We would agree that malignant phase hypertension does cause renal failure, with many such patients presenting (and dying) with renal complications[1]. However, there is some debate over the role of non-malignant essential hypertension as a *cause* of renal impairment[2]. The evidence for this causal relation is not good. A recent meta-analysis of ten randomised controlled trials[3] found that there were treated hypertensive patients who did not have a lower risk of renal dysfunction. A total of ten trials from 1966 to 1997 were identified, involving 26,521 individuals and 114,000 person years. All patients with severe renal dysfunction were excluded form the studies. There was no significant reductionin the risk of developing renal dysfunction in the treated hypertensives or those randomised to more intensive therapy (relative risk 0.97; 95% CI 0.78-1.21; p=0.77). However ethnicity may play a role. For example, the American Hypertension Detection and Follow-up project[4], found that only 110 out of 8,000 patients with initially normal creatinine developed a rise in creatinine, and this rise was mainly seen in African-Americans. Broadly similar results were seen in the MRFIT study[5].

Chris Isles suggests that malignant hypertension is 'not common in the UK', but this is not our experience. We have previously reported an incidence of 1–2 per 100,000 per year[6], with no decline over the years (we see an average of one patient per month) and the West Birmingham Malignant Hypertension register currently contains over 450 patients. With careful management, the five-year survival (approximately 74%) is better now than previously reported for malignant hypertension[1], although renal function at presentation is still a predictor of outcome.

In contrast to previous comments by Isles[7], we have shown that renal function continues to deteriorate in some patients with malignant hypertension, despite a good degree of control of their blood pressures having been achieved at follow-up. Careful monitoring of renal functioning and effective treatment of the blood pressure are therefore mandatory in patients with malignant hypertension.

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Junior doctors' experience of percutaneous liver biopsy: a questionnaire survey

Background

In recent years media interest in medical errors has risen significantly. Our profession is acutely aware that junior doctors must be adequately supervised, particularly for potentially hazardous procedures. Liver biopsy is an important diagnostic technique performed by radiologists, gastroenterologists and general physicians. A national audit undertaken by the British Gastroenterology Society and the Royal College of Physicians in 1991 of 1,500 liver biopsies identified five deaths following the procedure and a further 26 patients who developed complications[1]. Operator inexperience was found to be a significant risk factor for biopsy-related complications. For those who had performed less than 20 biopsies, complications arose in 3.2% of procedures, compared to only 1.1% if the operator had performed more than 100[1]. In response to this study, Grant and Neuberger produced guidelines for the British Society of Gastroenterology (BGS) on performing liver biopsy safely[2]. These included recommendations that doctors who have performed less than 20 liver biopsies should not perform the procedure unsupervised and that prothrombin time and platelet count should be always be checked in advance[2].

Aims

We performed a questionnaire survey of junior doctors to determine whether BGS

guidelines on percutaneous liver biopsy were being followed.

Subjects

Our subjects were 550 junior doctors attending two MRCP (Part II) courses in June and October 2001 at St George's Hospital, London. This group was selected as representative of those undertaking general medical training in the period after publication of the guidelines for liver biopsy.

Methods

An anonymous, standardised questionnaire was distributed to all the subjects. The questionnaire included questions concerning knowledge of and experience gained in performing percutaneous liver biopsy and the number of procedures carried out under supervision.

Results

The questionnaire was completed by 393 junior doctors, a response rate of 71.5%, of whom 259 were UK medical graduates. Fifty-five doctors had performed liver biopsies in the UK of whom, 25 had performed biopsies unsupervised. Only one of the 25 (4%) doctors had been supervised for the first 20 procedures. Eighteen doctors were supervised for less than six procedures, five doctors for between six and ten procedures, and one doctor for between eleven and fifteen procedures. Six of the 25 (24%) who had performed the technique unsupervised were unaware that both prothrombin time and platelet count should be checked. Nineteen of the 25 (77%) junior doctors who had performed liver biopsies unsupervised had not read the British Society of Gastroenterology guidelines on liver biopsy.

Conclusions

The majority (78%) of junior doctors in our sample had not performed a liver biopsy. This was reassuring as it suggests that liver biopsy is now regarded generally as a specialist procedure only performed by those with sufficient experience in the technique. This is in line with current practice in our own centre. However, among those who had performed unsupervised biopsies in the UK, the majority had received insufficient training. It is of grave concern that 24% of those who had performed liver biopsy unsupervised were unaware of the minimum essential blood tests that must be performed in advance of the procedure. These tests identify high-risk patients and in some cases lead to cancellation of the procedure. Hospitals which allow junior doctors to perform liver biopsies without adequate supervision may be putting patients at unnecessary risk.

Table 1. Experience of junior doctors surveyed in performing liver biopsies.

	Number
Questionnaires given out	550
Questionnaires completed	393
Total who had performed liver biopsies in the UK	55
5 or fewer	33
6–10	3
11–15	4
16–20	5
21 or more	10

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