fibronectin concentrations will not contribute to the differential diagnosis in complicated clinical settings where definite proof by positive CSF cytology should be sought. However, a few cancer patients in our study had a completely normal routine CSF examination including cytology, glucose, lactate, albumin, IgG, and IgM, but they had increased CSF fibronectin and later turned out to have leptomeningeal metastases, as shown by cytology. Therefore, determination of CSF fibronectin may be a useful diagnostic and monitoring tool in the staging and follow up of patients with disseminated cancer.

M WELLER
National Institute of Health,
Clinical Neuroscience Branch,
Bethesda, MD
USA

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Use of computers in anticoagulant clinics

The guidelines on oral anticoagulation published by the British Society for Haematology (BSH) acknowledged that computers may have a role in both the analysis of therapeutic quality control and in the clerical support of an anticoagulant clinic.¹ Their use in the production of dose schedules for individual patients was not recommended until reliable patient database programmes had been developed.

Until August 1990 our anticoagulant clinic had been performed by either a consultant haematologist or a medical senior house officer. Each patient had been allocated a target International Normalised Ratio (INR) range according to the BSH guidelines. In an attempt to improve our anticoagulant control we introduced a previously reported computer programme for determining the dose of oral anticoagulant.²

Mean (+ ISD) INR for patients whose target INR ranges are 3.0-4.5 (○) and 2.0-3.0 (●). On average each point represents the results from 66 patients for the range 3.0-4.5 and 139 patients for the range 2.0-3.0.

Results over the past 12 months indicate that the INRs have shown a consistent improvement. The figure shows that the mean INR for each patient group has progressively moved nearer to the mid point of the therapeutic ranges—3.75 for the range 3.0-4.5 and 2.5 for the range 2.0-3.0, there being too few patients in the range 2.0-2.5 to analyse. The percentage of patients within the therapeutic range each month for these two groups has increased from 50% to 70% and from 48% to 65%, respectively.

As a result of the improved anticoagulant control the average recall between visits has also increased from 26 to 36 days and from 21 to 33 days for the two groups. The results have been achieved without any apparent increased risk of serious bleeding complications. All episodes of bleeding have been recorded on each patient's computer record which allows the number of such episodes to be monitored.

The use of this computer program for determining the dose of oral anticoagulants has improved our therapeutic control. The clinic is now also run by a staff pharmacist acting under the direction of a consultant haematologist, thus freeing up medical time.

Among other benefits which have ensued is the improved advice given to new patients, which is part of the program. This part of the program consists of a series of questions for all new patients. As directed by the computer, the pharmacist will question the patients to ensure that they know why they have been given warfarin, the dose and colour of their tablets, the side effects of warfarin together with which drugs should be avoided. This ensures that each patient is fully counselled regarding their anticoagulation. This program will allow comparisons of performance to be made between centres.

L KENT
MJ GALLOWAY
Department of Haematology
General Hospital
Bishop Auckland
Co Durham DL14 6AD

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Audit of necropsies in a British district general hospital

In response to the recent article about audit of necropsies¹ we were prompted to carry out a retrospective study of the past 200 adult necropsies performed at the Mayday Hospital during 1990 and 1991.

Our criteria for grading diagnostic dis-

crepancies between the clinical cause of death and the post mortem findings differed from Harris and Blundell's study, as we used a single category for additional major pathology without "feed-back on tests" group.

The data were derived from the clinical and necropsy diagnoses obtained from post mortem request forms and necropsy reports. The diagnoses were then independently graded by three histopathologists (TPM, MJC, and SMT) using up to three of the criteria given below. The grades were then compared and only those agreed by at least two of the pathologists were accepted for each case. Results were later presented at the hospital clinical audit meeting (table).

There has been general agreement that necropsies have a central role in clinical audit, yet despite this the necropsy rate continues to fall in this era of audit.

Our study differs from that of Harris and Blundell in several ways. Both studies nevertheless emphasise the significant discrepancy between clinical and necropsy diagnosis. This discrepancy is sufficiently high to question the use of mortality statistics as derived from death certificates in the distribution of medical resources.

Many clinicians still question the relevance and validity of necropsy results. Our study, however, shows that most necropsies provide considerable information regarding the main terminal pathological process as well as revealing important findings that may not directly contribute to the cause of death.

The feedback from our study indicated that a summary of the main post mortem findings was desired by the clinicians even more than a full necropsy report. Despite the lack of resources in many hospitals it would not seem impossible to provide both a summary of findings and a concise necropsy report which would at least in part fulfill the Intercollegiate Working Party's recommendations on necropsy.²

In conclusion, necropsies must be considered as an essential part of clinical management and audit. Therefore, we actively support the use of necropsy and encourage our clinical colleagues in this matter. We also feel that additional resources—for example, secretarial and technical personnel—should be provided so that the underresourced pathology laboratories can provide the quantity and quality of necropsies as laid out by the Intercollegiate Working Party recommendations.

TP MEARS
MJ COPPEN
SM THOMAS
Mayday University Hospital,
Thornton Heath,
Surrey CR4 7YE

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Table Comparison of necropsy findings between Harris and Blundell's study and ours

Findings	Harris and Blundell study	Mayday hospital
Major discrepancy in diagnosis	13%	32%
Major unsuspected diagnosis	30%	46%
Important clarification in diagnosis	63%	38%
Confirms presence of main diagnosis	86%	60%
No contribution	2%	0%
Major additional pathology	51%	47%