

**Table 1. Deep vein thrombosis risk stratification.**

Risk level	Patient group
Low	Minor medical illness
Moderate	Major medical illness: heart or lung disease, inflammatory bowel disease, cancer
High	Major medical illness in patients with previous deep vein thrombosis, pulmonary embolism or thrombophilia Lower limb paralysis

erate and high risk category only 48 patients received thromboprophylaxis for DVT (50%). Anticoagulation was contraindicated in eight patients in this group, but only one patient was given thromboembolic disease prevention stockings.

This audit showed a low rate of use of DVT prophylaxis in medically ill patients. This poor rate of compliance is unfortunately no different in the studies carried out across the UK.<sup>3</sup> Our recommendation was similar to that of Butt *et al* and we hope to find a higher rate of thromboprophylaxis when we carry out a second audit. Also, we strongly recommend that THRIFT and American College of Chest Physicians recommendations should only be used as a guide and the risk should be individually quantified especially in younger adults who may not score high on the risk sheets based on the above guidelines.

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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Letters not directly related to articles published in *Clinical Medicine* and presenting unpublished original data should be submitted for publication in this section.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.

### Testing for urinary infection using urinary reagent test strips in unselected acute medical patients

Urinary tract infections (UTIs) may cause typical urinary tract symptoms, but in the elderly population may lead to non-specific symptoms such as delirium. Prompt diagnosis of UTI may be aided by urinalysis testing for leucocytes and nitrites, but the use of these tests is primarily advocated in patients with urinary symptoms.<sup>1,2</sup> The usefulness of urinalysis testing in unselected general medical emergency admissions is unproven.<sup>2–5</sup> We have audited our use of urine dipstick testing in adult patients admitted to hospital as emergencies.

The case notes and computerised laboratory results of 174 consecutive unselected acute medical patients admitted to hospital were studied retrospectively. The median (interquartile range) age was 75 (58–84) years. Of the 174 patients, 57 (33%) had urinalysis on admission. Urinalysis was considered positive for infection if leucocytes and/or bacterial nitrites were detected to any degree on dipstick testing of a clean catch urine sample.

#### Results

Urinalysis was more likely to be performed in patients whose clerking sheets documented urinary symptoms (frequency, dysuria, suprapubic pain, urinary incontinence) (11 of 21 patients) than in those without urinary symptoms (46 of 153 patients) ( $\chi^2 = 4.17$ ,  $p < 0.05$ ). When tested, urinalysis was no more likely to be positive in those with urinary symptoms (6 of 11 patients) than those without urinary symptoms (17 of 46 patients).

After excluding those with urinary symptoms, urinalysis was more likely to be done in elderly patients with confusion/falls/'off legs' (16 of 37 patients, median age 80 (74–88) years) than those without

(30 of 116 patients), ( $\chi^2 = 4.03$ ,  $p < 0.05$ ). When tested, urinalysis was no more likely to be positive in those with confusion/falls/'off legs' (8 of 16 patients) than those without (9 of 30 patients).

Of the total 57 admission urinalyses, 23 were positive. Of these, 13 were cultured in the microbiology laboratory and only 5 were positive for significant bacteriuria ( $>10^5$  bacteria/ml). Eight urine cultures were negative and in 10 patients the positive urinalysis was not followed up by microbiological culture. Despite infection only being subsequently confirmed in 5 of the 23 positive urinalyses, 7 of the 23 patients were started on an antibiotic specifically for UTI, 7 patients were commenced on a broad spectrum antibiotic that would cover a UTI and 2 patients were commenced on an antibiotic for a non-UTI diagnosis. Nine patients with positive urinalysis results received no antibiotics, suggesting the admitting doctors ignored the urinalysis result. Twelve of the 34 negative urinalyses were cultured, and all 12 were negative for significant bacteriuria.

Urinalysis is being used haphazardly in acutely admitted medical patients. Although it is done more frequently in patients who have specific urinary symptoms than those without, and in elderly patients with confusion/falls/'off legs' than those without such features, it is no more likely to be positive for infection in these settings. Reagent strip urinalysis is not useful in distinguishing UTIs in patients in these settings. The positive predictive value for a positive urinalysis is only 40%. A positive urinalysis frequently encourages the acute medical team to erroneously diagnose UTI, particularly in an elderly confused patient where a reversible organic pathology is enthusiastically sought. At worst a positive urinalysis may distract from the true diagnosis and encourage inappropriate antibiotic prescribing, with

its attendant risk of adverse reactions. Our findings do not support the use of routine urinalysis in unselected acute medical admissions.

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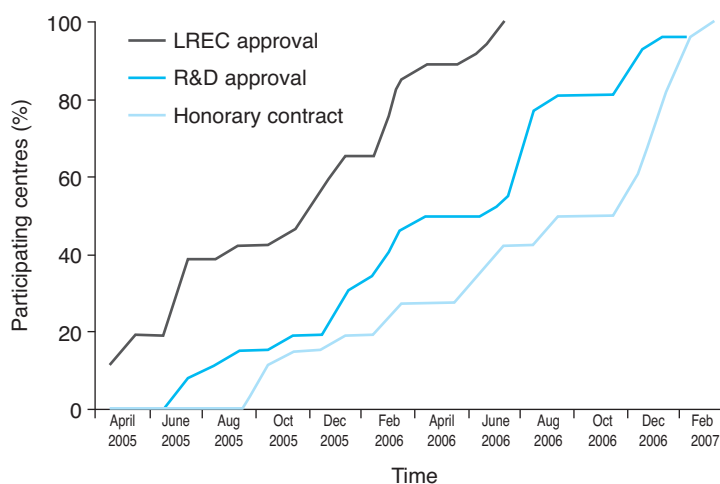
#### The trials and tribulations of implementing a multi-centre study of encephalitis in England

Over the last 10 years, increasing rules and regulations have severely hampered our ability to do clinical research in the UK. While no one would argue that ethical approval and research governance are needed, it is now recognised that they can create unnecessary hurdles which are often disproportionate to any risks involved. More recently, steps have been taken to try and streamline the processes. However, our experience in establishing a multi-centre study of encephalitis over the last couple of years suggests there is still a long way to go.

Viral encephalitis is a devastating neurological illness, with 700 cases estimated to occur annually in England.<sup>1</sup> Although notifiable by law only around 20 cases of encephalitis are reported annually, emphasising the gross underreporting. Its impact, however, extends far beyond the number of patients, because of the health economic costs to the NHS and society.<sup>2</sup> In England the cause of encephalitis remains unknown in more than 60% of cases.<sup>1</sup> The spread of West Nile virus across Europe, and perhaps into the UK,<sup>3</sup> gave added impetus to try and establish the cause of encephalitis in more of our patients. The Health Protection Agency (HPA) therefore set up a study, funded by the Department of Health, to document the clinical and demographic features of patients with encephalitis in three regions of

England. We aimed to ensure that the appropriate samples are collected for all cases, and that they get a full diagnostic work-up to look for possible causes ([www.hpa.org.uk/infections/topics\\_az/encephalitis/study.htm](http://www.hpa.org.uk/infections/topics_az/encephalitis/study.htm)). Given that all cases of encephalitis should be reported to the HPA anyway, that most would like to have a diagnosis, and that no extra samples are taken for the study, it could be argued that the study involves little more than best clinical practice. Nevertheless, we went through the full ethics and research governance processes.

We had hoped to take advantage of recent developments designed to streamline the process. The introduction of multi-centre research ethics committee (MREC), a single ethical review irrespective of the number of UK sites involved, has been a great improvement.<sup>4</sup> The design of a single standardised research and development (R&D) application form made available online as part of Central Office for Research Ethics Committees (COREC, Part D) and the Research Passport (RP), currently being piloted in the North West,<sup>5</sup> are additional welcomed developments. Our experience over the past two years however, indicates that these changes have not yet been fully implemented. The online R&D form was accepted by none of the eight London trusts. Only one of 13 centres in the North West accepted the RP, which has still to be rolled out to the rest of the country. This lack of acceptance has



**Fig 1. Time delay from multi-centre research ethics committee approval in obtaining local approvals and number of centres active in Health Protection Agency study (n=26).** LREC = Local Research Ethics Committee; R&D = research and development.