

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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1 Vautier G, Scott B, Jenkins D. Liver biopsy: blind or guided?
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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."¹ 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 studies³ 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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- 1 Vautier G, Scott B, Jenkins D. Liver biopsy: blind or guided?
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- 2 Gilmore IT, Burroughs A, Murray-Lyon IM, Williams R, Jenkins D. Indications, methods, and outcome of percutaneous liver biopsy in England and Wales. An audit by the British Society of Gastroenterology and Royal College of Physicians (London). *Gut* (in press).
- 3 Garcia-Tsao G, Boyer JL. Outpatient liver biopsy: how safe is it?
Ann Intern Med 1993;118:150-3.
- 4 Jacobs WH, Goldberg SB. Statement on outpatient percutaneous liver biopsy. *Dig Dis Sci* 1989;34:322-3.
- 5 Reichert CM, Weisenthal LM, Klein HG. Delayed haemorrhage after percutaneous liver biopsy. *J Clin Gastroenterol* 1983;5:263-6.

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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1 Aggleton JP, Bland JM, Kentridge RW, Neave NJ. Handedness and longevity: archival study of cricketers. *BMJ* 1994;309:1681-4. (24-31 December.)

2 Schueneman AL, Pickleman J, Freeark RJ. Age, gender, lateral dominance and prediction of operative skill amongst general surgical residents. *Surgery* 1985;98:506-15.

Word of warning to junior ophthalmologists

EDITOR.—B Hopkisson 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 Hopkisson 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 Hopkisson 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