Advanced Phlebology and Refresher Course (Phlebology Part II) Wednesday 19<sup>th</sup> September Venous Thromboembolism: Management of Acute DVT Course Notes

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#### **Initial phase of DVT Management:**

- Ensure correct diagnosis has been made
- Assess patient's general health and suitability for receiving anti-coagulant therapy in particular, decide if are there any potential clinical contra-indications to anti-coagulation and if so, consider what alternatives to anti-coagulant therapy are available and effective
- Perform baseline blood testing to assess patient's safety for receiving anti-coagulation renal function, liver function, full blood count and coagulation times
- Testing for laboratory thrombophilia is not indicated at this stage and in some assays, test
  results will be affected by acute thrombotic state making their interpretation difficult
- Main objective of initial therapy is to prevent thrombus extension and early and late recurrences

#### **Outpatient versus Inpatient Management:**

- Assess patient's suitability for being managed as an outpatient, which is generally preferable
- Patient groups that are unlikely to be suitable for outpatient treatment include those with co-existent serious medical problems, patients in significant pain, patients with significant renal impairment, those unlikely to be compliant with treatment and patients with a significant risk of bleeding.
- Network of integrated care must be set-up in community for ongoing support and management – administration of low molecular weight heparin (usually patient); commencement, monitoring and appropriate dose-adjustment of warfarin (usually general practitioner); is there a hospital in the home program available for those who need assistance?

## **Immediate Treatment:**

- If there are no contra-indications, patient should be anti-coagulated initially with low molecular weight heparin (using once daily or twice daily dosing regimen)
- In some circumstances, unfractionated heparin may be preferable (as in severe renal failure)
- Initiation of oral anti-coagulants should commence on the first treatment day
- Low molecular weight heparin should be given for a minimum of 5 days and not ceased until INR has been > 2.0 for at least 2 consecutive days
- Monitoring of low molecular weight heparin with anti-Factor Xa levels are not recommended routinely
- In general there is no evidence to support the use of thrombolytic agents for initial treatment of DVT
- Progress venous ultrasound at around one week may be helpful to assess for possible clot extension
- Ambulation as tolerated is recommended

## **Long-term Treatment:**

- The dose of warfarin should be adjusted to maintain a target INR of 2.5 (range of 2.0-3.0)
- Duration of anti-coagulation depends upon whether DVT is provoked or idiopathic
- For patients with a first episode of DVT secondary to a transient (reversible) risk factor, usual treatment duration is 3 months
- For patients with a first episode of idiopathic DVT, the usual treatment duration is at least 6-12 months
- If recurrent, idiopathic DVT, long-term anticoagulation is usually given
- The Americal College of Chest Physicians (ACCP) recommendations are similar for both proximal and calf vein DVT – ?contentious issue
- For patients with DVT and cancer, low molecular weight heparin (rather than warfarin) is recommended for long-term therapy
- Use of Grade II elastic compression stockings during 2 years after episode of DVT are recommended

# **References:**

The Seventh American College of Chest Physicians (ACCP) Conference on Antithrombotic and Thrombolytic Therapy. Chest, September 2004 Supplement <u>www.chestjournal</u> (New guidelines will be published in 2008)