

## Deep Vein Thrombosis is Not Rare in Asia—The Singapore General Hospital Experience

L H Lee,\**FAMS, MBBS, M Med*, K Q Gu,\*\**PhD*, D Heng,\*\*\**FAMS, MRCP, M Phil*

### Abstract

**Introduction:** Venous thromboembolism (VTE) is perceived to be rare in Asia, but our recent clinical experience at Singapore General Hospital (SGH) suggests otherwise. Between 1996 and 1997, there were 388 cases of confirmed deep vein thrombosis (DVT). **Materials and Methods:** All patients with symptomatic DVT confirmed by duplex ultrasound studies from January 1996 to December 1997 were retrospectively studied. Their case notes were searched for a record of predisposing risk factors. **Results:** Ultrasound imaging indicated acute thrombosis in 320 patients (82.5%), and previous, but not acute thrombosis in 68 patients (17.5%). The overall frequency rate of acute DVTs was 15.8 per 10,000 hospital admissions. The average age of patients with acute thrombosis was 58.2 years. 9.2% of patients developed pulmonary embolism (PE). Their most frequently recorded clinical predispositions were immobilisation (67%), malignancy (33%) and recent surgery (30%). One hundred and thirty patients were tested for antithrombin, protein C or protein S deficiency, and the presence of antiphospholipid antibody and 45 (35%) were found to have at least 1 positive result. **Conclusion:** DVT is not uncommon in Singapore. Our frequency rate of acute DVT of 15.8 per 10,000 admissions is much higher than previously reported rates of 2.8 and 7.9 per 10,000 admissions in 1990 and 1992, respectively. These findings confirm the need for increased awareness of VTE in Asian populations, and support the relevance of systematic studies of thrombosis risk and prophylaxis in Asia.

*Ann Acad Med Singapore* 2002; 31:761-4

**Key words:** Pulmonary embolism, Risk factors for DVT, Thrombophilia, Venous thromboembolism

---

\* Consultant Haematologist

Department of Haematology, Singapore General Hospital

\*\* Epidemiologist

\*\*\* Clinical Epidemiologist

Clinical Trials & Epidemiology Research Unit, National Medical Research Council

Address for Reprints: Dr Lee Lai Heng, Department of Haematology, Singapore General Hospital, Outram Road, Singapore 169608.