

Post-biopsy complications

The only post-biopsy complication was pain, either at the biopsy site or in the right shoulder. The degree of pain experienced by patients was similar for both ultrasound- and CT-guided biopsies. Pain was severe in three patients (1.2%), moderate in six patients (2.4%) and mild in 54 patients (21.5%), with the remaining 188 patients (74.9%) experiencing no pain or discomfort. None of the patients required hospitalisation after the procedure. However, one of the patients with severe pain developed a subcapsular haematoma that was diagnosed on ultrasound eight days after biopsy. Immediately following the biopsy this patient was well, and, as with all patients, was advised not to undertake any strenuous activity over the following 24 hours. This advice was ignored and the patient travelled about 150 kilometres by car to her home.

Adequacy of specimens

Sufficient material was obtained for histopathological examination (see Box for diagnoses) and biochemical analysis (where indicated) from all patients, irrespective of whether ultrasound or CT guidance was used.

Comparative costs of procedure

Our cost estimate for ultrasound-guided biopsy performed out of hospital was \$203 (\$116 for liver biopsy plus \$87 for abdominal ultrasonography); the estimate for CT-guided biopsy was \$535 (\$116 for the liver biopsy plus \$419 for the CT scan).

For liver biopsies performed in hospital on a day-stay basis, without radiological guidance, we estimated the average cost to be \$1032 (source: Clinical Information, Liverpool Hospital, South Western Sydney Area Health Service). (We did not obtain costing information for biopsies done under radiological guidance, but the cost would certainly have been significantly higher.)

DISCUSSION

The only complication experienced by patients in our study was pain, which was readily controlled with oral analge-

sia. The incidence and severity of pain was similar to that previously reported.^{3,4} Our results compare favourably with studies showing that hospitalisation as a result of complications (eg, haemorrhage, severe abdominal pain, pneumothorax) occurs in up to 3.2% of patients undergoing outpatient liver biopsy.^{10,11} Most patients were able to be discharged 60 minutes after the biopsy. Apart from the one patient found to have a subcapsular haematoma eight days post-biopsy, no major complications arose and none of the patients required immediate admission to hospital after the procedure.

All tissue samples taken were adequate, and we found no difference in the quality of samples obtained, nor in the pain experienced by the patient, whether biopsy was performed under ultrasound or CT control. However, the cost savings were substantial when the biopsy was performed under ultrasound control, and the cost of either of the out-of-hospital procedures was significantly less than in-hospital procedures.

The third pass performed in our study for patients with suspected haemochromatosis would not be necessary in future procedures, as hepatic iron concentration can now be measured from smaller biopsy fragments.

We believe our study confirms that short-stay, out-of-hospital, radiologically guided liver biopsy is safe and effective for patients with chronic liver disease who have acceptable coagulation profiles. Furthermore, our results challenge the concept that liver biopsy patients need to be monitored for at least six hours after the procedure.

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COMPETING INTERESTS

None declared.

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Correction

Re: "What people say about their general practitioners' treatment of anxiety and depression", by Andrews G, Carter GL, in the 16 July Supplement on the SPHERE National Depression Project (*Med J Aust* 2001; 175: S48-S51). On page S49, column 1, the last sentence under the heading "Assessment" should be replaced by " 'Perceived health need' was based on questions derived from the work by Meadows et al.¹ These questions were asked principally of people who had not sought treatment. Similar concepts were used by the UK Survey of Psychiatric Morbidity questions."

The authors apologise for this omission and would like to draw readers' attention to another article by Meadows et al.² for a more complete discussion of the development of the perceived need for care questionnaire.

- Meadows G, Harvey C, Fossey E, Burgess P. The assessment of perceived need. In: Andrews G, Henderson S, editors. *Unmet need in psychiatry*. Cambridge: Cambridge University Press, 2000.
- Meadows G, Harvey C, Fossey E, Burgess P. Assessing perceived need for mental health care in a community survey: development of the perceived need for care questionnaire (PNCQ). *Soc Psychiatry Psychiatr Epidemiol* 2000; 35: 427-435. □