Correspondence

Role of ultrasound in bile duct obstruction

SIR,—The statements made by Dr Summerfield in his leading article (*Gut* 1988; **29**: 741–5) are not supported by published work. First, ultrasound (US) has a sensitivity approaching 100%^{1,2} in the detection of bile duct dilatation. Second, US accurately defines the level of obstruction in almost all patients and in many will also show the cause of obstruction.^{3,4} The sensitivity of US in the detection of choledocholithiasis has improved significantly in recent years. An experienced radiologist will now detect between 56% and 79%^{3,5,6} of cases with bile duct stones, and false positive diagnoses are rare. It is true that stones within non-dilated ducts remain a diagnostic problem. Most pancreatic masses are well visualised with US⁷ and fine needle aspiration biopsy using US guidance permits a definitive diagnosis to be made. Gall bladder carcinoma and *porta hepatitis* nodes are also well seen with US. A stricturing lesion in the absence of a pancreatic mass suggests a cholangiocarcinoma or much less commonly a benign stricture. The specific diagnosis of ampullary carcinoma is difficult. An intraluminal mass may be seen in the distal end of the bile duct⁸ or the bile duct may be dilated throughout its length without any obvious cause.

Ultrasound is cheap, non-invasive, and in experienced hands an accurate method of assessing bile duct obstruction. To advocate computed tomography (CT) as the initial diagnostic modality is to advocate the use of an expensive, invasive (it requires administration of intravenous contrast media), time consuming technique which is not readily available in every hospital. Most busy CT units would be unable to cope with the additional workload if asked to image all patients with suspected bile duct obstruction. The fact that clinicians find US difficult to interpret is an irrelevance. What is important is close cooperation between clinicians and radiologist and confidence by the clinician in the individual carrying out the scan. Clinicians can certainly orientate themselves better with CT images but the diagnosis of the exact cause of bile duct obstruction by CT is not readily made by anyone other than an experienced CT radiologist.

Bile duct obstruction should initially be investigated by US followed by endoscopic retrograde cholangio pancreatography (ERCP). Computed tomography should be reserved for equivocal cases and for those in whom surgery is contemplated.

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Reflux oesophagitis and oesophageal transit

SIR,—We read with interest the paper by Eriksen and coworkers (*Gut* 1988; **29**: 448–52). The authors correctly convey the widespread belief that motility changes in the oesophageal body in gastro-oesophageal reflux are assumed to be secondary to reflux oesophagitis. It is misleading, however, not to acknowledge that many workers do not support this belief, and have postulated previously that impaired oesophageal clearance may well be a primary phenomenon.^{1,2} Furthermore, we are not convinced that the lack of correlation between transit time (which represents a complex of many factors) and endoscopic oesophagitis confirms the authors' conclusions. Documentation of the presence of hiatal hernia, which in itself can influence oesophageal transit,^{3,4} and the effect of correction of gastro-oesophageal reflux on these changes would have been helpful.

We have previously conducted a manometric study on 48 patients with reflux oesophagitis which identified two separate manometric defects, one of which was proportional to, and one independent of, the degree of oesophageal mucosal damage. Furthermore, in 48 patients we studied by manometry and 24 hour pH monitoring before and after successful correction of gastrooesophageal reflux, 29 had significant manometric abnormalities, which were improved after surgery in 20 and unchanged in nine. These results suggest that some patients with gastro-oesophageal reflux have a pre-existing motor disorder of the body of the oesophagus, which may be