Our results are outlined below

| Priority identification | Total (%) | SHO | Registrar | Consultant |
|--|-----------|-----|-----------|------------|
| All correct | 4 (22) | 1 | 2 | 1 |
| 1-3 priority correct | 1 (6) | 1 | 0 | 0 |
| 1–3 identified but priority incorrect | 6 (33) | 3 | 1 | 2 |
| 1-3 incorrectly identified | 7 (39) | 4 | 2 | 1 |

Eight respondents (44%) did not give priority to patient E (airway management), and of these 2 (25%) gave priority to patient D (trauma score 1: incompatible with survival). Despite a presumed awareness of the 'ABC' approach to the management of the acutely ill, overall, 13 doctors (72%) failed to apply this principle.

Our results are remarkably similar to those of Wood *et al.*, although a higher proportion of our respondents assigned all six patients correctly, 22% vs 6%. The Royal College of Surgeons of England working party on trauma management in the UK clearly emphasised the need for specialists of sufficient seniority to be available in major centres for the treatment of patients with severe trauma. Interestingly, we found that the level of seniority of the doctor did not appear to correlate with the ability to assign patients correctly, although our numbers were small. We agree entirely with Wood *et al.*'s conclusion that there is an urgent need to improve the teaching of emergency medicine to undergraduates, but we would add there is an equally urgent need to improve postgraduate training at all levels.

R C STUART FRCSI Registrar in Surgery P McLoughlin mb bs bds SHO in Surgery

North Tees General Hospital Stockton-on-Tees

Complications of choledochal cysts in adulthood

We enjoyed the article by Hopkins et al. (Annals, July 1990, vol 72, p229) as we have recently managed four patients with choledochal cysts, two of whom were adults. However, we believe that the suggestion that "early drainage could also have beneficial results by reducing biliary stasis and cholangitis and allowing drainage of possible carcinogens" should be clarified. Excision of the cyst and hepaticojejunostomy is now the operation of choice and other drainage procedures should be abandoned. In a recent series (1) the mean age of patients developing carcinoma after a drainage procedure was 35 years, 15 years less than those who developed primary carcinoma. Our experience is similar in that one of our patients developed carcinoma at age 36 (she had had a choledochocystduodenostomy as a child), which was 12 years earlier than the patient who developed a primary carcinoma. One suggestion to explain this earlier age of onset is the reflux of duodenal enterokinase which is known to activate pancreatic proteolytic enzymes, thus accelerating the inflammatory process and promoting carcinogenesis (2). Moreover, in patients who present as emergencies (3) or at elective cholecystectomy (as one of our patients did) cholecystostomy is ideal. Decompression is achieved and it allows planned one-stage surgery after further definition of the anatomy (Fig. 1). In our patient the use of such preliminary external drainage did not complicate the subse-



Figure 1.

quent hepaticojejunostomy, and referral of such patients to surgeons with an interest in hepaticobiliary surgery may reduce the morbidity and need for reoperation (4, 5).

BRIAN M STEPHENSON BSC FRCS Surgical Registrar BRIAN I REES MA FRCS Consultant Surgeon

University Hospital of Wales Cardiff

References

- 1 Todani T, Wantanabe Y, Toki A et al. Carcinoma related to choloedochal cysts with internal drainage operations. Surg Gynecol Obstet 1987;164:61-4.
- 2 Ohkawa H, Sawaguchi S, Yamazaki Y et al. Experimental analysis of the ill effect of anomalous pancreatico biliary ductal unions. *J Pediatr Surg* 1982;17:7–13.
- 3 Moir CR, Scudamore CH. Emergency management of choledochal cysts in adult patients. Am J Surg 1987;153:434-8.
- 4 Robertson JFR, Raine PAM. Choledochal cyst: a 33 year review. Br J Surg 1988;75:799-801.
- 5 Tan KC, Howard ER. Choledochal cyst: a 14-year surgical experience with 36 patients. Br J Surg 1988;75:892-5

Theatre delay for emergency general surgical patients: a cause for concern?

We are involved in a similar exercise to that which Wyatt *et al.* (Annals, July 1990, vol 72, p236) have reported, but involving orthopaedic trauma patients, and would agree that it is an important area for 'audit' in which there are causes for concern.

We are concerned, however, that the authors make no definition of what constituted an 'emergency' operation in their paper, neither do they include an analysis of the numbers of the different operations included in their study.

The definition of 'emergency' operation used in the CEPOD (1) report is "immediate operation, resuscitation simultaneous with surgical treatment (eg ruptured aneurysm; head, chest and

412 Comment

abdominal injuries). Operation usually within one hour". From reading the paper it would seem that a number, if not the majority of the patients reported, were not 'emergencies' according to these criteria. That is not to say that they were not 'urgent' operations, defined in the CEPOD report as "delayed operation as soon as possible after resuscitation (eg intestinal obstruction, embolism, perforation, major fracture). Operation usually within 24 hours."

Clearly, by definition there can be no significant delays in operating on 'emergencies' as defined by CEPOD, otherwise the patient will not survive. 'Urgent' cases are a different matter, however, and we would like to ask the authors to produce an analysis of their 'urgent' cases, as this information is needed in order to make an assessment of whether the patients are likely to have been adversely affected by the median delay of only 3 h reported.

While in an ideal world all 'urgent' patients would have their operations immediately after it is decided to be necessary, in practical terms this is never going to be possible, and the surgical community should be deciding what levels of delay are and are not acceptable for different types of patients.

PHILIP J RADFORD MA FRCS Registrar in Orthopaedic and Accident Surgery Queen's Medical Centre Nottingham

Reference

I Buck N, Devlin HB, Lunn JN. The report of a confidential enquiry into perioperative deaths. London: The Nuffield Provincial Hospitals Trust, 1988.

The presentation of malrotation of the intestine in adults

I would like to add a word of caution to the otherwise excellent article of Gilbert *et al.* (Annals, July 1990, p239).

Adult malrotation can mimic intestinal obstruction on X-ray appearance while, in fact, not being responsible for the cause of the patient's abdominal pain (1).

If unrecognised, this may lead to unnecessary laparotomy. Malrotation may be associated with other abnormalities, eg hypoplastic right lung (1). The presence of such physical features should alert the surgeon to this potential pitfall. Furthermore, a common association of adult intestinal malro-

tation is the 'cocoon' deformity, where the small gut is encased in a filmy peritoneal sac. This also often creates the X-ray pattern described above and again may result in unnecessary surgery (1).

ANJAN K BANERJEE FRCS MRC Training Fellow and Hon Lecturer in Surgery 11 The Gardens

West Harrow, Middlesex

Reference

1 Banerjee AK. Intestinal malrotation—a missed diagnosis. Practitioner 1989;233:468-71.

We were interested to read the paper by Gilbert et al. (Annals, July 1990, vol 72, p239) and would like to draw their attention to another rare presentation of this condition, not previously described in adults. Our patient was a 60-year-old male who presented with small bowel obstruction. A barium enema 4 years previously had shown failure of descent of the caecum, which was situated in the right upper quadrant of the abdomen. At laparotomy he was found to have a gangrenous ileocolic intussusception and underwent right hemicolectomy. A relationship between these two congenital conditions was first described in three children by Waugh in 1911 (1). The importance of this association remained unrecognised until recently when Brereton et al. (2) reported that 41 of 49 cases of infant intussusception undergoing laparotomy had a degree of malrotation, most commonly an unfixed caecum. They postulated that malfixation of the ileocaecal mesentery may allow the terminal ileum to pass into the caecum, resulting in intussusception and coined the term 'Waugh's syndrome'. We have researched the literature and can find no report of this condition presenting in adult life.

> MICHAEL H HARVEY MS FRCS Senior Registrar J DOUGLAS GEORGE MCh FRCS Consultant Surgeon

Department of Surgery Norfolk and Norwich Hospital, Norwich

References

- 1 Waugh GE. Referred penile pain in intussusception. Lancet 1911;i:1492-4.
- 2 Brereton SJ, Taylor B, Hall CM. Intussusception and intestinal malrotation in infants: Waugh's syndrome. Br J Surg 1986;73:55–7.