2   Joint Tuberculosis Committee of the British Thoracic Society. Peter Ormerod, Craig Skinner, John Moore-Gillon, Peter Davies, Mary Connolly, Virginia Gleissberg, John Watson, Anton Poxniak, Ruth Gelletlie, Ann Cockroft, Francis Drobniewski, Jane Leese. Control and prevention of tuberculosis in the United Kingdom: Code of practice 2000. *Thorax* 2000;**55**:887–901.

3   Cookson JB, Cookson AGI. Does a positive Heaf reaction in Asian school-children predict later breakdown of tuberculosis? *Thorax* 1992;**47**:776–7.

PDO DAVIES
Director
Tuberculosis Research Unit
Cardiothoracic Centre, Liverpool

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Letters not directly related to articles published in *Clinical Medicine* and presenting unpublished original data should be submitted for publication in this section.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

Audit of anticoagulation control: a comparison between the performance of a hospital anticoagulation clinic and the general practice

Withybush General Hospital runs an anticoagulation clinic (AC) and provides laboratory facilities for INR testing for GP surgeries willing to prescribe and monitor warfarin treatment for their own patients. Fifty randomly selected consecutive patients (26 women) attending the hospital AC were compared with a similar sample of 50 patients (22 women) whose INRs have been requested from the general practice. All patients had their anticoagulation initiated beforehand. A retrospective analysis of their last ten appointments for INR check was undertaken. The therapeutic range was according to the guidelines of the British Society for Haematology and was defined as INR values within 0.5 INR units of the target INR[1].

The age of the patients attending the hospital AC was 69.2 ± 12.9 years and 70.3 ± 10.5 years in the general practice group. There was no statistically significant difference between two groups regarding the indication for anticoagulation and mean duration of follow up (171.1 days in the hospital cohort and 145.9 days in GP cohort). Retrospective analysis of 50 patients' records of their last ten appointments with the hospital AC yielded 478 INR measurements, as on 22 occasions the patient failed to turn up. Similar analysis of the records of 50 patients from the general practice cohort yielded 494 INR measurements, as only on 6 occasions no blood samples were sent to the laboratory. 56.9% of hospital AC INR measurements (272 of 478) were in the therapeutic range, 23.8% (114 of 478) below therapeutic range and 19.2% (92 of 478) of measurements were above therapeutic range compared to 54.1% (267 of 494), 25.9% (128 of 494) and 20% (99 of 494) of the INR measurements respectively of the general practice group. There was no statistically significant difference between the two groups at the 95% confidence interval. There was no incidence of bleeding due to over-anticoagulation in any group. Similarly, no statistically significant difference in anticoagulation control was found when patients with atrial fibrillation were compared separately (25 in the hospital AC group and 24 in the general practice group). Retrospective analysis of their last 10 appointments yielded 237 INR measurements in the hospital AC group of which 140 (59.1%) were in the therapeutic range as compared to 238 INR measurements in the general practice group of which 143 (60.1%) were in the therapeutic range.

This study showed that more than half of the INR results obtained in the hospital AC or in the general practice fell within the recommended range. This is in accordance with previous studies, which gave a range of 47% to 53.4%[2–4]. We could not find any statistically significant difference between the hospital AC and the general practice in maintaining the INRs within the range recommended by the British Society for Haematology. We conclude that the control of anticoagulant treatment can be safely devolved to the primary care doctors who are willing to accept the responsibility, more so in patients with atrial fibrillation, where community based control of anticoagulation treatment is safe and effective.

References

1   British Society for Haematology. (British Committee for standards in Haematology; Haemostasis and Thrombosis Task Force.) Guidelines on oral anticoagulation: third edition. *British Journal of Haematology* 1998;**101**: 374–87.

2   Doble N, Baron JH. Anticoagulation control with warfarin by junior hospital doctors. *Journal of the Royal Society of Medicine* 1987;**80**:627

3   Pell JP, McIver B, Stuart P, Malone DNS, Alcock J. Comparison of anticoagulant control among patients attending general practice and a hospital anticoagulant clinic. *British Journal of General Practice* 1993;**43**:152–4

4   Fitzmaurice DA, Hobbs FDR, Murray ET. Primary care anticoagulant clinic management using computerized decision support and near patient INR testing: routine data from a practice nurse-led clinic. *Family Practice* 1998; **15**:144–146

DIPTARUP MUKHOPADHYAY
Specialist Registrar
Geriatric and General (Internal) Medicine
Kent and Canterbury Hospital
Canterbury
LINGESAN GOKULKRISHNAN
Senior House Officer
Department of Integrated Medicine,
PHIL JONES
Research and Audit Facilitator
Clinical Audit and Research Support Unit
KANTHAYA MOHANARUBAN
Consultant Physician
Department of Integrated Medicine

Withybush General Hospital
Haverfordwest