expense of patient morbidity. For these reasons participation of consultant pathologists in an external quality assessment scheme would appear to be essential. In pathology this will then largely avoid Dr Witcombe's proposal of accreditation (unless, of course, the screening service is privatised).

In addition, I have recently attended courses at two of the centres taking part in the United Kingdom trial of early detection of breast cancer, and it is evident that national standardisation is required in pathological terminology, diagnostic criteria, and methods. For example, an important prognostic factor in breast cancer is tumour diameter. If, however, one major training centre measures diameter on fixed tissue microscopically and the other on fresh tissue macroscopically comparison of results between the two centres is difficult.

The importance of pathology in the breast screening programme warrants substantially greater consideration than it has been given by the Department of Health and Social Security. The enlightened view of regional health authorities such as Trent unfortunately seems to be the exception rather than the rule.

DAVID SLATER

Rotherham District Hospital,
Rotherham S60 2UD

SIR,—I share Dr J B Witcombe's concerns about the prospect of a national breast screening programme proceeding without national quality control and a unified pattern of recording of data (26 March, p 909). The British trial for the early detection of breast cancer had very detailed pathological, radiological, and clinical data collection and analysis and nothing less will do for the British national screening campaign.

I also share his concern that if this scheme goes into full action too quickly there will be insufficient time to assess the competence of all those who take part. Training of radiologists and radiographers, histopathologists and cytopathologists, and surgeons is a priority.

The results of the Swedish trials quoted by Dr Witcombe have been paralleled quite closely by the Edinburgh and Guildford studies. Those of us who have participated in them believe that the lessons learnt over the past nine years should be made available to all who intend to set up breast screening programmes and thus ensure that the learning curve starts at an acceptable level. It is true that safety demands a moderate number of false positives in the radiological assessment of mammographic defects in a screening programme, but the review system and suitable reference to an experienced surgical team will result in a biopsy rate which is acceptable in a population study. In Guildford the biopsy rate for suspicious lesions in the first year was 1 malignant to 1.77 benign. The development of review systems with teamwork between radiologists, screening doctors, cytopathologists, and surgeons has over the years led to our present biopsy rate of 1:0.4 (malignant to benign). This is the sort of rate which should be the goal of screening programmes and it takes a lot of skill, interest, and high quality equipment used well to produce this.

It is difficult to reach any conclusion other than the one hinted at in the Forrest report, that the review and assessment and subsequent care of patients with impalpable lesions are done best in breast units, which should be established at a subregional level and staffed by people who have the equipment and skill and time to do the job properly.

The author mentions the problems in the training of radiographers and "breast physicians." The title

of breast physician is new and I believe it to be a misnomer. The high degree of efficiency in both the Edinburgh and Guildford programmes has depended much on the performance of expert screening doctors. They are specialists in the true sense of the word, but the task of a physician is not only to diagnose but also to treat patients. Surely this is not the remit of those who are going to be conducting the highly time consuming and responsible task of screening organisation and review. Screening centres must have surgeons appointed who are responsible for the final reference and decision making, the necessary biopsies, and subsequent treatment.

P S BOULTER

Guildford Medical Centre,
Royal Surrey County Hospital,
Guildford, Surrey GU2 5XX

Hypocalcaemia after parathyroidectomy

SIR,—We note with trepidation that Drs T J Thompson and T J Neale (26 March, p 896) had to resort to intraperitoneal calcium to treat hypocalcaemia after subtotal parathyroidectomy because the long term effects of large doses of calcium on the peritoneal membrane are not known.

At Liverpool we have subjected more than 15 patients with end stage renal failure and secondary hyperparathyroidism to total parathyroidectomy, and not once have they noticed symptomatic hypocalcaemia. Two weeks before surgery these patients are started on alfacalcidol in doses ranging from 1 to 2 µg daily. Postoperatively they continue taking alfacalcidol together with oral calcium, both titrated to the requirements of the patient.

Subtotal parathyroidectomy is not only a waste of time and effort, but later the remaining parathyroid gland is more than likely to become hyperplastic, which will require unnecessarily yet another operation.

MOHAMMED YAQOOB
RASHEED AHMAD
ERIC SIMKIN

Royal Liverpool Hospital,
Liverpool L7 8XP

Clinical carpal scaphoid injuries

SIR,—We are surprised at the way Mr M R A Young and others (19 March, p 825) manage scaphoid injuries. The use of isotope bone imaging is well described in published reports.^{1,2}

We manage patients with scaphoid injuries as follows. All new patients are examined and those with tenderness in the anatomical snuff box undergo x ray examination, including scaphoid views. Patients with positive findings are managed in scaphoid plaster. Those with no radiographic abnormalities have a wool and crêpe bandage applied to their wrist and are reviewed three days later; if the wrist is still tender they are referred for immediate isotope bone imaging of their wrist. Those with a positive image are treated as having scaphoid fractures and have plaster of Paris applied. Those with negative results are treated only symptomatically and discharged to the care of their general practitioners.

Among the past 50 patients we have referred for isotope bone imaging four had positive results. The remainder were discharged from follow up at that stage. As far as we are aware none returned with problems secondary to missed fracture of the scaphoid. This method of management reduces

dramatically the number of attendances and number of radiographs that the patients require. As the patients are not in a plaster cast for lengthy periods they can usually return to work earlier than those managed by conventional means. This means that the overall cost is also reduced.

M REICHL
M A KHAN

Accident and Emergency Department,
Southampton General Hospital,
Southampton SO9 4XY

- 1 Rolfe EB, Gavrie NW, Khan MA, Ackery DM. Isotope bone imaging in suspected scaphoid trauma. *Br J Radiol* 1981;54:762-7.
- 2 Deutsch SD, Gandsman EJ. The use of bone scanning for the diagnosis and management of musculoskeletal trauma. *Surg Clin North Am* 1983;63:565-85.

Körner, nomenclature, and SNOMED

SIR,—There is so much understanding of the problems of classification in Mr Richard Earlam's article (26 March, p 903) that his enthusiastic support of SNOMED (systematised nomenclature of medicine) is surprising.

His statement that it is "unknown and untested in the United Kingdom" is too strong. SNOMED has been considered in some depth in Britain and its limitations recognised though it is used in several pathology departments. Its detailed structure is beneficial in this discipline, and the fact that its tumour morphology field is identical with that of International Classification of Diseases-9 reduces problems of compatibility.

In clinical medicine its multiaxial structure is a drawback. The SNOMED authors have recognised this and have created an anomalous "D axis" for diseases to try to compensate. In spite of Mr Earlam's assertion, the classification copes poorly with "fuzzy," ill defined problems. The use in SNOMED of a varying number of fields of varying types to code a single entity can cause difficulties—for example, tonsillitis needs a morphology field M-40000, which indicates inflammation, and a topography field T-61100 for tonsils, while for streptococcal sore throat a disease field D-0180 is used. I can find no code for a simple sore throat. It is difficult to map SNOMED terms on to existing national and international statistical classifications, which we have to live with.

I wonder if Mr Earlam is familiar with the Read clinical classification.¹ This has been developed in the United Kingdom for use on computers and is exciting much interest here and overseas. It is a comprehensive, hierarchical nomenclature and classification covering all aspects of medicine including diagnosis, signs and symptoms, radiology, laboratory tests, operations, procedures (diagnostic, therapeutic, preventive, and administrative), occupation, and drugs.

The code is alphanumeric, using upper and lower case, and, with five characters, it could specify uniquely over 650 million entities. The new version provides precise codes for 150 000 medical terms.² By coding preferred terms and then linking recognised synonyms it allows the doctor to define the patient's problems in natural language. In most computer systems using the system coding is automatic, avoiding clerical coding and inputting errors and encouraging direct data input by clinicians. More than 1500 doctors are using the system daily.

By identifying and allocating codes to distinct concepts in medicine and by its space to expand the Read classification provides a nomenclature for medicine that is cross referenced to the International Classification of Diseases-9CM and its subsets, OPCS-4, diagnostic related groups, Körner datasets, and so on, allowing statistical