital bronchobiliary fistula is even rare, which occurs due to the union of anomalous bronchial bud with an anomalous bile duct, or duplication of the upper gastrointestinal tract. In such cases, respiratory symptoms are often present from early childhood, which helps diagnose the condition early. We herein report an incidentally diagnosed case of congenital BBF in a 25-year young female with a left-sided destroyed lung.

CASE DETAILS

A 25 year young female with history of recurrent respiratory tract infections since childhood presented with complaints of hemoptysis and cough with yellow expectoration. Chest radiograph showed ectatic changes in left lung, with features of volume loss. CECT thorax showed bronchiectatic changes involving the entire left lung with associated fibrosis and volume loss. Interestingly, a BBF between the left main bronchus and biliary ductule, and pneumobilia in the central hepatic and bile duct was noted. A hepatobiliary scan reinstated the diagnosis that the BBF caused recurrent infection following bile pneumonitis, and progressively destroyed the left lung. Left pneumonectomy and repair of the fistula was the proposed line of management for the patient.

CONCLUSION

Given the possibility of undiagnosed cases of BBF continuing into adulthood, the presence of congenital anomalies of the bronchial tree should be considered in differential diagnosis while treating patients with recurrent respiratory tract infections. A high index of suspicion and hepatobiliary imaging studies can help clinch an early diagnosis.

Title: Exertional dyspnea and hemoptysis in an adolescent: is it tuberculosis only?

Name of Presenter: **Dr. Nitesh Goyal**

Authors (or Co-authors): **Dr. Nitin Goel, Dr. Raj Kumar**

Institution/Author Organization: **Vallabhbhai Patel Chest Institute**

Introduction:

Unilateral pulmonary artery atresia (UPAA), commonly detected in childhood, can occasionally present in adulthood with typical symptoms of recurrent pulmonary infections, dyspnea on exertion and hemoptysis.

History and Presentation:

An 18 year old girl presented with complaints of cough, dyspnea on exertion and hemoptysis. Chest radiograph revealed dilated pulmonary trunk, signs of left sided volume loss and cavitating lesion in left lower zone. Pulmonary CT angiography found left pulmonary artery atresia. Endobronchial lung biopsy revealed granulomatous inflammation.

Diagnosis:

Pulmonary Tuberculosis with Left sided isolated Unilateral Pulmonary Artery Atresia (UPAA) with pulmonary hypertension.

Management:

She responded well to the 6 months course of anti-tubercular therapy with evidence of resolution of left lower zone cavitating lesion on chest radiograph.

Clinical Implications:

Presence of pulmonary tuberculosis in a patient with UPAA is a very rare clinical entity. This case highlights the importance of awareness about UPAA as a possible differential for exertional dyspnea, recurrent chest infections, hemoptysis and pulmonary hypertension in adults. Similarly, the present case also emphasizes the fact that the physicians managing the cases of unilateral pulmonary atresia should have high index of suspicion for pulmonary tuberculosis also, especially in high burden countries like India.

Title: HEPATOPULMONARY SYNDROMEName of Presenter: **Dr NITIN**Authors (or Co-authors): **DR RAHUL KUMAR ROHIT**Institution/Author Organization: **BJ MEDICAL COLLEGE AHMEDABAD****INTRODUCTION**

HPS is a triad of liver disease, arterial deoxygenation and intrapulmonary vascular dilation. A diagnosis is established when patient present with IPVD and arterial gas exchange abnormality (arterial-alveolar oxygen gradient >15 mm of Hg or Pao₂ <80 mm of Hg).

CASE REPORT

A 14 year old presented with gradual onset of breathlessness with peripheral cyanosis and digital clubbing since 2 years, progressively increased since past 2 month. He had chronic history of hyperbilirubinemia since birth. There was a platypnea and orthodeoxia confirmed with ABGA. Routine investigation done, altered LFT present, CXR, 2D ECHO, HRCT THORAX, CTPA and Bubble contrast enhanced transthoracic echocardiogram (TTE). Diagnosis was made by Contrast enhanced TTE.

CONCLUSION-

No known medical treatment for HPS exists, having poorer prognosis. HPS is an indication for liver transplantation.

Title: A RARE PRESENTATION OF EOSINOPHILIC GRANULOMATOSIS WITH POLYANGIITISName of Presenter: **DR. OMKAR RANGANATH KONJETI**Authors (or Co-authors): **DR.M.S.BARTHWAL, DR.TUSHAR SAHASRABUDHE**Institution/Author Organization: **DR. D.Y.PATIL MEDICAL COLLEGE, PIMPRI, PUNE****INTRODUCTION**

Eosinophilic granulomatosis with polyangiitis (EGPA) is a type of vasculitis that commonly affects the lung. It is an eosinophil-rich necrotizing granulomatous inflammation of lungs with necrotizing vasculitis predominantly affecting small-to medium-sized vessels, and is commonly associated with asthma and peripheral eosinophilia.

CLINICAL COURSE

A 49 year old male, non-smoker, known case of bronchial asthma, presented with acute asthma exacerbation. He also complained of numbness in all four limbs and weakness in bilateral lower limbs. Hemogram showed 64% eosinophils,

and serum ACE level was 960. Chest x-ray, 2-D echo and HRCT thorax were normal. Spirometry showed moderate obstruction with post-bronchodilator reversibility. ANCA-PR3 (c-ANCA) was positive (20.32RU/ml) and ANCA-MPO (p-ANCA) was negative. Nerve conduction study (NCV) confirmed Mononeuritis Multiplex. Nerve biopsy showed vasculitis. Transbronchial lung biopsy revealed alveolated lung parenchyma with small vessel vasculitis and bronchial mucosa with prominent increase in eosinophils suggestive of EGPA. Patient responded well to prednisolone 40mg daily for 2 months and is now on maintenance dose of steroids.

CONCLUSION

EGPA is a rare multisystem disease and needs high index of suspicion. Asthma with eosinophilia and neurological symptoms prompted us to evaluate him for EGPA.

Title: Chylothorax due to Gorham Stout Disease: a common complication of a rare conditionName of Presenter: **Pooja Bajaj**Authors (or Co-authors): **Gayathridevi HJ, Palaniappan Ramanathan**Institution/Author Organization: **MS Ramaiah Medical College and Teaching Hospital****Introduction:**

Known as "vanishing bone disease," it is a rare condition, with sporadic incidence. Characterised by osteolysis and lymphatic proliferation. Spine, skull, ribs, clavicle, pelvis, and mandible involvement were seen.

Presentation:

A sixty-year-old female presented with five-month history of breathlessness on exertion, dry cough aggravating on lying down, loss of weight and appetite. No fever, past history of tuberculosis or co-morbidities. Examination revealed low BMI, stable vitals, decreased chest movements and absent breath sounds on left side.

Diagnosis:

USG chest showed left-sided gross pleural effusion and minimal effusion on the right side. Pleurocentesis revealed milky white-pink fluid; sterile, lymphocyte-predominant exudate with plenty RBCs, normal ADA, elevated cholesterol and triglyceride levels. Ultrasound abdomen and 2D ECHO were unremarkable. Mantoux test was negative. CECT chest revealed left sided massive pleural effusion, severe erosion of left 12th rib and L1-L2 transverse processes. After ICD insertion, daily drainage of 500-600ml of milky white-pink fluid was seen.

Bronchoscopy showed normal endobronchial anatomy. TBLB showed non-specific inflammation.

MRI showed resorption of left rib and left transverse process of T12 to L3, Atlanto-Axial dislocation, left pleural effusion, suggestive of thoraco-lumbar lymphangiomatosis; Gorham-Stout Disease.

Lymphoscintigraphy revealed stasis in the region of thoracic duct and accumulation of labeled lymph in left pleural cavity.

Management:

Broad-spectrum antibiotics, empirical ATT while awaiting reports.

Left neck exploration revealed a prominent, dilated thoracic duct, which was clipped and ligated.

Clinical implications:

Chylothorax is usually due to damage to thoracic duct by malignancy. The erosion of rib could be due to malignancy or, in endemic areas, TB. This report describes unusual presentation of Gorham-Stout disease. The combination of bone erosion and lymphatic obstruction led to suspicion of the same. No definite treatment protocol exists and prognosis depends on site affected and complications of disease.

Title: CHYLOTHORAX - A rare case presentation of Chylothorax secondary to LymphomaName of Presenter: **Dr. Rahul Ugale**Authors (or Co-authors): **Dr. Anil Sontakke, Dr. B. O. Tayade, Dr. Samruddhi Tayade**Institution/Author Organization: **N. K. P. Salve Institute of Medical Sciences and Research Centre & Lata Mangeshkar Hospital****Introduction:**

Chylothorax is formed when the thoracic duct is disrupted and chyle enters the pleural space.

History/Presentation:

a) Breathlessness on exertion b) Cough with expectoration c) Left sided chest pain

Investigations:

Pleural Fluid Routine: Colour: Milky white
Biochemistry: Triglycerides: 654 mg/dl
Pleural fluid Cholesterol: 185 mg/dl
Sr. Cholesterol: 212 mg/dl
CECT Thorax: S/o ? Lymphoma.
Diagnosis: In our case pleural fluid triglycerides were 654 mg/dl (>110mg/dl) and the ratio between pleural fluid cholesterol and serum cholesterol is 0.87 (<1.0).

Treatment:

In non-traumatic Chylothorax possibility of Lymphoma should be considered. In our patient, Intercoastal drainage tube was inserted and chylothorax was drained. The patient was further evaluated for Lymphoma and treated for the same.

Conclusion:

Chylothorax secondary to Lymphoma, with proper investigations can be treated with medical management.

Title: CHYLOTHORAX –A RARE CAUSE OF PLEURAL EFFUSION

Name of Presenter: **Dr. Rajesh kumar Bajiya**

Authors (or Co-authors): **Dr. Aashish Singh, Dr. Vinod Joshi**

Institution/Author Organization: **Institute of Respiratory DISEASES, S.M.S MEDICAL COLLEGE, JAIPUR**

INTRODUCTION

Chylothorax is characterized by the presence of chyle in the pleural space and results from lesion or obstruction of the thoracic duct.

CASE REPORT

A previously healthy, 25 year old female non-smoker, presented with 2 month history of diffuse chest pain and shortness of breath since 5 day. At the chest physical examination, stony dullness to percussion with decreased breath sound over the left lung field was noted. There was no history of trauma, recent infection, fever or weight loss. PA and lateral CxR demonstrated left pleural effusion. Drain pleural fluid was creamy milky like fluid with protein 5.8 triglycerides 2396 cholesterol 105 WBC 3700 (Neutrophilic) confirming the diagnosis of chylothorax. All routine investigations was normal. ANA, RF and viral serology were negative. CECT chest and abdomen was normal.

RESULTS

Treatment consisted of relative rest and a medium-chain triglyceride diet and evacuation of the pleural fluid by multiple aspiration. In few days, the effusion had completely resolved, still the patient remained asymptomatic.

CONCLUSION

Chylothorax is a relatively uncommon cause of pleural effusion. So after exclusion of traumatic and non traumatic causes this was a case of idiopathic chylothorax that was managed symptomatically.

Title: KEEPING AN EYE ON THE FOREST (NOT JUST THE TREES)

Name of Presenter: **Dr Ramya Priya**

Authors (or Co-authors): **Dr Saka Vinod Kumar, Dr Manju R, Dr Vishnukanth, Dr Madhusmita Mohapatra, Dr Dharm Prakash Dwivedi, Dr Pratap Upadhyaya, Dr Mahesh Babu**

Institution/Author Organization: **JAWARHALAL INSTITUTE OF POSTGRADUATE MEDICAL EDUCATION AND RESEARCH**

INTRODUCTION:

This report explains the need for evaluation of co-existence of diseases with overlapping symptoms in case of clinical worsening or suspicion.

CASE DETAILS:

1. A 63-year old farmer, smoker and hypertensive presented with breathing difficulty, puffiness of face and hoarseness of voice of 2 months duration. CECT showed confluent mass extending from high cervical to right hilar region. He had consolidation in right upper lobe with right minimal pleural effusion. Biopsy taken from mass showed features suggestive of small-cell neuroendocrine tumor. Pleural fluid sent for smear and CBNAAT detected MTB. Patient was treated with dose modified chemotherapy and ATT, significant radiological and clinical improvement noted.

2. A 32 year-male with no known comorbidities, RT-PCR proven CoViD was shifted after isolation period to general ward as he continued to have hypoxia. He developed left pneumothorax for which tube thoracostomy was done and reactive pleural fluid sent for analysis detected MTB by CBNAAT.

3. A 58 year-male treated pulmonary tuberculosis presented with pyothorax for which left side tube thoracostomy was done. He had left apical axillary lymphadenopathy with liver metastasis. Axillary lymphnode biopsy features were consistent with adenocarcinoma (primary from lung).

CONCLUSION:

Thus, in case of clinical suspicion, possibility of co-existence of diseases should be evaluated for better prognosis.

Title: Swyer James Macleod Syndrome an incidental finding in a Unilateral hyperlucent lung

Name of Presenter: **Dr Ritamvara Oli**

Authors (or Co-authors): **Prof. Dr. JK Mishra, Prof. Dr. GN Srivastava, Dr. Deepak Shah, Dr. Saurabh Mishra**

Institution/Author Organization: **Institute of Medical Sciences, Banaras Hindu University (BHU)**

INTRODUCTION

Swyer-James Macleod syndrome is an exceptional form of post infectious obliterative bronchiolitis. It results in hypoplasia, agenesis of the pulmonary arteries causing pulmonary parenchyma hypoperfusion.

History

28 years female non-smoker presented to OPD with complains of shortness of breath for 10 years increased since last 10 days which was gradual onset, progressive, MMRC-II was associated with seasonal variation. She had history of chronic recurrent cough. She had history of fever for 10 days. She also had history of MDI use for 8 years, ATT intake for pulmonary TB.

On Examination:

Patient was febrile and tachypneic. On auscultation B/L diffuse wheeze with fine crepts on left infraxillary area was present.

DIAGNOSIS

Routine investigations were normal. Sputum R/M: Volume-2ml, greyish white, N-88, L-09, M-03. Gram stain: gram positive and gram negative bacilli. Sputum c/s: Pseudomonas, Digital CXR, CECT thorax:

Small hyperlucent left lung with mediastinal shift towards left. Cystic dilatation of bronchial tree noted in lingula and left lower lobe with 'bunch of grapes' appearance. Left pulmonary artery is narrow measuring 10.4 mm, right pulmonary artery 21 mm diameter. Emphysematous bulla in left lower lobe.

MANAGEMENT

Patient was managed with antibiotics, low dose inhaled corticosteroids and inhaled bronchodilators, mucolytics, chest physiotherapy. During discharge pneumococcal and influenza vaccination.

COMPLICATIONS

Bronchiectasis, Lung abscess, Pneumothorax, hemoptysis

Title: CASE REPORT OF PULMONARY ALVEOLAR PROTEINOSIS

Name of Presenter: **DR. ROBIN VARUGHESE JOHN**

Authors (or Co-authors): **DR. ASHISH DESHMUKH, DR. SUNIL JADHAV, DR. SHIVAPRASAD KASAT, DR. HAFIZ DESHMUKH**

Institution/Author Organization: **MGM MEDICAL COLLEGE AND HOSPITAL, N-6 CIDCO, AURANGABAD, MAHARASHTRA**

INTRODUCTION:

Pulmonary alveolar proteinosis is a rare disorder characterized by alveolar accumulation of surfactant leading to hypoxic respiratory failure. It is caused by mutations in surfactant proteins or granulocyte-colony stimulating factor, autoimmune due to Anti-GM-CSF-Autoantibodies blocking activation of alveolar macrophages.

HISTORY AND PRESENTATION:

40 year old female patient was brought to OPD with complaints of breathlessness on exertion not associated with wheeze since 1 year, loss of weight since 1 year, loss of appetite since 1 year.

DIAGNOSIS:

HRCT chest was done which was suggestive of 'crazy paving pattern' on bilateral lung fields. Bronchoalveolar lavage and Transbronchial Lung Biopsy was done which was suggestive of pulmonary alveolar proteinosis. **MANAGEMENT:** Using flexible bronchoscope whole lung lavage was done.

FOLLOW UP:

Follow up Chest X-ray and HRCT revealed near complete resolution of bilateral lung fields.

Title: A long forgotten cause of orthopnoea- Pulmonary perspective

Name of Presenter: **Dr S Vinayak Agarwal**

Authors (or Co-authors): **Dr M. L Gupta, Dr S. S Yadav**

Institution/Author Organization: **Santokba Durlabhji Memorial Hospital**

Introduction:

Diaphragmatic paralysis is an unusual and often under-recognised cause of dyspnoea. Bilateral paralysis can be an idiopathic clinical condition or associated with several diseases such as trauma, surgery, viral infections and neurologic disturbance. Diaphragmatic paralysis is a clinical disorder that generates hypoventilation and basal pulmonary atelectasis predisposing to hypercapnic respiratory failure. The clinical manifestations mimic the cardio-respiratory pathologies, therefore often misdiagnosed.

Case series:

We retrospectively analysed 7 cases of bilateral idiopathic diaphragmatic paralysis who presented to our tertiary care centre during a period of 3 years. Initially most of these patients were misdiagnosed as having either chronic obstructive pulmonary disease or cardiac pathology. The predominant symptom with which these patients presented was dyspnoea with pronounced orthopnoea. The patients were individually investigated with a thorough history, physical examination, PFT,

echocardiography, ultrasound chest, arterial blood gas analysis, chest imaging studies and subsequently diagnosed with bilateral diaphragmatic paralysis. Further details will be elaborated.

Title: Diaphragmatic eventration

Name of Presenter: **Dr. Saba Khanam**

Authors (or Co-authors): -

Institution/Author Organization: **Govt General and Chest hospital, Hyderabad**

A 41 yrs old male presented with cough with expectoration, shortness of breath and low grade fever since 10 days. He was in respiratory distress at the time of admission. There was no history of trauma. Patient had h/o recurrent respiratory infections. Chest xray PA view showed large cavity with air fluid level with raised dome of left diaphragm. Barium swallow showed stomach and intestines on left side. CT chest confirmed the presence of stomach and intestines in left hemithorax. Routine blood tests were normal and sputum was negative for AFB.

We diagnosed this as a case of left diaphragmatic eventration.

Discussion.

Diaphragmatic eventration is a relatively rare condition. Patients should be carefully evaluated for this condition as any cavity with air fluid level can be confused with HPT or lung abscess.

Title: Pulmonary Alveolar Microlithiasis: a rare case scenario

Name of Presenter: **Dr. Sampath Vinayak Yerramsetti**

Authors (or Co-authors): **Dr. MD. Badusha**

Institution/Author Organization: **NRI Institute of Medical Sciences, Sangivalasa**

Pulmonary Alveolar Microlithiasis (PAM) is a rare autosomal recessive disorder that has an indolent clinical course and which often runs in families. Only a few cases were reported in the literature due to the asymptomatic nature of the disease. 45-50% cases of PAM occur in families and there is a genetic defect of the SLC34A2 gene found on chromosome 4. The disease is characterized by innumerable tiny microliths (calcspherules) located in the alveoli. We present the case of a 59 year old female patient, who came with the chief complaint of dry cough for 15 days. Family history was significant for some respiratory disorder in her younger sister. Vitals were WNL and a saturation of 98% was noted. A

routine PA view chest x-ray revealed classical bilateral micronodular sandstorm appearance, predominant in lower lobes. PFT showed a mild restrictive pattern and HRCT demonstrated sand like calcifications with reticular pattern, calcified interlobular septa and a black pleura sign. Patient underwent elective bronchoscopy for transbronchial lung biopsy that confirmed the diagnosis. Interestingly, many cases of PAM are asymptomatic causing a clinico-radiologic dissociation pattern. Long term monitoring for features of cor pulmonale and respiratory failure is mandated. Eventually, all end stage diseases require Lung Transplantation.

Title: CONSTELLATION OF MISDIAGNOSIS IN A CASE OF NECROTISING GRANULOMA

Name of Presenter: **DR SEJAL B RADIA**

Authors (or Co-authors): -

Institution/Author Organization: **OSMANIA MEDICAL COLLEGE**

Introduction-

Granulomatosis with Polyangiitis (GPA) is a systemic vasculitis involving upper respiratory tract, lungs and kidney, characterized pathologically by necrotizing granulomatous inflammation. Its estimated incidence is 1.8 cases /1,000,000 person-years in children, 12.8 cases /1,000,000 person-years in working-age adults¹

History –

A 64-year-old male presented with 3 months of fever, fatigue, and weight loss. He had history of epistaxis and haematuria.

Evaluation -

Chest x-ray and HRCT revealed multiple cavitating nodules in both lungs. Sputum and Bronchial washings were negative for tuberculosis. PET CT showed increased uptake of nodules. CT guided biopsy of nodule revealed necrotizing granulomatous inflammation. Renal function tests showed severe impairment. Serum C-ANCA was positive, P-ANCA, ANA, RF were negative.

Treatment -

Patient was started on IV Methyl Prednisolone pulse therapy, discharged with oral prednisolone and cyclophosphamide.

Learning points –

Bilateral nodular opacities are confused with metastasis and presence of necrotizing granulomas is misdiagnosed as tuberculosis. Involvement of upper respiratory tract, lung, kidney is commonly seen in GPA.

References-

1. Panupattanapong, Sirada et al. "Epidemiology and Outcomes of Granulomatosis With Polyangiitis in Pediatric and Working-Age Adult Populations In the United States: Analysis of a Large National Claims Database." *Arthritis & rheumatology* (Hoboken, N.J.) vol. 70,12 (2018)

Title: Unusual cases require unusual Approach: Learning from a case of Pulmonary Alveolar Proteinosis (PAP)

Name of Presenter: **Dr. Shailya Patel**

Authors (or Co-authors): **Dr. Nimit Khara, Dr. Yagnang Vyas, Dr. Dhaval Prajapati, Dr. Sateesh Patel, Dr. Rajiv Paliwal**

Institution/Author Organization: **Shree Krishna Hospital and Pramukh Swami Medical College**

Introduction:

The incidence of PAP has been estimated to be 0.2 cases per million worldwide and whole lung lavage remains as the standard of care for such cases.

History/Presentation:

A 37 years old female presented with breathlessness mMRC Grade-II and cough, initially diagnosed as BAL positive pulmonary tuberculosis and received anti-tuberculous treatment for 3 months. In the meantime she was tested Negative for Covid-19 twice. On further investigating her with HRCT Thorax showing Crazy Paving pattern and Bronchoscopy guided lung biopsy, diagnosis of PAP was made, following which Bilateral Whole Lung Lavage was done which reduced her breathlessness to mMRC Grade-I. She was advised to start GM-CSF after evaluating Anti-GM-CSF antibody level. Unfortunately, the report was delayed and patient deteriorated in the meantime post Bilateral Whole Lung Lavage procedure, so there was no time to wait for report and she was started on Inhalational GM-CSF and Injection Rituximab. Patient's overall condition improved with no added complication.

Diagnosis:

Pulmonary Alveolar Proteinosis Management: Bilateral whole lung lavage followed by Inhalational GM-CSF replacement therapy and injection Rituximab.

Complications:

Clinico-radiological, worsening despite of Bilateral Whole lung lavage. Clinical Implications/Learning Points: Inhalational GM-CSF and Injection Rituximab can be started without taking into consideration Anti-GM-CSF antibody level in exceptional cases.

Title: Facial palsy and bilateral hearing loss as an initial presentation of Wegener's granulomatosis

Name of Presenter: **Dr. Shraddha Tewari**

Authors (or Co-authors): **Dr Naresh Patel (Professor and HOD), Dr Tushar Patel (Associate professor), Dr Rushi Patel (Associate professor), Dr Karmay Shah**

Institution/Author Organization: **GCS Medical College, Hospital and Research centre, Ahmedabad**

INTRODUCTION

Wegener's granulomatosis is characterized by necrotizing vasculitis with no sex predilection usually presents at around 50 years of age. Most commonly affected organs are kidney, lungs and upper airways. Facial palsy as a presenting symptom of Wegeners granulomatosis is rare.

HISTORY

A 40 year old male patient presented to ER with right sided facial palsy and bilateral hearing loss since 1 month with dyspnea on exertion and coughing since 20 days.

DIAGNOSIS

HRCT temporal bone: Chronic otomastoiditis. MRI brain: Normal Chest Xray: Bilateral patchy soft tissue opacities CECT chest: B/L cavitary nodules. Bronchoscopy with endobronchial biopsy: Histopathology s/o inflammatory exudate with focal vascular proliferation. BAL GeneXpert: negative. PR3-ANCA: Positive (144.41). Patient was diagnosed as Wegener's granulomatosis.

TREATMENT

Patient was started on pulse methylprednisolone therapy (500 mg for 3 days) followed by cyclophosphamide (500mg OD).

COMPLICATION

Patient developed massive hemoptysis and succumbed to disease within short period of diagnosis.

CONCLUSION

Wegener's granulomatosis may present itself as unilateral facial palsy which is an uncommon presentation. It is due to vasculitis leading to ischaemic cranial neuropathy. It is an autoimmune disease and affects multiple systems but awareness regarding atypical presentation is required as early diagnosis affects prognosis in these patients.

Title: A mass hazard of occupation

Name of Presenter: **Dr. Venkateswaran,**

Authors (or Co-authors): **Dr. Prabhakaran M. D, Dr. Arivudainambi M.D, Dr. Saravanavasan M.D**

Institution/Author Organization: **Government Rajaji hospital, Madurai medical college, Madurai**

Introduction:

In the era of the modern investigation, art of clinical history play important role in diagnosis of the patient especially detailed occupational history. One of the occupational hazard prevailing from era of Hippocrates is silicosis. Silicosis is an occupational lung disease attributable to the inhalation of silica dust in crystalline form. Three forms of silicosis such as acute, accelerated, chronic described according to amount of dust exposed and latency of the occupation to symptoms.

Presentation:

A 60 years Male smoker for 20 yrs., working as biryani seller was presented with complaints of breathlessness progressive for 3 months haemoptysis and chest pain for 3 days. He was treated as clinically diagnosed pulmonary tuberculosis 7 yrs. back with ATT. On detailing of occupation history, patient revealed history of occupation in cement factory for 6 years dated back to 20 years. General examination shows normal Broncho vesicular sounds with bilateral wheeze and crackles present and spo2 88% in room air. CT chest with contrast showed large round heterogeneously enhancing lesion in left lower lobe with multiple calcified mediastinal lymph nodes and Para septal emphysematous changes. Bronchoscopy shows some nodules, distortion of architecture. Biopsy found to be negative for malignancy and shows silica Crystal with fibrosis Hence diagnosis confirmed as silicosis mimic like mass.

Management:

As there is no definite management, patient treated conservatively with nasal oxygen, bronchodilators and empirical antibiotics. Smoking abstinence is advised. Advised to avoid exposure to smoke or dust. Patient is then periodically reviewed for complication like infection like tuberculosis and neoplasms. Details about the patient is informed to public health advisory for the primary prevention of employees in the same factory.

Learning points:

1. Detailed occupational history in the past makes necessary part in management of lung diseases
2. Radiological features of silicosis may mimic mass or tuberculosis, bronchoscopy is essential for making diagnosis

3. Prevention is better than cure.

Title: AN UNUSUAL CASE OF CYSTIC BRONCHIECTASIS IN AN SLE PATIENT AS AN INITIAL EVENT

Name of Presenter: **Dr. VIVEK. A**

Authors (or Co-authors): **Dr. S. RAGHU**

Institution/Author Organization: **GUNTUR MEDICAL COLLEGE,GUNTUR**

Introduction:

SLE an autoimmune disorder which primarily affects females. Cystic bronchiectasis is a rare entity encountered in SLE. Here we present a case of cystic bronchiectasis as an initial presentation of SLE.

Case report:

28 year old female with a child of 1 year age with 6 months history of cough with mucopurulent sputum. Her sputum culture during previous admissions shown pseudomonas growth. She has photosensitivity, hairfall and had an abortion. No previous recurrent respiratory tract infections including Tuberculosis. O/E: pallor, frontal hair loss and a malar rash present, Diffuse Crackles. Investigations: CBP: microcytic hypochromic anemia. X ray chest-Bilateral cystic lesions in lower lobes. CT chest-Bilateral cystic bronchiectasis, more on lower lobes. Pus C&S-Pseudomonas growth. Sputum CBNAAT-no mycobacterium tuberculosis. Endobronchial biopsy-positive for ANA, anti dsDNA ab, anti Sm ab. Treatment-tobramycin nebulization, mucolytics, Hydroxychloroquine, steroids. Conclusion: Cystic bronchiectasis is a rare entity in SLE. Immunosuppression, mucolytics and antibiotics provide symptom control and delay in disease progression.

Title: A STUDY OF CLINICORADIOLOGICAL PROFILE OF BRONCHIECTASIS AT TERTIARY CARE CENTRE

Name of Presenter: **Dr. ATIT RAJESHKUMAR SHAH**

Authors (or Co-authors): -

Institution/Author Organization: **AMCMET Medical College and L.G Hospital**

INTRODUCTION

Bronchiectasis is defined as an irreversible dilatation and destruction of one or more bronchi, with a reduction in clearance of secretions and in the expiratory airflow.[1]

Nowadays Bronchiectasis has been recognized more, mainly due to the frequent use of high-resolution computerized tomography.

AIMS AND OBJECTIVES

To find out clinical profile, radiological pattern and quality of life in patients of Bronchiectasis

METHODOLOGY

This is a retrospective study of clinicoradiological profile of BRONCHIECTASIS at Tertiary care centre. Data is collected and Results are analyzed.

STUDY DESIGN:

Retrospective study

OBSERVATION & CONCLUSION

The highest incidence of Bronchiectasis is between age group of 31-50 (52%) seen in 26 patients.

Majority of the patients has multiple zone involvement followed by lower zone involvement on Chest X-ray PA view. Cystic bronchiectasis is most common 19 (47.5%).

The most common isolated bacterium in sputum culture was Pseudomonas aeruginosa. On Spirometry obstructive pattern is seen in 16 patients.

The frequency of patients with low, intermediate and high BSI was 13 (32.5%), 13 (32.5%) and 14 (35%), respectively.

Mean SGRQ total score is 51.78, mean symptom score 56.08, activity score 55.08, impact score is 51.78.

Title: To study the clinical factors associated with Pulmonary hypertension in Bronchiectasis patients in a tertiary care hospital

Name of Presenter: **DR D. SURESH**

Authors (or Co-authors): **DR. R. SRIDHAR, DR RAJMOHAN**

Institution/Author Organization: **STANLEY MEDICAL COLLEGE**

INTRODUCTION:

Bronchiectasis is defined as the permanent dilatation of one or more bronchi. Pulmonary hypertension (PHT) as a complication of bronchiectasis is associated with increased mortality. Hence, studying the clinical factors associated with PHT is of paramount importance in predicting the future outcome of bronchiectasis.

AIMS & OBJECTIVES:

To assess and evaluate the clinical factors associated with PHT in bronchiectasis patients from those without PHT.

METHODOLOGY:

After informed consent, patients with a diagnosis of bronchiectasis are subjected to physical examination, complete blood count, HRCT, 6MWT and ECHO. Clinical factors such as age, BMI, FEV1%, exacerbation rate in previous

1 year, Mmrc dyspnea score, 6MWT and hematocrit are analyzed in patients with PHT and without PHT based on ECHO.

RESULTS:

Out of 120 bronchiectasis patients studied, factors such as age, FEV1%, 6 minute walk test and hematocrit strongly correlate with PHT when compared to non PHT group.

CONCLUSION:

In bronchiectasis, Patients with pulmonary hypertension has a strong correlation with factors such as age, FEV1%, 6MWT and hematocrit than without PHT when compared to other factors like BMI, exacerbation rate and dyspnea score. Hence, these clinical factors can be used as a simple means of predicting pulmonary hypertension in patients with bronchiectasis.

Title: Etiology of hemoptysis at institute of respiratory diseases, Jaipur

Name of Presenter: **Dr Dharamendra Kumar Gupta**

Authors (or Co-authors): **Dr R K Jenaw**

Institution/Author Organization: **SMS Medical College Jaipur**

Introduction -

Hemoptysis is defined as expectoration of blood originating from lungs or bronchotracheal tree. Hemoptysis is a frightening symptom for the patients and can be a manifestation of serious underlying disease.

Aim & Objectives -

To find out the various etiologies of hemoptysis and the relation of etiology to the severity of it.

Methodology -

Total of 100 patients complaining of hemoptysis were taken up for this prospective study. All the patients were fully investigated to find out the etiology of hemoptysis.

Results -

The most common etiologies of hemoptysis in our study were tuberculosis [29%] followed by malignancy [14%] and bronchiectasis [13%]. Out of 100 patients, 66 patients had mild hemoptysis [66%], 28 had moderate [28%], 06 had severe hemoptysis [6%]. 36% patients of mild hemoptysis were diagnosed as tuberculosis, 97% of the patients with idiopathic hemoptysis were having mild hemoptysis. Of the 28 patients with moderate hemoptysis, 25% were diagnosed as having bronchogenic carcinoma, 14% were having bronchiectasis as the etiology for hemoptysis. Tuberculosis (33%) and

bronchiectasis (33%) were the most common etiologies in patients with severe hemoptysis.

Conclusion -

Hemoptysis can be life threatening in the course of pulmonary tuberculosis. Careful assessment of the condition and quick management remains rewarding.

Title: Knowledge, Attitude and Practice of Tobacco Smoking Hazards and Smoking Cessation Among College Students

Name of Presenter: **GEORGE ROSHAN PRASANTH D**

Authors (or Co-authors): **MEENAKSHI N, ARUNA S, NISHA GANGA, SAI PUJITH**

Institution/Author Organization: **CHETTINAD HOSPITAL AND RESEARCH INSTITUTE**

INTRODUCTION

Burden of tobacco smoking in India is 28.6% of which 12.4% are under 15-24yrs age group. This Smoking behavior of teenagers maybe attributable to lack of knowledge regarding health consequences of tobacco use and benefits of smoking cessation.

AIM

The aim is to assess knowledge, attitude and practice of tobacco smoking hazards and smoking cessation among college students utilizing a comprehensive structured questionnaire

METHODOLOGY

Cross-Sectional Observational study involving students from engineering college in semi urban area. A comprehensive questionnaire designed based GATS, Fagerstorm and others was administered and responses were noted.

RESULTS

A total number of 126 college students with majority being Males (86.5%). The mean age of initiating smoking was 18+/-0.5 with a major reason being self pleasure (48%), stress relief (36%) and peer pressure (35%). More than 90% of participants were aware of the harmful effects of smoking. 79% of the participants were willing to quit their smoking habit but unaware of methods to quit smoking and 21% were not willing to quit.

CONCLUSION

The awareness and knowledge of smoking hazards and the willingness to quit were high among the students but the knowledge about the means of smoking cessation was poor. Hence health education about smoking cessation programs has to be enhanced among

students.

Title: CLINICAL, LABORATORY AND RADIOLOGICAL PROFILE OF PATIENTS OF PLEURAL EFFUSION

Name of Presenter: **DR. JIGAR J. KHANPARA**

Authors (or Co-authors): **DR. NIMIT KHARA, DR. YAGNANG VYAS, DR. DHAVAL PRAJAPATI, DR. SATEESH PATEL & DR. RAJIV PALIWAL.**

Institution/Author Organization: **SHREE KRISHNA HOSPITAL AND PRAMUKHSWAMI MEDICAL COLLEGE, KARAMSAD, ANAND**

INTRODUCTION:

Pleural Effusion[PE] is the most-common manifestation of pleural disease, characterised by fluid accumulation between visceral & parietal pleura. Chest X-Ray & USG-Thorax are primary tests for its diagnosis. Other diagnostic/therapeutic aid includes Thoracentesis/IPC (Indwelling-Pleural-Catheter)/Tube-Thoracostomy/Intercostal-chest-drainage(ICD). AIMS & OBJECTIVES: Study and compare different types of pleural effusion (Tuberculous/Malignant/Parapneumonic, etc.). Utilise Light's-Criteria for differentiating Exudates from Transudates.

METHODOLOGY:

Retrospective-observational-study conducted at Respiratory-Medicine-Department, Shree-Krishna-Hospital, Karamsad (Anand, Gujarat) for one-year, wherein data of 250-patients who underwent Thoracentesis/Intercostal-chest-drainage(ICD) for PE was recorded. Clinical-history, laboratory-parameters [Sputum/Blood/Pleural-fluid] & radiological-picture of all patients were analyzed [Proportion/frequency(%)].

RESULTS:

Out of 250-patient, 188 were males, 62 were females. PE showed higher incidence in Urban population (Middle-class-farmers/labourers). Tuberculous pleural effusion [TPE] was the most-common cause of PE (189-patients), followed by Malignant pleural effusion [MPE], (52-patients). TPE's & MPE's were common in younger & elderly patients respectively. In TPE, 12.56% & 11.32% patients had past-history of tuberculosis & contact-tuberculosis respectively. In MPE, 65.38% & 59.62% patients were smokers & had history of malignancy/distant-metastasis respectively. In parapneumonic effusion, 20% patients were diabetic and had history of pneumonia. Pleural fluid ADA (Adenosine-deaminase) and TC (Total-counts) were elevated in tuberculous and parapneumonic effusions respectively. Right-sided PE was most-common overall Chest X-Ray finding. Bilateral PE's were seen in CCF (Congestive-cardiac-failure)/

CKD (Chronic-kidney-disease)/ALD (Alcoholic-liver-disease). Pleural-fluid-cultures were positive in parapneumonic-effusions/empyema. Pleural-fluid-AFB-Concentration/CBNAAT (Cartridge-based-nucleic-acid-amplification-test) were positive in TPE. Pleural-fluid-cytology were positive in MPE. (Most-common, Adenocarcinoma).

CONCLUSION:

Out of 250-patients, 4% were transudates, 96% were exudates. TPE was the most-common cause of PE (and of Exudative PE). Undiagnosed PE cases were subjected to other diagnostic modality like Pleural-Biopsy, VATS (Video-Assisted-Thoracoscopic-Surgery), Bronchoscopy, PET-Scan & CTPA (CT-Pulmonary-Angiography).

Title: PREDICTORS OF SUCCESSFUL SMOKING CESSATION IN GENERAL POPULATION

Name of Presenter: **KRISHNADAS. M. P**

Authors (or Co-authors): **THOMAS GEORGE, OK MANI, MURALY CP, PARVATHY RAJENDRAN, ELIZABETH MATHAI**

Institution/Author Organization: **GOVERNMENT MEDICAL COLLEGE, THRISSUR**

BACKGROUND OF THE STUDY:

Tobacco smoking is a leading cause for global burden of diseases, cessation may reverse the health risks associated with smoking. There are few studies on predictors of smoking cessation

AIM:

To analyse the predictors of successful smoking cessation

METHOD:

Inpatients and bystanders were participants. Survey done by prevalidated structured questionnaire

RESULT:

62.5% use beedi, 40% have smoking index below 400 and 37.5% have smoking index >400. 78.1% started smoking by peer pressure. 81% have alcoholic addiction, 50% had COPD, 40% had diabetes and cardiac diseases, 31% were hypertensive. 60% got medical advice to quit smoking. 25% tried 2-5 attempts to quit smoking but failed. 55% continued other addictions after quitting smoking. Most common reason for smoking cessation was associated disease. 37.5% self-motivated, 30% motivated from social media to quit smoking and below 10% stopped because of family pressure and financial burden.

CONCLUSION:

Coronary artery disease, COPD, DM, HTN were found to be predictors of smoking cessation. Medical advice was crucial in cessation of smoking in both diseased and non-diseased smokers. Social media advertisements had role in motivating people to quit smoking

Title: CLINICORADIOLOGICAL, MICROBIOLOGICAL AND A VARIED CARDIOLOGICAL PROFILE OF BRONCHIECTASIS

Name of Presenter: **DR PAYYAVULA VENKAIAH**

Authors (or Co-authors): **DR BANANI JENA, DR RAKHI LUDAM**

Institution/Author Organization: **IMS AND SUM HOSPITAL**

Introduction

Bronchiectasis is a permanent, irreversible dilatation of bronchi, due to recurrent infection and inflammation.

Aims

To assess the clinical features, radiological extent, bacteriological growth and cardiological manifestations in bronchiectasis patients. This study may be helpful for clinicians to appropriately formulate and endorse a competent and rationale antibacterial therapy.

Methodology

All patients with suspected or already diagnosed bronchiectasis took into this study and all these patients were evaluated on the basis of detailed clinical history, physical examination, routine blood investigations, chest X-ray PA view, sputum analysis, HRCT thorax and 2D-ECHO.

Results

A total 60 subjects took into my study, male to female ratio was 0.82:1 and mean age of the study subjects was 51.6±18.3 years.

In my study all the patients had cough, and 50% patients had h/o Tuberculosis.

On sputum culture examination, pseudomonas was the most common followed by k. pneumoniae, Acinetobacter.

In HRCT scan the most common bronchiectasis changes were cystic, followed by cylindrical and varicose.

In this study 36.6% patients have pulmonary hypertension, out of this 11.75% have cor pulmonale in 2D-ECHO.

Conclusion

Evaluation of signs and symptoms in addition to radiological presentation is important

for clinicians to diagnosis and appropriate treatment.

Title: Age-wise distribution of etiological diagnosis of exudative pleural effusion: A 9-month observational study

Name of Presenter: **Poulkit Basra**

Authors (or Co-authors): **Rajesh Agrawal**

Institution/Author Organization: **Rohilkhand Medical College and Hospital Bareilly**

Introduction:

Among exudative pleural effusion tubercular, parapneumonic effusion, malignant effusion are the common causes. Generally tuberculous pleural effusion is found in younger and middle-aged patient and malignant effusion is seen in older age group.

Aim:

To determine the age-wise distribution of exudative pleural effusion

Methods:

A retrospective study conducted at Rohilkhand Medical college and hospital, Bareilly from October 2019- June 2020. All patients with exudative pleural effusion were included in study. Their Clinico-radiological as well as pleural fluid examination was used and data was analysed.

Results:

Out of total 51 patients with exudative pleural effusion 38(74.5%) were males. In age group 0-20 years TB was 66.7%(n=8) and CPE 33.3 (n=4). In age group 20-40 years TB was 64.7%(n=11), CPE 23.5% (n=4) and malignant effusion was 11.8% (n=2). In age group >40 years TB was 27.25%(n=6), CPE 27.25% (n=6) and malignant effusion was 45.5% (n=10). The malignant pleural effusion was more common in age of > 40 years.

Conclusions:

Tuberculosis is more common in 20-40 year group and malignancy in >40 years. ADA levels >70 is correlate with tubercular effusions with lymphocytic predominance.

Title: Clinical features and outcome of Granulomatosis with polyangiitis (GPA) - Our Experience

Name of Presenter: **Dr Roshan Kumar.M 1**

Authors (or Co-authors): **Dr Natarajan. A. S2**

Institution/Author Organization: **1Stanley Medicine College & Hospital, 2Vijaya Health Centre**

Introduction :

Granulomatosis with polyangiitis (GPA), formerly known as Wegener's granulomatosis (WG) is a necrotizing granulomatous vasculitis has varied presentation but predominantly affects nose, lungs and kidney (ELK). The exact etiology of GPA still remains unclear. It predominantly affects small-vessel vasculitis associated with antineutrophil cytoplasmic antibodies (ANCA).

Aims :

To report our clinical experience of eleven cases in our hospital

Materials & methods :

We conducted a retrospective analysis of all patients diagnosed with GPA during the period of 2002 to 2018, the details of demography, clinical and laboratory data, treatment and outcome were obtained and analyzed.

Observation :

A total of 11 patients (7 males, 4 females) were diagnosed as GPA. The mean age and duration of symptoms at presentation were 39 years and 3.2 months, respectively. Five patients had limited WG. Remission was achieved in 9 patients after a median time of six months. The median follow up of patients was 4 years. History of ATT were noted in 3 patients at initial presentation. All patient had elevated ESR levels and positive ANCA at initial diagnosis. The most common organ system involvement at initial presentation was upper and lower respiratory tract (63.64% and 54.55 % resp). Three patients were lost to follow up. One patient died of renal failure. Five patients suffered a relapse. One patient had developed pulmonary TB during the treatment. The most common organ involved at relapse were pulmonary (40%) and musculoskeletal system (40%). Out of 5 relapse patients, one had re-relapse with neurological manifestation. Treatment was usually provided with Prednisolone and cyclophosphamide.

Conclusion :

Relapse with different from initial manifestation and organ involvement pose a challenge to the treating physician

Title: A STUDY ON SPUTUM SMEAR AND CULTURE CONVERSION, ADVERSE DRUG REACTIONS AND TOLERABILITY OF BEDAQUILINE IN PATIENTS WITH DRUG RESISTANT TUBERCULOSIS

Name of Presenter: **VIGNESH A**

Authors (or Co-authors): **Rupam Kumar Ta**

Institution/Author Organization: **BURDWAN MEDICAL COLLEGE**

INTRODUCTION-

Bedaquiline, diarylquinoline derivative that targets mycobacterium ATP synthase, an enzyme it supply energy to Mycobacterium tuberculosis.

AIMS AND OBJECTIVES -

To evaluate sputum smear and culture conversion and adverse drug effects in patient on bedaquiline regimen for drug resistant tuberculosis.

METHODOLOGY- A total of 55 cases were included in the study, all patients started regimen containing bedaquiline and registered in DR-TB site were taken as cases. Daily assessment of patient for adverse reaction and ECG monitoring for two weeks. Patient were followed up for evaluation of sputum conversion (sputum AFB, LFT,ECG for every month and sputum culture at 3rd,4th,5th and 6thmonth) and any other adverse drug reactions of bedaquiline for 6 months period.

RESULTS-

Sputum smear and culture conversion rates were 92.72% and 90.90% at 3rd month, 96.36% and 94.54% at 4th month, 100% and 96.07% at 5th month, 100% and 98.03% at 6th month. Adverse events reported were nausea 60%, diarrhea 50%, joint pain 30%, anorexia 30%, itching 20%, tachycardia 30%, blackish skin discoloration 20%.4pts(7.27%) discontinued bedaquiline Permanently due to corrected qt interval increased.13 pts (23.63%) experienced qtcf prolongation >500ms.

CONCLUSION:

Bedaquiline is associated with early sputum smear and culture conversion and non-serious adverse events.

Title: DIAGNOSTIC EVALUATION OF COMPUTED TOMOGRAPHY GUIDED BIOPSY IN SUSPECTED LUNG MALIGNANCY

Name of Presenter: **AJIT KUMAR**

Authors (or Co-authors): **DR. K. B. GUPTA, DR. ROHTAS K. YADAV**

Institution/Author Organization: **PT. B. D. SHARMA, PGIMS, ROHTAK**

BACKGROUND:

Early diagnosis of lung cancer is important. The present study was conducted in our Centre to evaluate the usefulness and safety profile of CT – guided biopsy in 43 patients with suspected lung malignancy.

OBJECTIVES:

To study the diagnostic yield and safety profile of CT guided lung biopsy in suspected malignant lesions in cases where bronchoscopy was negative or not possible.

METHODOLOGY:

In the selected patients, under CT guidance the entry site for biopsy needle was marked on skin after patient's positioning. The area was cleaned and anaesthetized and the biopsy specimen was obtained and sent for histopathological evaluation. Post biopsy imaging and 24 hours observation was done to rule out complications.

RESULTS:

The overall diagnostic yield was 90.7% and 100% in central and 86.7% in peripheral lesions and 100% in cases with negative bronchoscopy. The only complication was pneumothorax in 3 (7.0%) cases with no mortality. The relative risk for pneumothorax was higher in cases with lung tissue interface (RR = 1.45) and in patients with history of PTB (RR = 3.08).

CONCLUSION:

CT guided lung biopsy is a safe procedure with excellent diagnostic results in both central and peripheral lung lesions and in cases with negative bronchoscopy.

Title: STUDY OF IMPULSE OSCILLOMETRIC LUNG FUNCTION INDICES IN HEALTHY ADULTS AGED 20 TO 60 YEARS.

Name of Presenter: **AKHIL BABU C**

Authors (or Co-authors): **SYED ZULKARNAIN TOUSHEED, MANJUNATH P H, AKHIL BABU C, RANGANATHA. R, B. V. MURALIMOHAN**

Institution/Author Organization: **NARAYANA HRUDAYALAYA HEALTH CITY, BOMMASANDRA, BANGALORE.**

INTRODUCTION

Impulse Oscillometry (IOS) is gaining more acceptance as an adjunct tool in routine pulmonary function testing. Spirometry is currently the most commonly performed lung function test in clinical practice and is considered to be the gold standard diagnostic test for Obstructive airway diseases. However, spirometry is not an easy test to perform because the forceful expiratory and inspiratory manoeuvres requiring good patient co-operation. Being an effort independent tool IOS is extremely handy for assessing pulmonary function in children and elderly people. The principle of IOS is based on superimposition of sound waves of various frequencies, typically 5Hz and 20Hz on normal tidal breathing. Computer analysis of the resultant pressure and flow relationships provides a measure of mechanical properties of lung termed as respiratory impedance (Z) and its components like airways resistance (Rrs) and reactance (Xrs). However these are based on data obtained from Caucasian population. No previous Indian normative data exists. Our study is an attempt to address the vacuum in studies looking at normal reference values of IOS parameters for Indian population.

AIMS& OBJECTIVES

This study aims to find out the reference values for various IOS parameters in healthy Indian adults. We also intent to determine the relative contribution of various anthropometric measures like age, sex, height, weight & BMI to IOS parameters.

MATERIAL AND METHODS

An age-stratified sample of 120 healthy adults, between 20 and 60 years was selected from employees, students and healthy volunteers from Narayana Hrudayalaya hospital, Bengaluru. People with a history of smoking, acute or chronic lung disease, or current acute respiratory infection were excluded. Each 10 year cohort included 15 males and 15 females with normal spirometry. Smokers, asthmatics and people with other acute or chronic respiratory disease were excluded. Both IOS and spirometry were conducted on all participants. The relative contribution of various predictors of IOS parameters were assessed and prediction equations for Resistance (R5) and Reactance (X5) was obtained with multiple linear regression analysis.

RESULTS

Females showed higher resistance (R5)

values than men, while reactance (X5) was lower in females compared to males. Height had a negative significant correlation with R5 whereas age and BMI had a positive correlation. Age, weight and BMI had significant negative correlation with X5. A significant age-dependency was noted in D5-D20. Weight and BMI had significant positive correlation with D5-D20. Prediction equation for IOS parameter (R5, X5, D5-D20) was obtained separately for males, and females using multiple linear regression analysis.

CONCLUSIONS

Impulse oscillometry being an effort independent tool and a better modality in early detection of small airway disease, should be included as a complementary tool in routine pulmonary function testing. In our study the contribution of various anthropometric variables to impulse oscillometry parameters was found to be showing similar trends to various previous studies. A preliminary set of prediction equations for IOS were formed for our population. There were marked differences between this and the published equations for Caucasians. Other pulmonary function tests enabled us to see the black and white of lung function, but Impulse oscillometry can shed light on to the shades of grey in between.

Title: **ROLE OF BRONCHOALVEOLAR LAVAGE EXAMINATION CLINICALLY AND RADIOLOGICALLY SMEAR NEGATIVE PULMONARY TUBERCULOSIS**

Name of Presenter: **CHETANKUMAR KARSANBHAI PRAJAPATI**

Authors (or Co-authors): -

Institution/Author Organization: **B. J MEDICAL COLLEGE AHMADABAD**

Introduction:

Tuberculosis is major health problems world wide with variable clinical presentation in india more than 40% population infected early diagnosis of active pulmonary tuberculosis is critical for tb control. the diagnosis and treatment of these patients relies on clinical symptoms but 20% are asymptomatic the physician is seeking to prove tuberculosis. Clinical and radiological based diagnosis can lead to either over or under diagnosis of tuberculosis. Fibreoptic Bronchoscopy can provide an early confirmative diagnosis. Among bronchoscopic material bronchoalveolar lavage is the best diagnostic material for diagnosis of ptb Methodology: Patient who came to opd pulmonary medicine department b.j .medical college was evaluated for respiratory symptoms and radiographic

finding. After initial sputum smear negative, patient asked to go through sputum induction. If smear negative after sputum induction then fiberoptic Bronchoscopy done for bronchoalveolar lavage. Result: in our study total 168 patients are clinically and radiologically suspected for tuberculosis in which 77% patient BAL is positive for tuberculosis after exclude initial induction sample AFB is positive.

Conclusion:

fiberoptic Bronchoscopy is superior then sputum induction for diagnosis of tuberculosis in smear negative patient and also to rule out condition other than tuberculosis

Title: **A STUDY OF YIELD OF MEDICAL THORACOSCOPY IN UNDIAGNOSED PLEURAL EFFUSION – A RETROSPECTIVE STUDY**

Name of Presenter: **DR. DEEP RAJENDRABHAI KOTHARI**

Authors (or Co-authors): -

Institution/Author Organization: **A. M. C MET MEDICAL COLLEGE AHMEDABAD**

INTRODUCTION:

Undiagnosed pleural effusions despite thoracentesis remain a diagnostic challenge. Thoracoscopy remains gold standard in providing diagnosis and management of these cases. Medical Thoracoscopy is minimally invasive procedure that allow visualization of pleural space. Medical thoracoscopy is considered in patients where tuberculous and malignant pleural effusion are clinical possibility but pleural fluid analysis inconclusive.

Aims and objectives:

- To find Diagnostic yield of medical thoracoscopy in cases of undiagnosed pleural effusion.
- To find complication rate in these patients.

METHODOLOGY:

This is a retrospective study of undiagnosed cases of pleural effusion in whom medical Thoracoscopy was performed. Data is collected and Results are analyzed.

- OBSERVATION AND CONCLUSION: In present study total 40 patients of undiagnosed pleural effusion enrolled for medical thoracoscopy There were 77.50% male and 22.50% female with male to female ratio of 4.5:1..
- 87.50% patients had exudative followed by 12.50% patients had transudative pleural effusion.
- Most common thoracoscopic finding was

variable sized nodules over pleural surface in 57.57% patients..

- After thoracoscopy majority of the patients diagnosed malignant pleural effusion (75%). Tuberculous pleuritis diagnosed in 12.5% of patients.
- Diagnostic yield of thoracoscopy is 87.50%.

Title: **Prediction of progression risk in patients with covid -19 pneumonia – THE CALL SCORE**

Name of Presenter: **Dr J Soundhariyan**

Authors (or Co-authors): **Dr V. Nooka Raju M.D., , Dr. Gayathri Devi M.D., Dr B. Padmaja M.D.**

Institution/Author Organization: **Andhra Medical College**

Background: Covid-19 is a deadly infectious disease and various factors are involved in progression of disease in the patient. This study is done to predict the progression of covid disease using various clinical and biochemical parameters.

Aims: 1. To identify various high risk factors for covid -19 2. To develop a score to predict progression of disease.

Methodology:

All patients who are admitted to our COVID hospital between May to November 2020 are enrolled and clinical data are retrospectively collected and analysed to identify the various risk factors associated with progression of disease which were then used to develop a scoring model.

Results:

Overall 100 patients were analysed during their hospital stay which showed that Comorbidity, Age, Lymphopenia, higher Ldh levels were independent high-risk factors for covid19 progression. So incorporating these 4 factors, a scoring model called CALL was developed of which the positive and negative predictive values were 58.5% and 96.7%. Conclusion: Call score helps the clinicians to predict the progression of covid19 disease and thereby reduce the mortality.

Title: **AN EVALUATION OF RISK FACTORS FOR DEVELOPING PULMONARY FIBROSIS IN COVID19 PATIENTS**

Name of Presenter: **DR MONICA HARISH BANSAL**

Authors (or Co-authors): **DR GAURAV CHHABRA**

Institution/Author Organization: **GEETANJALI MEDICAL COLLEGE AND HOSPITAL**

BACKGROUND:

Coronavirus infection has emerged as a public health emergency worldwide most commonly presenting as atypical pneumonia. CT scan of chest and inflammatory markers have an important role in prognosis. Post-COVID infection leading to lung fibrosis has been a concern.

MATERIALS AND METHODS:

An observational study has been done in patients of covid19 RTPCR positive, which were admitted in our hospital. Parameters taken: onset of symptom, detailed past and medical history, blood and radiological findings were compared during and after treatment.

RESULT:

In our study, 100 patients were enrolled, out of which 70% were males and 30% were females. Out of them, 65% of patients were having age of more than 60 years, out of which 77% patients were having co-morbid conditions (Diabetes, Hypertension, CAD). Out of the total 100 patients included in our study, 60% of patients showed increase in inflammatory markers and amongst these, 75% were aged above 60 years. In 25 patients who were aged above 60 years developed fibrotic changes as evident on CT scan.

CONCLUSION:

From our study we conclude that the positive predictor of pulmonary fibrosis in covid19 infection are old age, co-morbid conditions and increased inflammatory markers. Hence, CT scan holds an important value so that early treatment can be started and disease severity can be limited.

Title: COMORBIDITIES AS RISK FACTORS FOR DEVELOPMENT OF PULMONARY SEQUALAE IN MODERATE TO SEVERE CASES OF COVID19

Name of Presenter: **Dr. D. S. V.SRI DEVI**

Authors (or Co-authors): **Dr. K. SOWMYA, Dr. S. RAGHU, Dr. D. Sudheer**

Institution/Author Organization: **GUNTUR MEDICAL COLLEGE, GUNTUR**

INTRODUCTION:

COVID19 leads to wide spectrum of respiratory diseases with high incidence of ARDS especially in patients with comorbidities like hypertension and diabetes. It may result in pulmonary sequelae like GGOs, septal thickening, fibrotic bands

AIMS AND OBJECTIVES:

To study comorbidities as risk factors for development of pulmonary sequelae in discharged patients with moderate to severe COVID19.

METHODS:

Prospective study involving 50 patients with moderate to severe COVID19 pneumonia admitted in wards of Dept of Pulmonary medicine, Govt. Fever hospital, Guntur.

STUDY PERIOD :

8 months (March 2020-October 2020).

INCLUSION CRITERIA:

A Confirmed moderate to severe case of COVID19 by RTPCR/TRUNAT/RAT/CT CHEST. Age-18-60 years.

EXCLUSION CRITERIA:

All outpatients. Past H/O Pulmonary TB, Interstitial lung disease and any fibrotic lung disease.

RESULTS:

50 Cases of moderate to severe COVID19 were seen during study period. 22% have no comorbidities and 78% have comorbidities (DM, HTN, COPD and others). After 3 Months follow up Chest CT showed abnormal findings (GGOs, septal thickening, fibrotic bands) in 38% of study population. 46% of Pts with Hypertension, 33% of Pts with Diabetes, 25% of Pts with COPD, 37.5% of Pts with other comorbidities developed pulmonary sequelae. 36% of Pts with no comorbidities also developed pulmonary sequelae

CONCLUSION:

Pulmonary sequelae is common in COVID19 Patients with comorbidities and needs to be addressed.

Title: RARE COMPLICATION OF COVID-19 - RHINO-ORBITAL MUCORMYCOSIS

Name of Presenter: **A. Abidni Aashis**

Authors (or Co-authors): **V. Sindhu, Kranthi Kumar, Dr. Manmadharao**

Institution/Author Organization: **KRISHNA INSTITUTE OF MEDICAL SCIENCES, SECUNDERABAD**

INTRODUCTION:

COVID-19 is caused by a novel coronavirus (SARS-CoV-2) first documented in China in December 2019 and subsequently causing a worldwide pandemic. As it is a newly

emerged disease, many of its manifestations and complications are unknown to us. While the pathophysiology of the virus is still under investigation, new symptomatic manifestations and complications of the disease continue to be identified and described in medical literature. Rhino orbital Mucormycosis are rare, time sensitive conditions that must be recognized and treated promptly to avoid mortality and morbidity. Herein I present a case of rhino-orbital mucormycosis in a post COVID-19 patient

CASE REPORT:

51 years old male k/c/o Diabetes presented with c/o cough, fever, Shortness of breath. On evaluation his CT Chest showed features s/o Covid 19. COVID 19 RTPCR was done and tested positive. He was treated with antivirals, antibiotics, steroids, O2 support, prophylactic anticoagulant and other supportive measures. He was discharged in haemodynamically stable condition. On follow up after 2 weeks he presented with c/o right eye pain with headache, vomiting and photophobia. On evaluation MRI brain features s/o fungal sinusitis with secondary orbital cellulitis, ischemic optic neuropathy and superior ophthalmic vein thrombosis. CT PNS showed features of deviated nasal septum to left, mucosal thickening in right maxillary sinus with blocked osteomeatal unit, mucosal thickening also noted in left maxillary/bilateral ethmoid, sphenoid, frontal sinuses with bilateral sphenoid Ostia blocked. Right orbital exenteration with FESS was done and FESS scrapings were sent for HPE which was suggestive of mucormycosis. Extensive use of steroids/monoclonal antibodies/broad-spectrum antibiotics may lead to the development/exacerbation of a preexisting fungal disease. Physicians should be aware of the possibility of secondary invasive fungal infections in patients with COVID-19.

Title: Pneumothorax in COVID-19 positive patients: a retrospective case series

Name of Presenter: **Dr. Karmay Himanshu Shah**

Authors (or Co-authors): **Dr Naresh Patel (Professor and HOD), Dr Tushar Patel (Associate professor), Dr Rushi Patel (Associate professor), Dr Shraddha Tewari**

Institution/Author Organization: **GCS Medical College, Hospital and Research centre, Ahmedabad**

Introduction

Pneumothorax has been reported in a small number of patients COVID-19 due to multiple

plausible mechanisms. This study aims to study 7 such cases and their radiological findings, clinical progress, and survival; and to find out possible correlations of survival.

Methods

The patients were selected retrospectively from COVID-19 positive patients with the presence of pneumothorax admitted at a tertiary hospital in Ahmedabad from July to November 2020. Result All patients (n=7) were males. 6 (86%) had no history of pneumothorax and underlying lung pathology and were managed by Intercostal Chest Drainage(ICD) tube insertion. 5 (72%) were classified as secondary spontaneous pneumothorax. 50% cases in whom ICD was inserted were resolved. 4 (57%) survived while rest 3 (43%) expired. Survival rate in patients who had COVID related fibrosis on imaging was 33% while in those who did not have fibrosis was 75%. These 7 were from a total of 3197 patients admitted during the study period making the overall incidence 0.21%.

Conclusion

Pneumothorax is an associated complication of Covid-19. Clinicians should be aware that an acute deterioration with a rapid oxygen desaturation in a Covid-19 patient could indicate a pneumothorax and it may lead to an increase in mortality or morbidity.

Title: A young woman with NSIP masquerading as Bilateral pneumonia

Name of Presenter: **Munira Shapurwala Kausar**

Authors (or Co-authors): **Ravi Dosi, Pradeep Singh Rajoriya**

Institution/Author Organization: **Department of Respiratory Medicine ,SAIMS Medical College and PG Institute, Indore(M.P) India**

Introduction:

Idiopathic non-specific interstitial pneumonia (NSIP) is a rare clinical disorder and it can be classified into cellular NSIP (c-NSIP) or fibrotic NSIP patterns. Both clinical conditions manifest with ground glass opacities (GGO), irregular linear opacities, and consolidations in a bilateral, symmetrical or subpleural distribution.

Case Report:

A 22 years old female presenting with acute history of productive cough, hemoptysis, fever, nasal discharge and congestion from past 5 days. Respiratory Examination s/o bilateral crepts on middle and lower areas of chest on Auscultation. Auscultation over

cervical trachea was normal; specifically there was no evidence of stridor. Chest X Ray was suggestive of bilateral haziness. Pulmonary function test suggestive of moderate restrictive ventilatory defect. CT chest which showed GGO in bilateral lung fields with air trapping, multiple tiny cluster cysts seen along peribronchovascular structures. Multiple prominent mediastinal and hilar lymph nodes seen with no obvious necrosis or calcifications. Biopsy was done suggestive of interstitial fibrosis and abundant brownish pigments. Interestingly, vegetable matter was also seen at places. Thus, based on radiographical and histopathological, diagnosis of non-specific interstitial pneumonia was formed.

Conclusion:

In general, areas of glass opacities or consolidation in patients with non-specific interstitial pneumonia (NSIP) are distributed in bilateral or symmetrical fashion on radiological studies and are predominantly seen in the peripheral or subpleural spaces. In patients with cellular-NSIP, paucity of fibrous components in the lung parenchyma might result in normal auscultatory sounds, as in the present case.

Title: A RARE CASE OF ISOLATED PULMONARY LANGERHANS CELL HISTIOCYTOSIS

Name of Presenter: **Dr. RITA GOJIYA(R1)**

Authors (or Co-authors): **Dr. SANJAY TRIPATHI (HOD) Dr. SAVITA JINDAL (ASSO PROF)**

Institution/Author Organization: **A.M.C. MET MEDICAL COLLEGE AHMEDABAD**

INTRODUCTION :

Langerhans cell histiocytosis is characterized by Proliferation of mono nuclear langerhans cell admixed with variable numbers of Eosinophills, lymphocytes, plasma cell and neutrophils into the bronchioles and lung interstitium.¹it is disorder of langerhans cells involving Middle age smocker male .This disease could be neoplastic and arise from smocking related and immunomodulatory process. It predominantly involved upper lobe of lung, causing fine nodular infiltrate , advanced disease with cysts, cavitory lesions and honeycombing.

Case report:

Here we describe a case of 34 year old male who presented with chief complaint of breathlessness on exertion, fever, nausea, weakness and weight loss since 15 days for the first time in his life. Patient is cigarette smoker and rikshaw driver by occupation. Patient was

started AKT from private hospital since 15 days and here ;admitted as AKT induce Hepatitis. So we hold the AKT. At the time of admission; all routine blood investigations was done. CBC and all sera within normal limits except SGPT which was 145 U/l. chest X-ray and HRCT was suggestive of multiple nodular opacity. After two days patient developed spontaneous pneumothorax, ICD insertion was done and pneumothorax was improved with the high flow O₂; HRCT thorax was done which is suggestive of langerhans cell histiocytosis, Confirmation was done by thoracoscopy; which showed multiple cysts like lesion over visceral pleura . Biopsy was taken from visceral pleura which confirms the diagnosis of langerhans cell histiocytosis. Patient was investigated to rule out other systems involvement which was unremarkable, so this is case of isolated pulmonary langerhans cell histiocytosis .

DISCUSSION:

Langerhanscell histiocytosis 80% occurs in bone; mostly in skull and long bones of arm and leg causing pain and swelling may causes fracture of bones.² Pulmonary langerhans cell histiocytosis occurs in 15-20% cases of langerhans cell histiocytosis ; It is reactive proliferation of langerhans cell ; but 40% are associated with BRAF mutation which are neoplastic in origine. It is reactive process with a subset showing clonality but extra-pulmonary form of langerhans cell histiocytosis are neoplastic. Presentation is chronic cough , dyspnea, hemoptysis, pulmonary hypertension, vasculopathy and in 15-25% cases spontaneous pneumothorax and Diabetes Insipidus in 10% cases. Sessation of smoking , corticosteroid and immunomodulators are mainstay of treatment.

REFERENCES :

- (1) Vol.1 eRobbins and Cotran pathological Basis of Diseases, south asia edition.
- (2) <https://medlineplus.gov/genetics/condition/langerhans-cell-histiocytosis>.

Title: Case series on peripheral neuropathy in patients on treatment for drug resistant tuberculosis

Name of Presenter: **Dr. Shraddha Tewari**

Authors (or Co-authors): **Dr Naresh Patel (Professor and HOD), Dr Tushar Patel (Associate professor), Dr Rushi Patel (Associate professor), Dr Karmay Shah**

Institution/Author Organization: **GCS Medical College, Hospital and Research centre, Ahmedabad**

INTRODUCTION

Drug resistant tuberculosis (DRTB) poses huge challenge to healthcare. Adverse drug reactions of drugs are one of first few hurdles to successful treatment. Newer drugs like linezolid and cycloserine cause peripheral neuropathy in patients which can cause further debilitation.

HISTORY

6 patients who were on different regimens of DRTB under NTEP(all oral longer, shorter)were selected. Patients after prolonged treatment (about 6 weeks) developed burning and tingling sensation in bilateral lower limbs which could not be explained by alternative reasons.

DIAGNOSIS

All the patients had following common features. • Vitamin B12, random blood glucose, serum folate levels: Normal • HIV: Non reactive • Neurological examination: Diminished reflexes. • Nerve conduction studies: Sensory neuropathy with normal motor conduction • Neuropathy had occurred after initiation of drugs (linezolid,cycloserine).

TREATMENT

Patients were treated with pyridoxine, pregabalin, gabapentin, amitriptylline. Linezolid dose was reduced in 5 out of 6 patients as per guidelines. RESULTS This case series showed that these patients developed peripheral neuropathy which was irreversible even on lowering doses or withdrawal.

CONCLUSION

Drugs like linezolid, cycloserine, ethambutol and isoniazid may cause irreversible peripheral neuropathy. Regular monitoring is recommended, so timely intervention could be done. If required, withdrawal may be necessary.

Title: Survey to Understand Physicians' Perspectives on Home Maintenance Nebulization (HMN) for COPD

Name of Presenter: **Dr. Deepak Talwar**

Authors (or Co-authors): **Subin Ahmed, Sandeep More, Geeta Goregaonkar, Meena Lopez, Rashmi. Hegde, Jaideep Gogtay**

Institution/Author Organization: **Metro Hospitals & Heart Institute**

Introduction:

There has been growing interest in HMN for COPD due to a rise in the elderly patient pool, increased availability of advanced, patient-friendly nebulizers and a wide range of nebulized drugs. However, perceptions on HMN among Indian physicians (PHY) is not known.

Objective:

To understand the perspectives and practices of Indian PHY with respect to HMN.

Methodology:

A survey questionnaire on HMN was randomly administered to PHY in India. 322 PHY participated. Results: Majority of PHY preferred HMN for patients in GOLD group D (67%) and those with severe/very severe airflow obstruction (85%). 57% PHY reported prescribing pMDI with spacer, while 29% PHY preferred nebulization in patients discharged from hospital post an exacerbation. Patients on HMN mainly included elderly patients with motor/cognitive impairment, inadequate inspiratory flow or unable to use handheld inhalers. Only 49% PHY reported having a follow-up visit of patients on HMN after a month. Majority of PHY (56%) recommended face mask for nebulization while only 17% PHY recommended mouthpiece. 80% PHY reported instructing their patients to rinse their mouth while 54% PHY also recommended cleaning the exposed skin.

Conclusion:

The survey results suggest a continued need for dissemination of the right practices of HMN amongst PHY.

Title: Prevalence of Sub-optimal PIFR at Discharge in Indian Patients of AE-COPD

Name of Presenter: **Dr. Deepak Talwar**

Authors (or Co-authors): **Imran Shamsi, Geeta Goregaonkar, Isham Goel, Sandeep More, Meena Lopez, Rashmi Hegde, Jaideep Gogtay**

Institution/Author Organization: **Metro Hospitals & Heart Institute**

Introduction:

Sub-optimal peak inspiratory flow rate (PIFR) in acute exacerbation of chronic obstructive pulmonary disease (AECOPD) patients may compromise their ability to use dry powder inhalers and result in reduced drug deposition in the lungs. However, the prevalence of sub-optimal PIFR in Indian AECOPD patients post discharge has not been studied.

Objective:

To determine the prevalence of sub-optimal PIFR in patients with AECOPD patients post discharge. Methodology: PIFR and Borg's dyspnea score was recorded in 30 AECOPD patients discharged from Metro Centre of Respiratory Diseases, Noida. A PIFR value <60 L/min was defined as sub-optimal PIFR.

Results:

The mean PIFR among the patients was 77.6 ± 19.55 L/min. 10% (3/30) patients had sub-optimal PIFR. Significant correlation was observed between sub-optimal PIFR and high symptom (Borg dyspnea) score ($P < 0.01$). Nine patients had Bronchiectasis associated with COPD, out of which 22.2% (2/9) had sub-optimal PIFR. No correlation of PIFR was observed with age, duration of hospital stay or other patient characteristics.

Conclusion:

10% of Indian AECOPD patients had sub-optimal PIFR at discharge. Risk factors for sub-optimal PIFR were comorbidity of Bronchiectasis and high symptom score. Our data re-emphasizes selection of inhalation devices based on patient characteristics such as PIFR, in patients getting discharged after AECOPD.

Title: A study of infection latency and determination of quarantine period in hospital staff with COVID-19.

Name of Presenter: **Dr Jayalakshmi T.K**

Authors (or Co-authors): **Apollo Hospitals Navi Mumbai**

Institution/Author Organization: **Dr Dipti Dhanwate, Dr Narendra Patil, Dr Bhumika Madhav**

Background:

The ongoing COVID-19 pandemic has seriously

affected staff services in many hospitals due to exposure of staff and risks in acquiring infection. Hence large percentage of staff have to be on quarantine leave at any given time. ICMR protocol regarding quarantine periods have been evolving over the last 9 months.

Objective:

Our study aims to study the time duration from exposure of hospital staff to potential COVID-19 contacts to development of symptoms and positive COVID-19 test. From this we can estimate the ideal time for quarantining of staff to prevent risk to patients and colleagues and also avoid unnecessary loss of workdays.

Methodology:

200 COVID-19 positive staff in a tertiary care hospital were assessed from the months of March to October 2020 by means of telephonic interview after COVID-19 positive detection. Detailed history of place of work, time and duration of exposure and exposure settings was obtained. The data was compiled to calculate mean time of latency period between exposure and symptoms.

Conclusion:

As per the time duration and the range of latency period to confirmed infection, we can estimate the ideal duration of quarantine period.

Title: Safety and effectiveness of Pirfenidone 1800 mg and above in patients with Idiopathic Pulmonary Fibrosis: results from post marketing study

Name of Presenter: **R Dhar**

Authors (or Co-authors): **S Rajan, S. Balamurugan, B.P Singh, H Pophale, A Ghoshal, M Modi, M Lopez, M Mehta, S Jadhav, S Sawant, A Vaidya, J Gogtay**

Institution/Author Organization: **Fortis Hospital, Kolkata**

We present post marketing experience with Pirfenidone > 1800 mg in terms of adverse events and effectiveness parameters for a 24-week treatment period. We screened 229 patients and enrolled 218 patients with a mean age of 63.90 (9.55) years with a mean disease duration of 10.65 (0.13:213) months. 189 patients were taking Pirfenidone at screening and the mean dose was 1460.3 (600:2400) mg. Pirfenidone dose was uptitrated every 2 weeks to reach a maintenance dose of > 1800

mg. 124 patients had at least 1 adverse event (AE); majority [83 (38.07%)] reported mild AEs. Cough (14.75%) and gastrointestinal (25.69%) were the most common AEs. Skin rash and LFT elevation were reported by 7 (2.52%) and 2 (0.92%) patients, respectively. 13 Serious Adverse Events were reported which included 3 acute IPF exacerbations & 2 deaths (Cardiac arrest & IPF exacerbation); both were not drug related. Dose reduction was necessitated in 10 (4.59%) patients and drug was discontinued by 3 (1.38%) patients. 6MWT improved by 26.93 meters (95% CI of 17.51;36.35, $p < 0.0001$) and mean change in FVC was 0.06 (0.39) L ($p = 0.0760$) at week 24. Pirfenidone > 1800 mg was well tolerated and stabilized the disease in IPF patients.

Title: The impact of an innovative multimodality online education program in palliative care for COVID-19 in low and middle income countries

Name of Presenter: **Rajani Surendar Bhat**
 Authors (or Co-authors): **Rajani S Bhat, Rajam Iyer, Sunitha Daniel, Chitra Venkateswaran, Rajashree K C, Mhoira Leng, Smriti Rana, PalliCovidKerala Study group**
 Institution/Author Organization: **Board of Doctors**

Background

The COVID-19 pandemic placed an unprecedented burden on healthcare systems worldwide with a novel devastating disease. The World Health Assembly, in May 2020, urged all governments to integrate palliative care into all levels of healthcare through the course of COVID-19.

Aim:

Acknowledging the shortage of trained palliative care professionals, a multidisciplinary group of doctors (the PalliCovidKerala study group and TIPS, Pallium India) designed an online training resource for this worldwide.

Methods:

In April 2020, a free online training program was launched, including an e-book, powerpoint videos, webinars and interactive training with experts via Project ECHO over Zoom. A flipped classroom training method was used in the interactive sessions conducted in English and Hindi to cover ethical principles, triage, symptom management including breathlessness, communication skills, end of life care, grief and burnout. Results: 1151 healthcare professionals (416 doctors, 415 nurses, 320 others) from India and 12 Asian/African nations have completed the training

program with self-reported improvement in competence in pharmacological and non-pharmacological therapy for respiratory symptoms of breathlessness and agitation in the ward and ICU.

Conclusion:

Short-term online interactive training programs are effective in sensitising healthcare professionals to the basic competencies of primary palliative care. Detailed assessment of the program's impact on clinical practice is ongoing.

Title: Role of clinical criteria and oxygen saturation measure in the diagnosis of pneumonia in children aged 2 to 59 months: A multicenter, prospective observational study

Name of Presenter: **Rashmi Ranjan Das**
 Authors (or Co-authors): **Amit Satapathy, Samarendra Mahapatro, Sushil Kabra**
 Institution/Author Organization: **AIIMS Bhubaneswar**

Background:

Revised WHO criteria retained the signs and symptoms used in the older version for classifying severity of childhood pneumonia.

Objective:

To study the role of clinical features, and oxygen saturation measure (SpO₂) in the diagnosis of childhood pneumonia.

Methodology:

This multi-center prospective observational study included under-five children suffering from acute respiratory infection (ARI) over two-year period. Results: Of 7026 children with ARI, 13.4% had WHO defined pneumonia and 46% had pneumonia based on chest x ray (CXR) abnormality. The sensitivity and specificity of the revised WHO criteria for diagnosis of pneumonia was 56.5% and 66.2%, respectively, when compared against CXR abnormality. Cough and fever, each had sensitivity of >80%. Audible wheeze and breathing difficulty, each had a specificity of >80%. Sensitivity and specificity of high respiratory rates were 58.7% and 63.3%, respectively. Addition of SpO₂ of <92% to chest in-drawing alone or WHO criteria increased the likelihood of pneumonia diagnosis.

Conclusions:

Revised WHO criteria have modest sensitivity and specificity considering CXR abnormalities as gold standard for diagnosis of pneumonia. Addition of SpO₂ of <92% to chest in-drawing

alone or WHO criteria is important in the management of a child with pneumonia.

Title: SWITCH TO SALMETEROL/ FLUTICASONE SYNCHROBREATHE® FROM PREVIOUS INHALER IMPROVES ASTHMA OUTCOMES- A POST HOC ANALYSIS OF THE EVOLVE STUDY

Name of Presenter: **Dr Sonia Dalal**
 Authors (or Co-authors): **Balamurugan S, Deshmukh V, Khanra M, Sunder Raj S, Akhtar S, Kumar V, Nandagopal V, Ahmed M, Chhowala S, Lopez M, Sawant S, Sonali Jadhav, Vaidya A, Gogtay J**
 Institution/Author Organization: **Kalyan Hospital, Vadodara**

A 12 week, real world, observational, study was conducted to assess the change in ACQ and PEFR in patients initiated on Salmeterol/ Fluticasone (SFC) Synchrobreathe (SB). A post hoc analysis was done to evaluate the change in the asthma endpoints in patients switched from their previous inhaler (MDI, DPI and any SFC inhaler) to SB in this study. Of the 490 asthmatics, 283 subjects who were switched from their previous inhaler [105 (21.42%), DPI users 178 (36.32%) MDI users and 62 (12.65%) patients on any SFC inhaler (MDI/DPI)] were considered for the post-hoc analysis. ACQ score changed by -1.68±0.99, -1.7±1.14 and 1.76±1.09 in previous DPI users, MDI users and any SFC inhaler user, respectively (all $p < .0001$ vs baseline) at week 12. Similarly, PEFR improved in previous DPI user, MDI user and any SFC user by 69.69±62.38 L/min, 72.0±63.53 L/min and 56.72±52.84 L/min, respectively (all $p < .0001$ vs baseline) at week 12. Patients who were previously using a DPI or MDI when switched to SB scored high in device usability and >90% of patients preferred SB over their previous inhaler. Overall, ACQ and PEFR improved with the use of SFC SB when patients were switched from their previous inhalers.

Title: Physicians' Perspectives and Practice Patterns in India on the Diagnosis and Treatment of Interstitial Lung Disease (IN-ILD survey)

Name of Presenter: **Sujeet Rajan**
 Authors (or Co-authors): **Christopher Ryerson, Sushant Meshram, Prashant Chhajed, Monali Mehta, Meena Lopez, Rashmi Hegde, Jaideep Gogtay**
 Institution/Author Organization: **Bombay Hospital, Mumbai, India**

Background

Data on physicians' perspectives and practice

patterns regarding ILD management in India is currently lacking.

Objective

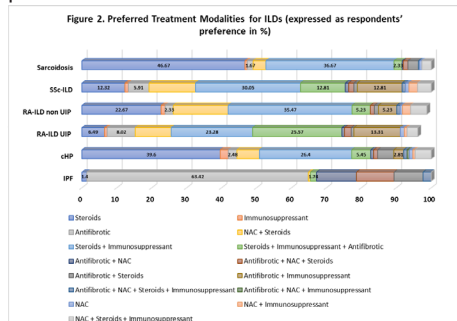
To understand physicians' views and practice patterns regarding ILD management in India.

Methods

Survey questionnaire was administered to physicians attending CME programmes on ILDs in February 2020.

Results

A total of 321 physicians managing ILDs participated in the survey. cHP was ranked as the commonest ILD, followed by IPF, CTD-ILD and sarcoidosis. Clinico-radiological plus serology was the most preferred ILD diagnostic tool (figure 1); TBB and TB cryobiopsy were the preferred tools for IIP diagnosis. Respondents preferred antifibrotics for IPF treatment and steroids + immunosuppressant for other ILDs (figure 2). 20% of respondents rated mycophenolate mofetil superior to azathioprine in both efficacy and safety. 50% of respondents opined that pirfenidone/d 1.8g was tolerated by >45% of their IPF patients, while 58% reported that only 15% of their IPF patients tolerated 2.4gm. 72% of respondents confirmed using antifibrotics in their PF-ILD patients.



Title: Diagnostic yield of Various Bronchoscopic techniques for Evaluation of Lung Cancer: A Retrospective Analysis Comparing endobronchially Visible and Non-visible Lesions

Name of Presenter: **Uday C Kakodkar**

Authors (or Co-authors): **Akashdeep Singh Arora, Rohit Vadala**

Institution/Author Organization: **Goa Medical College, Bambolim Goa**

BACKGROUND

Since in most centres of developing countries advanced guided bronchoscopic techniques are unavailable, there is need to study the diagnostic yield of this procedure in the absence of imaging facilities like C-arm and EBUS.

AIMS

To compare the diagnostic yield of various bronchoscopic techniques in patients having endobronchially visible lesion with those without any visible endobronchial growth.

METHODS

The patients of suspected bronchogenic carcinoma who underwent flexible video bronchoscopy have been retrospectively analysed in this study; 514 bronchoscopies were analysed and 206 patients who fulfilled the inclusion criteria have been included in the present study.

RESULTS

Squamous cell carcinoma was the commonest histological diagnosis amongst endobronchially visible lesions, whereas it was poorly differentiated carcinoma when endobronchial growth was absent. The highest yield was by endobronchial biopsy in the first group, while bronchial brush cytology provided maximum yield in the second group. There was a significant improvement in the diagnostic yield of flexible bronchoscopy when bronchial brush cytology and bronchial washings were combined, especially in those patients in whom there was no endobronchial lesion.

CONCLUSIONS

Bronchial brush cytology and bronchial washings are useful in the diagnosis of endoscopically non-visible lung cancers in resource limited settings and should be routinely performed when advanced techniques are not available.

Title: Perception and use of long-acting bronchodilators in COPD patients: A survey among Indian physicians

Name of Presenter: **Dr Arjun Khanna**

Authors (or Co-authors): **Dr Lancelot Pinto, Dr Rashmi Hegde, Dr Meena Lopez, Dr Kartik Deshmukh, Dr Almsh Kadakol, Dr Jaideep Gogtay**

Institution/Author Organization: **Yashoda Hospital - Delhi (India)**

Long-acting bronchodilators (LABD) are central for the management of COPD. Our present study aimed to understand the usage of LABD by Indian physicians (PY), as data on this is lacking. A self-reported questionnaire was randomly administered to PY across India. 321 PY participated in the survey. 93% PY reported that majority of their COPD patients (pts) had mMRC grade ≥ 2 . Only 43.5% PY

used dual bronchodilators as first-line therapy in majority of their symptomatic COPD pts. Most PY (63%) reported that majority of their COPD pts had ≤ 2 exacerbations/year while 15.9% felt that it was >2 /year. The preferred first-line maintenance therapy for patients at high-risk of exacerbations was ICS/LABA/LAMA (39.7%), LABA/LAMA (37%) or ICS/LABA (18%). LABA/LAMA was preferred in GOLD-D patients by 45.9% PY, in GOLD-B by 44.4% PY and in GOLD-C by 32.30% PY. 22% PY preferred adding ICS/LABA to a LABA/LAMA for more than 40% of their pts. Among them, 27.3% prescribed ICS/LABA to control symptoms, while 32.6% prescribed it due to greater confidence in ICS/LABA as compared to LABA/LAMA. Thus, dual LABDs are underused despite majority of COPD patients being more dyspneic. A significant proportion of PY use ICS/LABA with LABA/LAMA, which is a safety concern.

Title: Effect of REM OSA and CPAP's impact on REM related cardiovascular events

Name of Presenter: **Dr.T.LINGADEVI**

THANASEKARAN

Authors (or Co-authors): **Dr. Komarla Puneet Nagendra**

Institution/Author Organization: **Ayyappa Clinic**

Introduction

REM (Rapid eye movement)-related OSA is a sleep disordered breathing (SDB) abnormality in which apneas and hypopneas are confined to REM sleep. Aim of the study is to analyse both the effect of REM OSA on the dysregulation of autonomous nervous system, in patients with pre-existing coronary artery disease (CAD) and the impact of CPAP during REM sleep in them.

Material and Methods:

Systemic analysis was done by 3tiered search strategy-Searching Internet, PUBMED/Google scholar and their references. Key words-"OSA" "CAD", "Sympathetic activity" "REM" "CPAP"

Results

Studies revealed that risk of recurrent cardiovascular events in patients with pre-existing CAD doubles with severe OSA in REM sleep, especially when oxygen saturation is $<90\%$. The association is weaker in patients without prevalent CAD.

Discussions:

The hemodynamic and sympathetic changes during REM SDB associated with desaturation and arousals causes an increase in sympathetic

activity and decrease in cardiac vagal activity resulting in surges in HR, BP thus worsening the ischaemic events in patients with known CAD. Patients with good compliance to nocturnal CPAP therapy mainly during early morning when REM sleep is predominant (> than the recommended 4 hrs/night), primary endpoint of adverse cardiovascular events was reduced (RR 0.60-0.70, CI 95%, 0.52-0.94), reduction of systolic BP by 2-2.5 mmHg/diastolic by 1.5-2 mmHg was noted and patient compliance increased. There was clear lack of benefit if CPAP was used < 4 hrs and not used during 2nd half of the night when most REM related respiratory events occurred.

Conclusion:

REM-related events impose greater cardiovascular risk and it is imperative to emphasise CPAP therapy adherence to cover entire REM sleep period to reduce further events in these patients.

Title: Clinico-radiological characteristics of Post COVID-19 at a tertiary pulmonary care centre

Name of Presenter: **NITIN GOEL**

Authors (or Co-authors): **NITIN GOEL, NITESH GOYAL, RAJ KUMAR**

Institution/Author Organization:

VALLABHBHAI PATEL CHEST INSTITUTE, UNIVERSITY OF DELHI

Introduction:

There is a gradual increase in recovered patients from COVID-19, with persistent symptoms or radiological changes in lungs, also known as post-COVID-19.

Objectives:

To analyse the clinical presentation, laboratory and radiological investigations of post COVID-19.

Methodology:

Present study is a retrospective analysis of post-COVID-19 patients presenting to one of the units of Viswanathan Chest Hospital. Results: There were 35 cases of post-COVID-19 patients. All patients were symptomatic. Mean duration was 47 days from discharge to first visit. Pre-existing respiratory comorbidity was present in 63% and 52% patients had history of hospitalisation. Fatigue (65%), breathlessness (60%), cough (45.71%) and chest pain (28.57%) were the common symptoms. On 6-minute walk test, 3 patients had desaturation. One patient had type 2 respiratory failure. Anaemia (40%) and thrombocytopenia (11%) were

observed. Chest X-ray was abnormal in 34.28% (n=12). On CT thorax (n=17), diffuse reticulations (52.94%) and diffuse nodular shadows (29.41%) were observed. One patient each were newly diagnosed as pulmonary tuberculosis and tubercular unilateral hilar lymphadenopathy.

Conclusions:

Fatigue, breathlessness and cough are commonest symptoms in Post-COVID-19. Pre-existing respiratory diseases are more symptomatic and may suffer clinical course deterioration. Caution is required for infections like tuberculosis, especially due to steroids use in COVID-19 management.

Title: PROFILE OF SLEEP RELATED BREATHING DISORDERS IN PATIENTS WITH OVERLAP SYNDROME

Name of Presenter: **Pranav Ish**

Authors (or Co-authors): **Sumita Agrawal, Nitesh Gupta, Shibdas Chakrabarti, JC Suri, Rohit Kumar**

Institution/Author Organization: **VMMC & Safdarjung Hospital, New Delhi**

Introduction:

Chronic obstructive pulmonary disease (COPD) and obstructive sleep apnea (OSA) represent two highly prevalent chronic respiratory disorders, the coexistence labelled as overlap syndrome (OS). There is paucity of literature on the profile of sleep related breathing disorders in such patients and guidelines for their positive airway pressure (PAP) titration.

Methods:

It was a prospective observational study. All patients presenting with history suggestive of COPD underwent a post bronchodilator spirometry, Epworth sleepiness score assessment and polysomnography (PSG). Those with apnea-hypopnea index (AHI) more than 5/hour were labelled as overlap syndrome. Thirty-seven such OS patients were included.

Results:

Only around half of the patients had pure OSA with no hypoventilation and were easily titrated with CPAP. Around 35% of the patients had associated hypoventilation with OSA requiring Bilevel PAP; 5.4% patients had Cheyne's stokes breathing (CSB) requiring PAP and optimization of heart failure medications and rest had OSA with central sleep apnea (CSA) along with hypoventilation requiring a back-up rate.

Conclusions:

This study reveals the myriad of presentations of sleep disordered breathing in patients with overlap syndrome ranging from pure OSA to hypoventilation to CSA to CSB.

Title: Utility of Bronchoscopy Safety Box – Barrier to COVID-19 among healthcare workers

Name of Presenter: **Dr Sameer Arbat**

Authors (or Co-authors): -

Institution/Author Organization: **KRIMS Hospitals, Nagpur, India**

Background:

There is need of protecting healthcare workers (HCWs) from SARS-CoV-2 while treating patients.

Aim:

Barrier development to prevent COVID-19 transmission while doing bronchoscopy and endotracheal intubation.

Method and material:

Two prototypes of Bronchoscopy safety box (BSB) viz., prototype 1 and prototype 2 (figure 1), was developed (made up of acrylic and PVC sheets). Bronchoscopy and intubation was done with BSBs in 20 patients.

Results:

We were able to manoeuvre the bronchoscope and navigate up to the right lower lobe bronchus and left lower bronchus without any difficulty. The intubation procedure was performed comfortably with the BSB. 10 bronchoscopy procedures were performed with the Prototype 1 while 6 bronchoscopy



Figure 2: Advantages and limitations of BSBs.

Advantages-
1. Bronchoscopy Aperture for performing Bronchoscopy Procedures and EBUS.
2. Assistant Aperture for guidance.
3. Tightly covered apertures with PVC valves in Prototype 1 and Gloves in Prototype 2.
4. Presence of negative suction port.
5. PVC sheets at patient end minimise aerosol release outside the box.
6. Easily disinfected with 70% alcohol or bleach.
7. Multipurpose Box useful in -ICUs for Bronchoscopy Procedures and Intubation. -patients of all infective aetiologies; H1N1, COVID-19, MDR-TB, XDR-TB, TB.
Limitations-
1. Fixed dimensions of the box hence, need practice for operators with different height and arm lengths.
2. Might lead to hindrance during difficult intubation.

Conclusions:

BSB is a reusable, multi-purpose aerosol safety barrier which can be utilized for bronchoscopy procedures and intubation to help protect HCWs against COVID-19.

Title: BCG vaccination status and Covid 19 outcome

Name of Presenter: **Dr. Shreeja Nair**

Authors (or Co-authors): **Dr. Karan Singla, Dr. PV Potdar**

Institution/Author Organization: **MGM MEDICAL COLLEGE, NAVI MUMBAI, MAHARASHTRA**

Background and Introduction

BCG is known to have protective effects against diseases other than TB and hypothesis regarding its effect on Covid 19 is being tested.

Aims and Objectives

To study correlation of BCG vaccination status and outcome of patients affected with COVID 19.

Methodology

A prospective, cross sectional study was done in July 2020 in a tertiary care centre in Navi Mumbai. Adult patients admitted with Covid 19 infection were screened for BCG scar and their clinical course was followed.

Results

Out of 370 patients, 55% presented with mild disease, 36% with moderate disease, 10% with severe disease. 87% of the patients had a favourable outcome signifying they either recovered or improved by end of the study. BCG scar was found in 269 patients (73%) and there was a statistically significant association between scar presence and clinical outcome. 75.8% of the cases with favourable outcome had BCG scar. Vaccinated patients had better progression and lesser symptoms. However, there was no significant association of scar presence and outcome in hypertensive and diabetic patients.

Conclusion and Clinical implications

Childhood vaccination with BCG seems to have protective role in adults suffering from SARS COV2 infection. This emphasises the importance of BCG vaccination and with the help of prospective studies, adult revaccination with BCG could be considered.

Title: Post COVID Pulmonary Rehabilitation: New Frontier for Telemedicine?

Name of Presenter: **Tarang Kulkarni**

Authors (or Co-authors): **Ankita Asher, Manas Menger, Alpa Dalal**

Institution/Author Organization: **Jupiter Hospital, Thane, Maharashtra**

Study Objectives:

A pilot study to assess the effectiveness of a video call based tele rehabilitation program on patients with post-COVID pulmonary fibrosis.

Methods:

A pilot, observational study was performed on patients with a recent history of COVID pneumonia without any previous lung disease. These patients were subjected to 10 sessions of video call based tele rehabilitation over a period of 5 weeks. Six-minute walk test and Functional Independence Measure (FIM) score were recorded at first and last visit. Comparative data was recorded and submitted for multivariate analysis.

Results:

2 patients (8 males) with post-COVID pulmonary fibrosis were recruited in the study. The mean age of the patients was 52.6 years. Significant improvement was observed in 6MWD (p-value <0.05) and FIM score (p-value <0.05) after 5 weeks of tele rehabilitation. The percent desaturation also improved significantly. On subgroup analysis, there was a greater improvement in 6MWD and FIM score when tele rehabilitation was initiated on an in-patient basis.

Conclusion:

The magnitude of improvement provides an insight into the nature of healing of post-COVID fibrosis. Moreover, based on our study, tele-rehabilitation can be considered as an equally effective and safer alternative for post COVID rehabilitation.

Title: How Rapid Can "Rapid On-site Cytology Evaluation (ROSE)" Be - Our Experience with Toluidine Blue Staining - Concordance Between ROSE & Final Cytological Diagnosis On EBUS TBNA Samples

Name of Presenter: **Dr. Umang C Shah**

Authors (or Co-authors): **Dr. Arpan C Shah**

Institution/Author Organization: **Pranayam Lung and Heart Institute**

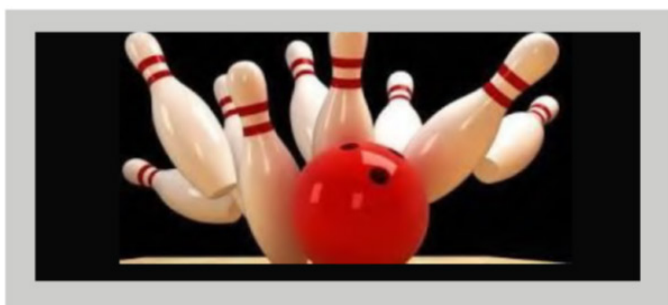
We aimed to analyze Clinical utility of Toluidine blue staining on EBUS TBNA samples and concordance rate between ROSE diagnosis and final HPE diagnosis. Results - 423 patients were included and 1539 lymph nodes samples. ROSE diagnosis was concordant with final diagnosis in 1486 (96.68%) LNs and non-concordant in 51 (3.31%). Unsatisfactory ROSE diagnosis was more likely to be non-concordant (82.8 vs 17.1%) than a ROSE satisfactory diagnosis (97.4 vs 2.3%) or normal node diagnosis (98.1 vs 1.9%) (P < .0001). The sensitivity, specificity, NPV, PPV, and overall accuracy of ROSE were 0.84, 0.98, 0.97, 0.98, and 0.97, respectively. Differences in diagnosis concordance rate between pathologist (P < .023), cell block preparations (P < .03), number of passes and TBNA slides were seen. Conclusions - TBNA slides during ROSE if stained with H & E stains will at least take 3 - 4 mins for diagnosis and in turn will be cumbersome to wait for next TBNA pass whereas TBNA slides stained with Toluidine blue will give us Cytological diagnosis in less than 1s of microscopic examination which will diminish complications. ROSE diagnosis has a high concordance with the final diagnosis, reducing procedure time and optimizing sample for molecular profiling.

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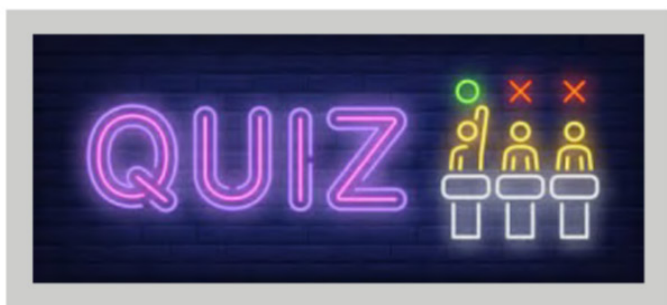


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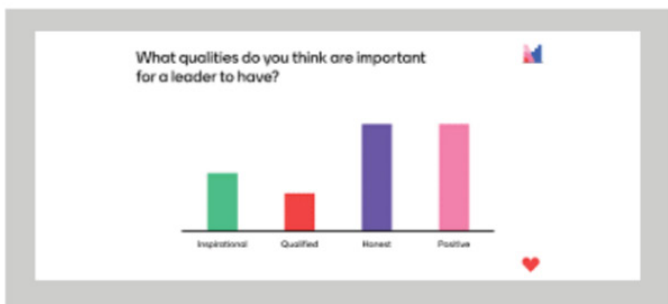
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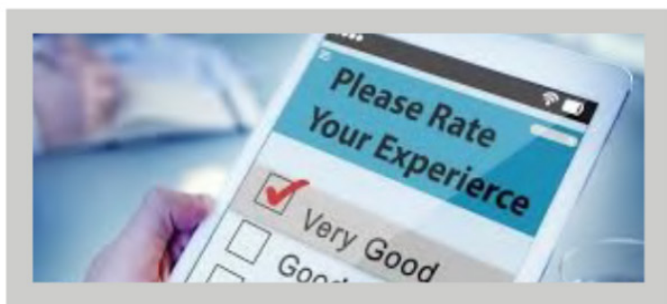
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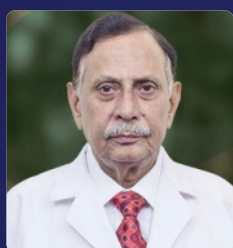
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