Patients underestimate risk of DVT, say University of Birmingham researchers

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Many people going into hospital have concerns about contracting the hospital acquired infection MRSA, yet the risk of acquiring - and dying from – hospital acquired venous thromboembolism (VTE) is much greater, warn scientists at the University of Birmingham.

Hospital acquired VTE kills more people than breast cancer, road traffic accidents, HIV/AIDS and MRSA combined, report scientists from the University's School of Health and Population Sciences who are carrying out the ExPeKT study into how best to prevent and manage thromboembolism.

'Poor public knowledge of VTE, which is largely confined to blood-clots associated with air travel, is not surprising when the risk is also underestimated by hospitals, who continue in failing to provide appropriate clot-preventing drugs,' says Dr Lorraine McFarland, who is leading the research. What is even more surprising, she says, is the lack of appreciation of these risks among health care professionals.

VTE includes deep vein thrombosis (DVT) and pulmonary embolism (PE), and risk factors include; immobility, acute illness, major and orthopaedic surgery, malignancy, pregnancy, increasing age and obesity. A combination of these factors further increases the risk. Since the publication of clinical guidelines and recommendations by the National Institute for Health and Clinical Excellence (NICE) in 2007, all patients admitted to hospital in the UK should undergo a routine VTE risk assessment.

The correct and uniform implementation of these guidelines across the UK is essential, says Dr McFarland.

'VTE is difficult to diagnose, often asymptomatic; the first sign of the disease can be a sudden fatal PE, and a lack of routine post-mortem examinations means it can remain unrecognised even at death,' she says. 'These factors suggest there may be a marked underestimate of VTE incidence. However, VTE is largely preventable. Routine risk assessment on hospital admission and the use of effective preventive strategies such as compression stockings and small doses of anticoagulants, including low molecular weight heparin (LMWH), can reduce the 32,000 deaths that occur each year from this condition and relieve the long-term debilitating burden created when veins become damaged by DVT.'

The risk of VTE is greatest within the first 90 days after leaving hospital and remains high for up to 12 months. A VTE occurring within 90 days of a hospital discharge is classified as a hospital-acquired VTE. Primary healthcare professionals have little involvement in VTE aftercare and patients may self-administer thromboprophylaxis for up to 35 days. 'Primary healthcare professionals often remain unaware if a patient experiences a VTE event or is re-admitted to hospital and thus a period of clinical void exists for the patient.

'The importance of the ExPeKT study is in examining and defining the role of primary care in thromboprophylaxis and in exploring the information and care that high-risk patients receive prior to hospital admission or after discharge,' adds Dr McFarland. 'The outcome will be to develop a pathway for the co-ordinated care and the integrated management of thromboprophylaxis between hospital and the community; in effect bridging the void for patient care.

'The need for awareness and education across both secondary and primary care is evident. An informed patient requires understanding and knowledge of the VTE risks associated with hospitalisation, medical procedures and immobilisation in order to know which questions to ask when admitted to hospital.

'An effective intervention would educate a patient to recognise the symptoms of DVT and PE and instil the confidence to know who to approach if they suspect they are experiencing an event. Primary care could play a major role in this task, which will inevitably reduce the numbers of patients with hospital-acquired VTE and prevent large numbers of unnecessary deaths.'

For more information, please contact Jenni Ameghino, Press Office, University of Birmingham, 0121 415 8134. 07768 924156.

Notes to editors

- ExPeKT: Exploring Prevention and Knowledge of VTE
- Dr Lorraine McFarland is available for interview. Please contact the press office to arrange: **pressoffice@contacts.bham.ac.uk (mailto:pressoffice@contacts.bham.ac.uk)** / 0121 414 6029

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