**Guidance in brief**

**Venous thromboembolism**

NICE guidance on venous thromboembolism stresses the importance of prompt assessment and investigation.

**VTE: its diagnosis and management**

It is estimated that 25,000 hospitalised patients in England and Wales die from hospital acquired thrombosis (Department of Health and Chief Medical Officer, 2007). Therefore it is vital that people with a blood clot in their leg or lung have a coherent and consistent approach to managing their condition.

The new venous thromboembolic diseases guideline from the National Institute for Health and Clinical Excellence (2012) makes recommendations on the diagnosis and management of patients with venous thromboembolism (VTE).

In the past, there has been a lack of standardised, clear information to give to patients with suspected or confirmed VTE. The guideline has addressed this by providing management pathways and, in doing so, enables nurses to challenge omissions in practice and let patients know what care they should expect.

The recommendations are based on the best available evidence and underpin a care pathway so that we can be assured that the quality of care given to patients is also the best available.

**Investigations**

The guideline recommends that the investigation of a potential blood clot is based on the validated Wells clinical probability score for both deep-vein thrombosis (DVT) and pulmonary embolism (PE).

Following assessment using the Wells score, patients with a suspected DVT should be offered a proximal leg vein ultrasound scan; this should be conducted within four hours of it being requested. If the result is negative, a D-dimer test should be performed (this blood test measures the concentration of a protein in the blood – if the D-dimer concentration is normal, a DVT or PE is unlikely).

If a proximal leg vein ultrasound scan cannot be conducted within four hours, patients should be offered a D-dimer test and parenteral anticoagulant treatment for 24 hours, during which time a proximal leg vein ultrasound scan should be carried out.

The scan should be repeated six to eight days later for all patients with a positive D-dimer test and a negative proximal leg vein ultrasound scan.

For patients whose Wells score indicates a likely PE, NICE recommends immediate computed tomography (CT) pulmonary angiography. If imaging cannot be done immediately, patients should be offered parenteral anticoagulant treatment followed by CT pulmonary angiography. If the CT pulmonary angiography is negative and DVT is suspected, the guideline recommends that a proximal leg vein ultrasound scan should be considered.

Where the underlying cause of a blood clot cannot be identified, the guideline recommends further investigation, particularly looking for cancer as a possible cause.

**Management**

Post-thrombotic syndrome is a chronic condition that develops after DVT. Signs and symptoms range from minor skin changes, pain or swelling to established leg ulceration.

The syndrome affects 20-40% of patients after DVT of the lower limb and can have a significant impact on quality of life (Prandoni et al, 1996).

NICE recommends that patients with a proximal DVT are offered below-knee graduated compression stockings with an ankle pressure greater than 23mmHg. These should be fitted a week after diagnosis or when swelling has subsided on the affected leg or legs. Patients are advised to wear these for at least two years.

Management of patients with anticoagulation for thrombosis is often challenging and changes frequently as advances in technologies and treatments evolve, so nurses need to keep up to date.

**Summary**

This new guideline will give nurses the confidence to provide standardised care, based on the most up-to-date evidence, and will provide them with the tools to help bring about service improvement in areas where there may be a lack of timely or appropriate service provision.

The guideline also raises the profile of VTE and the numbers of patients that present with this potentially life-threatening condition. In doing so, it highlights the role of the nurses in ensuring the most appropriate care for their patients.

**The guideline is available at** www.nice.org.uk/GC144

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**References**