Preventing clots

The rare death of a younger person as a result of a long airline journey is sure to hit the press headlines. Death could be due to venous thrombo-embolism (VTE). As someone with three of the associated risk factors (on the wrong side of 60, previous deep-vein thrombosis (DVT) and prolonged immobility) I administer a jab of a low-molecular-weight heparin (LMWH) to myself just before takeoff. Apart from their most serious danger of sudden death due to massive pulmonary embolism, VTEs can occasionally also cause prolonged disability such as swollen legs.

VTEs can be prevented by an improved understanding of the causes, and appropriate prophylaxis and treatment. Prophylactic anticoagulation in South Africa is unfortunately under-prescribed. This has led to unacceptable mortality and morbidity in numerous patients. The guidelines for prophylactic anticoagulation by the Southern African Society of Thrombosis and Haemostasis (p. 689) provide an authoritative, pithy but comprehensive outline for use in South Africa.

Pulmonary embolus is the commonest preventable cause of death in hospital patients, contributing 10% of all hospital deaths, three-quarters of which occur in medically ill patients. In the absence of anticoagulation, in medically ill patients, the risk of DVT is comparable with that observed in surgical patients (10 - 20%). The efficacy of heparins in preventing VTEs in surgical and medically ill patients is well established. However, their use is associated with an increased risk of major bleeding episodes and this should be balanced against the thrombotic risk.

High-risk conditions include severe cardiopulmonary disease (particularly cardiac/respiratory failure), stroke, acute myocardial infarction, ICU patients, pregnancy, duration of surgical procedure, degree of tissue damage and degree of immobility following surgery. Associated risk factors include age above 60 years, past history of VTE, underlying malignancy, obesity, prolonged immobility, oestrogen replacement therapy and underlying thrombophilic states.

The authors provide easy-to-follow recommendations for prophylaxis in medically ill, surgical and pregnant patients. They also include recommendations with regard to spinal and epidural anaesthesia.

Prophylaxis is not required for medical patients who are mobile or for patients undergoing low-risk surgical procedures with no patient-related risk factors. In patients at high risk of bleeding, the use of mechanical prophylaxis such as graduated compression stockings or intermittent pneumatic compression should be considered as an alternative if the thrombotic risk is high.

The timing of prophylaxis in surgical patients is controversial and it seems that 6 hours postoperatively will become the preferred method. The duration of prophylaxis depends on factors such as the extent of the surgery and the presence of additional risk factors.

Treatment of VTE needs to be individualised according to the patient's thrombo-embolic risk level. LMWH offers advantages in terms of convenient dosing and no need for monitoring. Warfarin should be commenced from day 2 of anticoagulation and continued with monitoring of the INR levels.

Treating HIV-infected children

The changing environment in South Africa in which the management of HIV/AIDS now includes the provision of antiretroviral therapy led to the development of an antiretroviral treatment programme for public sector patients as reported by the Red Cross Children's Hospital team (p. 643).

They found that their earlier results were better than published reports from rich countries. The key to ongoing success is to ensure that high levels of adherence are maintained. Some children developed serious medical events during the early stages of therapy and their experience suggests that an inpatient consultation service is an important consideration.

Occupational post-exposure HIV prophylaxis

With the dramatic increase in the numbers of HIV/AIDS patients in South Africa the dangers of occupational exposure for health care workers is much increased. Gary Maartens (p. 626) provides a logical outline of when and how to provide appropriate post-exposure prophylaxis (PEP).

In instances where the risk of infection is extremely low or non-existent, PEP is not indicated, as the risks will far outweigh its benefits. Low- and high-risk exposures are defined, as are the two recommended regimens for treatment. PEP should be commenced as soon as possible after the injury. PEP is not well tolerated, with adverse events occurring in about half of all cases, although most of these are not life threatening.

Traditional bonesetters

Traditional healers thrive all over the world. SAMA is investigating how it should respond to the traditional healers in South Africa. In China many medical schools attempted to combine teaching of conventional medicine with traditional Chinese healing, although they have recently moved their medical education towards standards of a global nature.

Nigeria, with about 130 million people, has the largest population in Africa. Nigeria has 16 medical schools compared with South Africa where 8 medical schools serve a population of 44 million. Dr Onuminya (p. 652) provides a fascinating insight into the important role played by traditional bonesetters (TBS) in his country.

Over 70% of the rural population in Nigeria still rely on the TBS for primary fracture care. TBS practice also accounts for about 80% of fracture morbidity in their hospitals, with gangrene resulting from treatment by a TBS accounting for 60% of major limb amputations in Nigeria. Dr Onuminya provides thoughtful proposals for upgrading the TBS services.

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