regarded as part of the workload. Problems can arise with such a service. Patients may be unable to get through on the telephone. They may justifiably become irritated if kept waiting, especially if they are telephoning from a call box or abroad and incur unnecessary expense. A policy must be agreed for patients who fail to telephone for results. Finally, the sifting out of patients who are quick and easy to deal with means that only patients with more complicated problems attend for follow up, which increases the consultation time.

Overall our patients appreciate the service. Most of them are young, fit, and in employment, and some are prepared to travel long distances to use the confidential service provided by a genitourinary medicine clinic. Reducing the number of visits to the clinic saves them time and money. Furthermore, if follow up by telephone was unavailable resources would have to be found to see these patients in the clinic. We think that more clinicians and patients could benefit from our experience.

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Phone clinic provides excellent support

EDITOR,—It is not only the United States that has implemented the idea of following up carefully defined groups of patients by telephone.¹ We have started what we call a "phone clinic" to follow up patients with cancer shortly after they have completed treatment, which aims at replacing a routine outpatient visit. We have shown that the phone clinic provides excellent support and effective medical surveillance in a defined situation in oncological follow up and has resulted in a decrease in medical outpatient attendances, which has allowed time for medical consultation targeted at patients in greatest need.²

We do not share Jammi Nagaraj Rao's view of the staff necessary for phone contact.¹ With proper planning, training, and record keeping it was not necessary for the phone clinic to be manned by senior medical staff. An experienced and trained nurse practitioner may enhance the service for patients with cancer as a high proportion of the patients need advice on support services not frequently offered by medical staff. There was no evidence of any adverse effects on medical care. Compliance and satisfaction among patients were high as none of the patients requested medical consultation.

Before too many phone clinics are established in place of routine outpatient follow up, however, we should ask whether the follow up is necessary at all. The answer will become apparent only from detailed examination of the content and outcome of routine follow up appointments; in many specialties, including oncology, the quest for this information is only just beginning.

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Side effect of quinine for nocturnal cramps

EDITOR,—Malcolm Man-Son-Hing and George Wells report a meta-analysis of the use of quinine for nocturnal night cramps in elderly people.¹ I wish to draw attention to lichenoid photosensitivity related to quinine, which is a poorly recognised but, I suspect, a relatively common side effect of this treatment. I first became aware of it in 1982, and until my retirement in 1991 I saw nine patients affected by it. All were elderly women taking quinine for nocturnal cramps. I have reported five of these cases previously.² The following points are worth emphasising: all nine patients had lesions on the dorsa of the hands (figure); none of the patients

Lichenoid photosensitivity related to quinine in 70 year old woman

initially associated the skin eruption with quinine, and most could be persuaded of the association only with difficulty; and the eruption cleared in all cases when quinine was withdrawn.

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Liver biopsy

Interventional radiology teams can provide prompt analgesia and care monitoring

EDITOR,—In their editorial on whether ultrasound guidance for percutaneous liver biopsy is appropriate Guy Vautier and colleagues comment that "the biopsy is usually done in a radiology department, which means that the patient would be waiting to return to a ward without being observed."¹ We agree that it is inappropriate to leave patients unobserved after percutaneous liver biopsy, particularly because at least 60% of complications occur soon after the procedure is completed.²

We believe that observation and monitoring of patients after percutaneous liver biopsy are an integral part of the procedure. In our institution liver biopsies on thin, cooperative patients are performed in the wards by the gastroenterologists. Biopsies are performed in the radiology department on patients in whom they are likely to be difficult (because of obesity, variant anatomy, a small liver, or reduced cooperation) or who are likely to develop complications.

One of the advantages of performing liver biopsies under ultrasound guidance in the interventional procedures area of a radiology department is the presence of a dedicated nursing and radiological staff, who are well trained and experienced in monitoring and resuscitating patients. This dedicated monitoring is rarely available in busy medical wards but is vitally important in the

early recognition of complications. The presence of the patient in the radiology department ensures a rapid diagnostic evaluation (by ultrasonography or computed tomography) of any suspected complications if clinically appropriate. In our radiology department, patients who have had liver biopsies are closely monitored in the interventional radiology area immediately after the biopsy. Later they are accompanied back to the ward or short stay unit by a nurse for further observation.

The authors also state that guided biopsies require more resources than blind biopsies in terms of trained staff. We believe that a procedure in which up to a quarter of patients experience pain¹ demands appreciable clinical support. In our practice, patients who complain of pain during or immediately after liver biopsy guided by ultrasonography receive prompt analgesia. This is prescribed and supervised by the interventional radiologist and given by the radiology nurse. The choices of drug and dosage are based on the patient's body weight and clinical condition. Complications are dealt with in conjunction with the referring clinician.

We agree with the authors that certain criteria must be met when a decision is made on where percutaneous liver biopsies should be performed; these include suitable training of operators and appropriate care after the procedure. The ready availability of suitably monitored analgesia should also be considered. The implication that radiology is unable to meet these criteria is an oversimplification. The advent of dedicated interventional radiology teams has provided an environment in which pain and complications after procedures can be minimised. The inclusion of an experienced nurse in the team also allows for excellent monitoring of patients both during the procedure and immediately after. These features are particularly important in patients who are at high risk of complications.

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Require imaging guidance

EDITOR,—We were amused by Guy Vautier and colleagues' efforts to justify the continued use of blind liver biopsies and by their assertion that "the ideal biopsy may be one that is performed in the ward by the gastroenterologist using ultrasonographic guidance."¹ We believe that this is an issue in which the advantages of one option are so self evident that there is no justification for the large scale randomised trial suggested by the authors. In our opinion all biopsies should be performed by expert operators using imaging guidance, and nowadays few hospitals do not have the required skill—in the radiology department.

In our practice liver biopsies are performed as part of a routine ultrasonography list, taking no more than 20 minutes; are as atraumatic for the patient as is possible; have caused no important complication in eight years; and, when automatic biopsy guns are used, uniformly provide diagnostic samples. Direct ultrasonographic visualisation ensures that the needle is nowhere near the gall bladder or major vessels as the needle can be watched within the liver throughout the biopsy. Our patients are never left unobserved "while waiting to return to the ward"; this is a matter of good nursing organisation.

Radiologists, who every year scan hundreds of livers of all shapes, positions, and sizes, are better placed than anyone else to comment on the inappropriateness of performing blind right intercostal punctures with large calibre needles. They are also, by training and experience, the most expert in placing biopsy needles of all kinds under imaging guidance and are probably just waiting to be asked.

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Most are performed by radiologists

EDITOR,—Guy Vautier and colleagues' editorial finishes with the totally unsubstantiated assertion that the "ideal liver biopsy is one that is performed on the ward by the gastroenterologist using ultrasound guidance." In Britain most biopsies of the liver (and other organs) for focal disease are successfully performed by radiologists in the radiology department. The radiologist selects the most appropriate imaging technique for the patient and lesion, usually either ultrasonography or computed tomography. Radiologists have the advantage of familiarity with the imaging equipment and the cross sectional display of anatomy. The patient is accompanied by a nurse, who escorts him or her back to the ward; therefore patients are not left "without being observed during the time when at least 60% of complications occur."

The editorial does not state who performed the liver biopsies in the studies quoted or the type of biopsy needle used. We routinely use a Biopty gun (or equivalent), a spring loaded automated device that produces clean, relatively atraumatic tissue samples. We consider it to be a definite advance on the technique that uses a Menghini needle. Further radiological refinements involve the application of angiographic skills either to embolise the track of the percutaneous liver biopsy needle or to obtain a transjugular liver biopsy specimen to minimise the risk of haemorrhage in those in whom biopsy is imperative but coagulation appreciably impaired.

Although the liver is large, its position varies considerably among patients and can alter by 5 cm or more with deep respiration. If the liver is not localised ultrasonographically before biopsy it may be missed completely; this is in addition to the problem of inadvertent puncture of gall bladder or portal vein. Therefore imaging guidance is of value in diffuse as well as focal disease.

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Day case procedure is safe

EDITOR,—Guy Vautier and colleagues discuss the cost and convenience of guided liver biopsy.¹ When these two aspects are considered an additional important question is whether percutaneous liver biopsy should be performed as an inpatient or a day case procedure. The national audit of liver biopsies in 1991 indicated that fewer than 5% were performed as day case procedures.² Why are British gastroenterologists and general physicians reluctant to perform day case biopsies when studies from the United States indicate that

they are safe?³ The most likely reason remains fear of complications after discharge.

Since 1989 we have undertaken 182 liver biopsies as a day case procedure in selected patients, according to criteria based on the American guidelines.⁴ Five patients developed complications, but these were directly attributable to the procedure in only three. Four patients required admission (two with delirium tremens and two with abdominal pain), and all were discharged the next day with no serious complications. One patient returned to hospital three days after biopsy with pleuritic pain due to a pneumothorax. Twenty four consecutive patients who had been treated as day cases completed a questionnaire. Twenty two indicated a preference for the day case procedure while two would have preferred to be treated as inpatients because they were anxious about possible complications.

Our experience suggests that day case liver biopsy in selected patients is safe and associated with a high degree of satisfaction among patients. This is similar to the findings of previous American studies⁵ and indicates that the criteria used to select patients are good predictors of a low complication rate. Investigators have previously observed that complications, particularly haemorrhage, after liver biopsy most often occur within the first four hours.³ Complications rarely occur after this, though case reports exist of haemorrhage occurring 14 days after biopsy.⁵

Increasing the use of day case procedures is an important aspect of improving convenience for patients and the cost effectiveness of health care. The disparity between the current low national rate of day case liver biopsy and our own and American practice suggests that the use of day case liver biopsy could be considerably increased in Britain, with the potential for large cost savings.

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Handedness among surgeons

EDITOR,—Like John P Aggleton and colleagues,¹ we are interested in handedness, but in the context of its possible importance in influencing a doctor's choice of career. To investigate this we assessed the prevalence of left handedness in cohorts of physicians and surgeons.

Two hundred and nine clinicians of register grade and above were sent questionnaires asking whether they were left or right handed. Responses were received from 103: 67 physicians (47 men) and 36 surgeons (27 men). This represented a response rate of 51% by physicians and of 50% by surgeons. When the responses were analysed by grade the response rate was 47% (24/51) for registrars compared with 77% (30/39) and 42% (48/114) for senior registrars and consultants respectively (questionnaires sent to five staff grade doctors or clinical assistants were excluded because we were unsure how to classify them). None of the surgeons was left handed, compared with eight (12%) of the physicians. This difference in the

frequency of left handedness between the groups (χ^2 test, $P < 0.05$; 95% confidence interval 2.0% to 21.8%) could not be accounted for by the unequal ratios of men to women in the groups.

To our knowledge, this is the first report of a difference in the frequency of left handedness between surgeons and physicians. The absence of left handed surgeons might suggest that left handers are less capable than right handers at manual skills pertinent to surgery. In a study of surgical residents, however, Schueneman *et al* reported that left handers were more proficient than right handers in a neuropsychological test of tactile-spatial abilities; high scores in this test correlated positively with rated operative skill in the left handed group.² Nevertheless, in terms of surgery right handers were still judged to outperform their left handed colleagues.² These authors suggested that such assessment, usually made by right handed senior surgeons assisting residents, may reflect the difficulties encountered when the handedness of the surgeon and assistant differs. The absence of left handed surgeons in our study may partly be due to surgical training that usually requires trainees to assist right handed surgeons. This may be relevant in the selection and training of surgeons.

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Word of warning to junior ophthalmologists

EDITOR,—B Hopkinson highlights the bottleneck that has developed at entry to the ophthalmic registrar grade.¹ There are now 81 senior house officers with settled status who have the FRCOphth; fewer than 20 registrar appointments were made last year. It is no surprise that Hopkinson had nine applicants (30%) with two or more higher qualifications. Three years ago a fifth of higher surgical trainees in ophthalmology had both the MRCP and an ophthalmic fellowship (R J Aggarwal *et al*, annual congress of the Royal College of Ophthalmologists, 1992), but increasing competition has directed many more senior house officers towards research and the acquisition of higher degrees. The unpredictability of the number of specialist registrars in the future coupled with the eligibility of doctors in the European Union to apply for training posts could increase both the quantity and quality of curricula vitae when Hopkinson next shortlists people for a registrar appointment.

It is important to address the problems facing both the current and the future cohorts of senior house officers. The present bulge in the number of career senior house officers should be absorbed in such a way that neither group carries the full burden. It is inappropriate to terminate all senior house officer posts at the conclusion of existing contracts as this simply draws new recruits into an ever expanding system. Senior house officers facing the expiry of their contracts with no career opening ahead may be forced to opt for futile research as a temporising measure or may give up in exasperation. The highly specialised nature of work as an ophthalmic senior house officer is such that those with three years of experience and an ophthalmic fellowship are ill equipped to switch careers. It is unreasonable, however, to place a moratorium on the advertisement of new posts as