examination. Infants cannot describe their complaints and often resent abdominal palpation. Stringer and colleagues confirm that among children with intussusception only a minority have the traditional triad of symptoms.

It is natural for trainees in general practice to try to reach an accurate diagnosis, but in these difficult circumstances it is probably wiser to observe the rule that a patient who has evidence of continuing acute abdominal disease for more than six hours must be considered to have a surgical condition. If this is uppermost in the practitioner's mind he or she is less likely to delay in seeking a surgical opinion.

To improve the management of intussusception in hospital Stringer and colleagues advise "expeditious treatment in a centre with combined paediatric radiological, anaesthetic, and surgical expertise." The first line of treatment in most cases, after correction of dehydration, is now generally agreed to be hydrostatic reduction under an image intensifier, with the surgeon ready to proceed if necessary. In most series about a fifth of patients who are operated on require a resection. This is a regimen that requires radiologists, anaesthetists, and surgeons with paediatric expertise. Some district hospitals can call on these skills, but the few infants admitted with an acute abdomen mean that other hospitals cannot easily acquire them. Attention has been drawn to these problems, and the British Association of Paediatric Surgeons has considered them, but Stringer and colleagues' report shows that some infants still receive less than expert care.

As more consultants are appointed and it becomes usual for each general surgeon to have a special interest we can reasonably expect that each district general hospital will have at least one surgeon with paediatric skill. Until then there is no dishonour in recognising that some sick infants require speedy transfer to the regional paediatric surgical unit.

PETER F JONES

Cults, Aberdeen AB1 9HR

- 1 Stringer MD, Pledger G, Drake DP. Childhood deaths from intussusception in England and Wales, 1984-89. *BMJ* 1992;**304**:737-9. (21 March.)
- 2 Pledger HG, Fahy LT, van Mourik GA, Bush GH. Deaths in children with a diagnosis of acute appendicitis in England and Wales 1980-4. BMJ 1987;295:1233-5
- 3 Winsey HS, Jones PF. Acute abdominal pain in childhood:
- analysis of a year's admissions. BMJ 1967;i:653-5.

 4 Beasley SW, Auldist AW, Stokes KB. The diagnostically difficult intussusception: its characteristics and consequences. Pediatric Surgery International 1988;3:135-8.
- 5 Ein SH, Stephens CA. Intussusception: 354 cases in 10 years. J Pediatr Surg 1971;6:16-27.
- 6 Jones PF. The general surgeon who cares for children. BMJ

SIR,-We think that in their attempt to produce practice guidelines from their audit of childhood deaths from intussusception Mark D Stringer and colleagues have overlooked a particular problem in the diagnosis and management of this condition in children, possibly because of the small sample they studied.

We and others have become increasingly aware of the difficulty of diagnosing intussusception in neonates and premature infants (M P Lewis et al, unpublished findings).2 Although fairly unusual in this age group, intussusception causes considerable diagnostic problems when it occurs. Because of the similarity of the presentation of neonatal intussusception and the common condition of necrotising enterocolitis an ultraconservative nonoperative policy may be adopted with disastrous consequences.³⁴ Early consideration of the diagnosis and a low threshold for operation are to be recommended in view of the appreciable incidence of jejunal atresia in these infants, which is thought to result from the ischaemic necrosis during the intrauterine pathogenesis of the condition.3

Recommendations attempting to reduce serious

complications in children presenting with intussusception should not overlook the problems in neonates and premature infants.

MARK EMBERTON

Royal College of Surgeons of England. London WC2A 3PN

M P SINGH

Department of Surgery, Royal Postgraduate Medical School, Hammersmith Hospital, London W12 0NN

- 1 Stringer MD, Pledger G, Drake DP, Childhood deaths from intussusception in England and Wales, 1984-9. *BMJ* 1992; **304**:737-9. (21 March.)
- 2 Pavri DR, Marshall DG, Armstrong RF, Gorodzinsky FP. Intrauterine intussusception: case report and literature review. Can J Surg 1983;26:376-8.
- 3 Kelly SB, Singh MP. Intrauterine intussusception and ileal atresia presenting as acute perforation. Acta Paediatr Scand 1991;80:172-3.
- 4 Stine MJ, Harris H. Intussusception in a premature infant simulating neonatal necrotising enterocolitis. Am $\mathcal J$ Dis Child · 1982:136:76-7

The fast of Ramadan

SIR, -Awad H Rashed's editorial on the fast of Ramadan is a reminder of the need to monitor the medical effects of this religious observance. Unfortunately, his contention that breast feeding mothers are exempt from fasting is not universally accepted, and some authorities allow exemptions only for the sick or travellers, who should subsequently make up missed days.2

Last week we admitted a 1 month old child whose mother had been successfully breast feeding. After the start of the fast her milk supply dried up and the child was given the local alternative of goats' milk diluted with heavily polluted canal water. The child became extremely ill with diarrhoea and vomiting and required intravenous rehydration. On medical advice the mother was allowed to break her fast with the proviso that the missed days should be made up afterwards. Her milk supply returned and the child was discharged well; obviously, though, if the mother fasts again the child may again be at risk.

During Ramadan some local Muslims allow people who have a good reason to avoid fasting to give morning and evening meals instead to a poor person who can fast in their place. Muslim doctors whose conscience will allow them to do so will be doing a great service to Muslim infants by encouraging the idea of a special dispensation for breast feeding mothers.

DEREK A MCHARDY MORRIS EPHRAIM

Rural Health Care Project, Kunri Christian Hospital, Kunri 69160, Tharparkar,

1 Rashed AH. The fast of Ramadan. BM7 1992;304:521-2.

2 Sarwar G. Islam: beliefs and teachings. 3rd ed. London: Muslim Educational Trust, 1987:76.

3 Yusuf Ali A. The holy Quran: text, translation and commentary

Leicester: Islamic Foundation, 1975:72.

Effect of overdose of trazodone

SIR,-We doubt G Balestrieri and colleagues' interpretation of hyponatraemia and seizure being due to an overdose of trazodone.

Firstly, no mention is made of the blood concentration of trazodone. The therapeutic concentration of the drug is 1.6 mg/l; 25.7 mg/l is associated with moderate toxicity. Serious symptoms of toxicity are well recognised with doses exceeding 750 mg and include dry mouth, dilated pupils, and urine retention. The authors also do not mention the sodium concentration on admission, and the

laboratory results quoted may well have been due to overhydration of the 72 year old patient.

Secondly, the sweating and anxiety that the patient experienced were probably due to the withdrawal of oxazepam and propranolol, which she had been taking for 10 years. The vasopressin concentration was not measured.

Trazodone is fairly safe in overdose compared with first generation tricyclic antidepressants Animal studies suggest that it does not lowe ninima.

EMMA BAUGHANGE
S S M JAWABE the seizure threshold and causes minimal cardiovascular disturbances.2

ed

Department of Psychological Medicine, University of Wales College of Medicine, Cardiff CF4 4XN

1 Balestrieri G, Cerudelli B, Ciaccio S, Rizzoni D. Hyponatraemia and seizure due to overdose of trazodone. BMJ 1992;304:686

2 Barnes T, Bridges P. New generation of antidepressants. In: Tyrer P, ed. Drugs in psychiatric practice. London: Butter worths, 1982:219-48.

AUTHOR'S REPLY,—We could not measure the blood concentration of trazodone, but the dose of trazodone (350 mg) may well be considered to be an overdose in a lean (35 kg) old woman. The serum sodium concentration (118 mmol/l) was measured immediately after the seizures and was the first measurement obtained. We do not think that the infusion prescribed (1000 ml of 5% glucos and 500 ml saline daily) could have caused overQ hydration in a patient without appreciable cardiacon renal, or hepatic impairment. On the contrary, the urine was hypertonic in relation to plasma, and this was consistent with inappropriate secretion of antidiuretic hormone. Measurement of vasopressin is not required to diagnose this syndrome.

The patient had taken oxazepam and propranolo irregularly for six months. We agree that some of the symptoms could be related to the withdrawal of these drugs. Seizures were observed in our patien during profound hyponatraemia; in our opinion seizures may more easily be correlated to ion imbalance than to a direct effect of trazodone Seizures have, however, been described in patient receiving trazodone in therapeutic doses.1

GIANPAOLO BALESTRIER

19

Facoltà di Medicina e Chirurgia, Università degli Studi di Brescia, 25124 Brescia, Italy

1 Tasini M. Complex partial seizures in a patient receiving trazodone. J Clin Psychiatry 1986;47:318-9.

Advanced trauma life support courses

SIR, - As a successful candidate I can vouch for the effectiveness of the advanced trauma life suppor course as a method of learning for doctors caring for patients with trauma in hospital. Unfor tunately, the course, and Jerry P Nolan and colleagues' editorial, does not address the most important problem of trauma care in the United Kingdom.

The cost of trauma is unquestionable, whether is is measured in terms of fatal and non-fatal casual ties, distress caused to patients and their relatives distress suffered by the staff of the emergence services, or cost to the nation (assessed in 1989 at £6.36bn a year.2

A large proportion of deaths from trauma occup before the patients reach hospital, and early treatment improves mortality from accidents. 1 In the United Kingdom there is still a substantia "therapeutic vacuum" between accident and hospital, which can be filled by immediate care doctors.

A report by a working party of the Royal College

BMJ VOLUME 304 25 APRIL 1992