GPSIs are to be trained. This could make the whole system unsustainable. A clinic consisting only of obscure and complicated cases would also be unsuitable for undergraduate students, which would be a pity when it is so important that they do have a proper exposure to dermatology.

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Clinical & Scientific letters

Letters not directly related to articles published in *Clinical Medicine* and presenting unpublished original data should be submitted for publication in this section. Clinical and scientific letters should not exceed 500 words and may include one table and up to five references.

Diarrhoea may be an important risk factor for deep venous thrombosis in the elderly

I read with interest Ng SM *et al*'s case report.¹ If the difficulty in recognising deep venous thrombosis (DVT) in children is understandable, failure to identify it in highrisk elderly patients is completely unjustified, as the incidence of DVT increases sharply with age, from one case per 100 000 people per year in childhood to nearly 1% per year in old age.² This high risk is at least partly due to the exposure of the elderly population to more or new risk factors, such as immobility and hospitalisation for either medical or surgical emergencies.³

We have audited the notes of 15 Elderly patients who developed either DVT or pulmonary embolism while in hospital after being admitted with either acute stroke (five patients) or Parkinson's disease. An interesting finding was that an acute diarrhoeal episode preceded the onset of DVT in five out of the 15 patients (33%). The diarrhoea started between two and eight days before the detection of DVT. Two of these five patients were admitted with a stroke and the three Parkinson's patients with sudden onset of immobility secondary to cancer colon, fractured hip and urinary tract infection, respectively four of the patients were men and one was a woman, and their age ranged between 75 and 86 with mean of 79.

Hyperviscosity secondary to dehydration is a well-recognised risk factor for DVT.⁴ We feel that the elderly population is particularly vulnerable, especially if they have a neurological disorder such as stroke or Parkinson's disease, which might affect their swallowing, communication or cognition, thus increasing the risk of dehydration following a relatively mild attack of diarrhoea.⁵

Rosindaal² considered thrombosis as a multicausal disease. In order to develop

thrombosis, a patient must have several risk factors to exceed the 'thrombosis potential threshold'. If a patient is very close to the threshold, and one more risk factor is added, thrombosis will occur. It is important to consider this concept in the clinical setting to be able to stratify the patients at high risk of thrombosis, not just to implement adequate prophylactic measures such as elastic stockings and subcutaneous heparin, but also to aggressively try to reverse 'developing' risk factors such as diarrhoea by ensuring adequate hydration.

References

- 1 NG SM, Khurana RM, Yeang HW AW, Hughes UM, Manning DJ. Is prolonged use of computer games a risk factor for deep venous thrombosis in children? Clin Med 2003;3:593-4.
- Rosindaal FR. Venous thrombosis: a multicausal disease. Lancet 1999:353:1167-73.
- 3 Heit JA, O'Fallon M, Petterson TM, Lohse CM et al. Relative impact of risk factors for deep vein thrombosis and pulmonary embolism. Arch Intern Med 2002;162:1245–8.
- 4 Mammen EF. Pathogenesis of venous thrombosis. Chest 1992;102(Suppl 6): 640S-644S.
- Whelan K. Inadequate fluid intake in dysphagic acute stroke. Clin Nutr 2001;20:423–8.

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