letters

TO THE EDITOR

Please submit letters for the Editor's consideration within three weeks of receipt of *Clinical Medicine*. Letters should ideally be limited to 350 words, and can be submitted on disk or sent by e-mail to: Thomas.Allum@rcplondon.ac.uk.

PEGs in chronic neurological disorders.

Editor – The wide-ranging and informative paper on PEG feeding, by the late Christopher Pennington (*Clin Med* May/June 2002, pp250–5), is of particular relevance to us here, at the Royal Hospital for Neuro-disability, since we have more than 100 patients with permanent or semi-permanent gastrostomies (age range 18 to 65). Whilst we acknowledge that most PEGs are placed in the elderly and in patients with cerebrovascular disease (with a relatively poor prognosis), there is also an increasing prevalence of young people with severe acquired brain injury who live for many years, fed partly or exclusively through gastrostomies.

At this hospital, protocols are in place covering gastrostomy indications and management. Close liaison and a joint PEG placement protocol with a local gastroenterology unit, highly skilled in PEG insertions, makes for fewer complications. Each gastrostomy is closely monitored by nurses and supervised by dietitians. Three-monthly auditing of gastrostomy sites over 3 years, showed 78% had no significant problems (57% clear dry sites, 21% slight redness with or without minor serous discharge). Amongst the remainder, complications included granulation, inflammation, serous, purulent or blood-stained discharges. Only 2% had hyper-granulated infected sites. However, no tubes required removal and even the worst sites did not appear to cause distress to patients. Moderate site complications were more likely with larger tubes, 20 French Gauge (FG), than with medium (15/12 FG) or fine bore tubes (9 FG), which were well tolerated. Since fine bore tubes are more prone to blockage long term, it seems the optimal size is about 15 FG. Another disadvantage of fine bore PEGs is that 9 FG replacement balloon gastrostomy tubes are not manufactured, so it is not possible to replace a 9 FG PEG at the bedside. A few original 15 FG PEGs have remained effective for more than 4 years. The complication of adherence of PEGs to the gastric mucosa ('buried bumper') has been rare.

Amongst our patients are some 30 in the later stages of Huntington's disease. Combinations of inexorable cognitive decline, perceptual and psychiatric disorders, progressive loss of mobility and speech, and increasing dysphagia, present immense ethical dilemmas in deciding whether PEG insertion is in the patient's best interest, 'improving the quality of life rather than prolonging death'[1]. We have a protocol for assessing mental capacity to give consent to PEG placement or to give an advance directive. Relatives/carers are always consulted and the views of the multidisciplinary team are carefully considered in the decision-making process. Detailed legal guidance about withholding life-prolonging treatment is available from the BMA. Currently, only one in this group of patients has a gastrostomy. The decision about the advisability of instituting PEG feeding forms part of the 'resuscitation status' of patients, is reviewed 3-monthly and, in the case of mentally incapacitated patients, must accompany them if they move to another place of care, particularly to an acute hospital setting, to prevent expedient but inappropriate PEG placements.

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From aviation to clinical medicine

Editor – The article 'Confidential reporting: from aviation to clinical medicine' (*Clin Med*, May/June 2002, pp234–6) in which safety issues in clinical medicine are compared with those in the aviation industry, invites several comments.

First, when an air crash occurs, generally speaking the pilot and other aviation service professionals go down with the plane. This concentrates the minds of their colleagues on safety issues to perhaps a degree beyond that occurring on a day-to-day basis in the health service.

Secondly, adverse aviation incidents are particularly common at take-off in circumstances quite unlike those of an acute medical admission. The pilot controls the plane at this time from the cockpit rather than from within the main cabin of the plane, and he and his crew are not surrounded by passengers who may distract them, be anxious or even under the influence of alcohol.

Thirdly, when a pilot who is not experienced in flying the type of aircraft involved is not available, then it is usual for the flight to be cancelled. Flying of the plane by amateurs directed by telecommunication from afar is the subject of Hollywood films.

Fourthly, pilots' competency to fly a specific aircraft is retested at regular intervals, possibly by a 'flight simulator'. If successful, they may be issued with some kind of certificate confirming their fitness to fly that particular aircraft. I would be surprised if this testing of professional competency were to be performed by a colleague of similar experience chatting in a comfortable office, during the course of which the pilot is gently probed about how he may have altered his technique of flying in response to complaints by passengers of air turbulence while flying over the Alps.

All attempts to reduce adverse clinical incidents in general medicine must clearly be supported. It is easy to fall into the temptation of attempting to copy procedures from dissimilar areas of professional activity, when underlying problems with organisational structure in hospital general medicine are overwhelmingly obvious to the majority of readers of this journal.

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Hypertension and renal failure

Editor – We read with great interest the excellent review on cardiorenal failure: pathophysiology, recognition, and treatment by Chris Isle (*Clin Med* May/June 2002, pp195–200).

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.

References

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Clinical & Scientific letters

Letters not directly related to articles published in *Clinical Medicine* and presenting unpublished original data should be submitted for publication in this section. Clinical and scientific letters should not exceed 500 words and may include one table and up to five references.

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