Greetings!

Happy New Year to all APSR Officials and Members. I am most honoured to take up the role as Coordinator of this APSR Respiratory Updates Series, which has been well received by the APSR community and serves to keep members abreast on the latest literature both from within and outside the Asia-Pacific region.

Under the great leadership of Professor Richard Beasley, the first two volumes, with monthly issues spanning 2009 and 2010, picked up the momentum of the APSR Respiratory Updates Series, and he also kindly agreed to select and give us his insights into the articles for the first issue in Volume 3. Professor Beasley has also taken the lead in providing a ‘bottom line’ comment summarizing his expert opinion on the relevant topics and articles.

We would also like to thank all the APSR experts who have contributed to previous issues. Most of them have kindly agreed to contribute again to forthcoming issues. I hope to continue serving you with regular issues of this Respiratory Updates Series.

Happy reading.

David CL LAM
Coordinator, APSR Respiratory Updates Series
Oral rivaroxaban for symptomatic venous thromboembolism

Authors: EINSTEIN Investigators


URL: http://www.nejm.org/doi/full/10.1056/NEJMoa1007903#t=article

Comment: We are getting closer to the day when we can prescribe an oral anticoagulant for venous thromboembolism (VTE), without the requirement for initial subcutaneous low molecular weight heparin treatment, and the subsequent challenge of ongoing warfarin therapy, with the associated laboratory monitoring, dose adjustment and potential complications of food and drug interactions. This study showed that the oral factor Xa inhibitor, rivaroxaban, offers a simple single drug approach to the short term and continued treatment of VTE, with probably a better benefit-to-risk profile than the current standard anticoagulant regime.

Bottom line: We need to become familiar with the use of rivaroxaban and other novel oral anticoagulants that are likely to replace current anticoagulant regimes in the treatment of VTE.

Safety of outpatient treatment in acute pulmonary embolism

Authors: Erkens PM et al.


Comment: One of the crucial clinical issues in the initial assessment and management of patients with deep vein thrombosis (DVT) or pulmonary embolism (PE) is how to identify those patients who can safely be treated as outpatients. Previous validated scoring systems such as the pulmonary embolism severity index (PESI) are complicated to use and may be difficult to implement. This study showed that simple clinical criteria can identify low risk patients who can be managed at home; however this strategy requires a dedicated outpatient service, with review 1 to 2 days after diagnosis, and then again at 7 days and 3 months.

Bottom line: Patients presenting acutely with symptomatic PE can be treated as outpatients if they do not have a serious comorbidity, are haemodynamically stable, do not require oxygen therapy and do not have contraindications to low molecular weight heparin therapy. Such a management regime can only be implemented if an outpatient service can provide prompt and regular review. Please also see the associated commentary: Baglin T. Fifty per cent of patients with pulmonary embolism can be treated as outpatients. J Thromb Haemost 2010; 8: 2404-5.
Early anticoagulation is associated with reduced mortality for acute pulmonary embolism

Authors: Smith SB et al.
URL: http://chestjournal.chestpubs.org/content/137/6/1382.long

Comment: Another clinical issue to consider at presentation is whether the timing of anticoagulation influences the outcome in patients presenting with deep vein thrombosis (DVT) or pulmonary embolism (PE). This study showed a marked reduction in mortality if heparin therapy is initiated in the emergency department (ED), or if therapeutic anticoagulation is achieved within 24 h of presentation. Although this is an observational study and there is likely to have been some confounding, with higher rates of comorbidity and older patients in the delayed treatment group, the findings are of interest and support guidelines that recommend early anticoagulation in patients with PE.

Bottom line: Prompt diagnosis and initiation of anticoagulant therapy sooner rather than later is recommended in patients with suspected DVT or PE presenting to the ED.

Venous thromboemboli and exacerbations of COPD

Authors: Gunen H et al.
URL: http://erj.ersjournals.com/content/35/6/1243.long

Comment: One of the diagnostic dilemmas in the assessment and management of patients admitted with exacerbations of COPD is determining which patients may have a concomitant venous thromboembolism (VTE) event. This study not only reports that VTE is a common problem with COPD exacerbations, but shows how patients with a high index of suspicion can be identified through the use of the Wells score and D-dimer testing.

Bottom line: Consider VTE in patients with exacerbations of COPD, particularly those without an obvious infective cause and who have a high Wells score.

Duration and magnitude of the postoperative risk of venous thromboembolism in middle aged women: prospective cohort study

Authors: Sweetland S et al.
URL: http://www.bmj.com/content/339/bmj.b4583.long

Comment: This landmark study provides accurate assessment of the patterns of risk of venous thromboembolism (VTE) over time following surgery, and by type of surgery. It demonstrates that the risk of deep vein thrombosis (DVT) and/or pulmonary embolism (PE) after surgery is substantially increased for 12 weeks post-surgery, and may vary considerably with the type of surgery.

Bottom line: The current recommendation to extend the duration of VTE prophylaxis beyond hospital discharge should not be limited to hip and knee replacement surgery and hip fracture surgery, but also apply to other high risk surgical procedures and/or patients.
**A risk assessment model for the identification of hospitalized medical patients at risk for venous thromboembolism: the Padua Prediction Score**

**Authors:** Barbar S et al.


**Comment:** Prophylaxis for venous thromboembolism (VTE) in hospitalised medical patients is generally underused. One strategy to improve performance is to target high risk patients. This study reports the use of a simple assessment model which was able to identify a high risk group, in which prophylaxis was definitely required, and a low risk group, in which prophylaxis could reasonably be withheld. 

**Bottom line:** The risk assessment model can be recommended for identification of high risk patients in whom VTE prophylaxis should be used.

**Effect of home testing of international normalized ratio on clinical events**

**Authors:** Matchar DB et al.


**Comment:** Home testing of international normalized ratio (INR) has been proposed for patients on long term anticoagulation therapy, to allow greater frequency of testing and closer patient involvement. This study showed that when compared with monthly high quality clinic testing, weekly self-testing achieved similar outcomes. 

**Bottom line:** Home INR testing represents an option for patients on long term anticoagulation therapy, particularly those whose access to high quality anticoagulation therapy is limited by disability, geographical distance or other factors.

**Prolonged work- and computer-related seated immobility and risk of venous thromboembolism**

**Authors:** Healy B et al.

**Reference:** J R Soc Med 2010; 103; 447-54.

**URL:** [http://jrsm.rsmjournals.com/cgi/content/full/103/11/447](http://jrsm.rsmjournals.com/cgi/content/full/103/11/447)

**Comment:** A reminder that prolonged seated immobility at work or at the computer may increase the risk of venous thromboembolism (VTE), similar to prolonged seated immobility during long distance travel. Recognition of the potential role of prolonged seated immobility at work has important clinical implications, in particular, for differentiation between provoked versus idiopathic events, which may influence the duration of anticoagulant treatment and the need for subsequent preventive measures that may reduce future risk. 

**Bottom line:** Ask about prolonged seated immobility at work and at the computer as a risk factor for VTE.
Acute pulmonary embolism

Authors: Agnelli G, Becattini C


Comment: This excellent review focuses on the optimal diagnostic and management strategies for acute pulmonary embolism, according to the clinical presentation and estimated risk of an adverse outcome.

Bottom line: A must read for physicians responsible for the care of patients with pulmonary embolism.