Paraplegia (1996) 34, 180

Letters

Percutaneous endoscopic gastrostomy

I read with interest the paper on 'The Role of Percutaneous Endoscopic Gastrostomy in Spinal Cord Injured Patients'. (Ref. Frost RA *et al*, *Paraplegia* 1995; **33:** 416–418).

I agree that this is a very useful technique. However, I do not believe that a good case has been made for preferring PEG to the radiological technique as the reasons given in the final paragraph of the discussion are not necessarily always true. (a). I am not aware that the endoscopic approach would reliably avoid damage to structures lying between the skin and the stomach. I think this can be demonstrated radiologically just as well, if not better. (b). The gastrostomy tube being pulled rather than pushed through the gastric wall means that it has to be inserted via the mouth and along a wire into the oesophagus. This is not a pleasant procedure and I do believe that with appropriate radiological technique there is no risk of damage to the posterior structures, particularly if the stay suture is used.

One disadvantage not mentioned is the need for two operators and the relatively unpleasant procedure of endoscopy.

An occasional disadvantage of the radiological method is a difficult nasogastric intubation.

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Reply from Dr RA Frost

I am grateful to Dr Bodley for his comments. Our paper concerns the value of gastrostomy in spinal cord injury patients. The question of whether a gastrostomy should be placed using the PEG technique or a purely percutaneous technique under radiological control is very much a secondary issue and may often depend on local expertise. It is more important that the operator should be experienced and expert in the chosen technique than that a particular technique be chosen. However, as a radiologist who performs endoscopy as part of my practice, I am experienced in both the radiology and PEG techniques of gastrostomy placements. I have no doubt, that in my hands, the PEG technique is very much easier to perform and very much quicker than the radiological technique. I perform both the endoscopic and percutaneous parts of the PEG procedure so that there is no need for two operators. The patients are sedated intravenously and very rarely have any memory of the event.

During the PEG procedure, trans-illumination of the anterior abdominal wall, from inside the stomach, allows the operator to completely exclude any bowel, whether empty, fluid or gas filled, between the abdominal wall and the stomach. It even allows blood vessels to be avoided. Palpation of the area of maximum trans-illumination of the anterior abdominal wall is also observed endoscopically, confirming an ideal position for the gastrostomy. A sheathed trochar is then advanced into the gas filled stomach under endoscopic control so that the posterior wall is not stabbed by the trochar. The PEG technique gives me more confidence in avoiding structures outside the stomach than that given by radiological control, which very much depends on maintaining good gaseous distension of the stomach by means of a naso-gastric tube. In a recent report, Lang shows that there can be problems using radiological guidance alone[1]. In series of 76 radiologically placed gastrostomies, complications included two through and through punctures into the lesser sac, one gastro-colic fistula, one duodenal puncture and two splenic punctures.

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1 EK Lang Complications of Percutaneous Gastrostomy and corrective measures. *European Radiology* 1995; **5:** S195 (abstract)