increased intraepithelial lymphocytes. Enteropathy due to cows' milk sensitivity has been associated with post-enteritis syndrome—that is, chronic diarrhoea after infection. Most cases in our study resolved spontaneously despite the children continuing with a normal diet, and three children given a milk free diet showed no obvious benefit.

Thus in immunocompetent children cryptosporidium seems to be an important cause of chronic, as well as acute, diarrhoea. It is associated with enteropathy of the small intestine and with severe failure to thrive, which add to the urgent need for effective treatment.

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Minitracheotomy

SIR,—Dr D W Ryan's review of minitracheotomies¹ merits further comment on contraindications and complications. The intensive care staff at The London Hospital have performed over 200 minitracheotomies in the past three years. Complications are often referred to the ear, nose, and throat department and so come to our attention.

In most cases the indication for minitracheotomy is retained sputum in the lower respiratory tract after operation. Only a small bore catheter can be inserted through a minitracheotomy and this limits suction of thick secretions. The stimulation of the carina resulting from suction often provokes a most efficient cough reflex, however, and may account for much of its benefit.

Careful patient selection is essential to avoid problems. In addition to patients with a coagulopathy, the following patients should be excluded: the elderly (who often have calcification of the cricothyroid membrane), the obese, patients with short necks or poor neck extension, and those who are already hypoxic.

As Dr Ryan comments, the incidence of complications remains unknown and warrants further study. Certainly, however, in our hands major problems have been infrequent, probably less than 2%. Two cases of troublesome complications come to mind. The first was one of uncontrolled haemorrhage in a patient with abnormal clotting. The second occurred in a 62 year old woman with mild obstructive airways disease who underwent a left hemicolectomy for a large bowel adenocarcinoma. After operation she developed left lower and middle lobe consolidation with hypoxia. She did not improve on vigorous medical treatments and in view of retained secretions a minitracheotomy was performed under local anaesthesia, without difficulty. She recovered well and the cannula was removed after 10 days. Three weeks later she presented with inspiratory stridor and dyspnoea, and examination showed a subglottic granuloma. This was removed at rigid endoscopy; she settled on steroids, antibiotics, and humidification and was discharged. One month later she was readmitted with acute stridor caused by a major subglottic mass necessitating emergency tracheostomy. This was followed by a laryngofissure with complete excision of the minitracheotomy tract and granuloma. Her subsequent recovery was uneventful with satisfactory decannulation, and endoscopic follow up showed complete healing with a good voice and no further subglottic recurrence at two months.

This is an example of a late complication which, although uncommon, carries high morbidity and about which the surgeons who performed the original minitracheotomy are hardly aware.

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1 Ryan DW. Minitracheotomy. *Br Med J* 1990;300:958-9. (14 April.)

SIR,—Following Dr D W Ryan's informative editorial on the use and applications of minitracheotomies¹ I would like to recommend a few additional points.

Firstly, insertion is very much facilitated by infiltrating skin and subcutaneous tissue with lignocaine combined with adrenaline. The reduction in venous oozing, which can be distressing to both patient and operator, is dramatic. This will not, unfortunately, have much effect on haemostasis if an aberrant thyroid artery is hit by a scalpel blade or minitracheotomy tube and this must be borne in mind when considering hazards of the technique. Secondly, it is very helpful when teaching someone to perform the procedure to highlight how superficial the trachea is since the tendency is to insert the tube too deeply and hit the posterior wall of the trachea without realising that one has already entered it. Finally, minitracheotomy has been used to aid difficult endotracheal intubation by passing a wire through the tube once it has been inserted into the trachea in a cephalad direction. The oroendotracheal or nasal endotracheal tube can then be railroaded down the wire, the minitracheotomy tube removed, and the endotracheal tube advanced further down the tracheal tree.

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Varicose veins

SIR,—We enjoyed the editorial by Mr W Bruce Campbell on varicose vein surgery¹ but would like to take issue with his statement that bilateral varicose vein operations are not operations for a solo surgical trainee. We suggest that a bilateral procedure entailing high saphenous ligation or proximal stripping with avulsions, or both, is not a suitable operation for any surgeon.

Both procedures were performed bilaterally on a 38 year old man with extensive varicosities, one patient in a series of 65 undergoing varicose vein operations. Prophylaxis against deep vein thrombosis comprised subcutaneous heparin 5000 units three times a day, elastic stockings, and mobilisation in hospital for 48 hours before discharge. On the tenth day after operation he was readmitted, gravely ill with massive pulmonary embolism. No underlying thrombotic disorder was detected. He recovered, fortunately, after a period of intensive care.

Alarmed by this event, we reassessed our management of varicose veins. We no longer perform bilateral varicose vein procedures at the same time. This is because bilateral surgery takes longer, reduces patients' mobility for several days in the immediate period after operation, and may predispose to deep vein thrombosis. In contrast, after a unilateral procedure patients recover quickly, mobilise within 24 hours, and usually exercise normally within two weeks.

We have no scientific evidence to support our impression that the risk of thrombosis is increased in patients undergoing bilateral surgery: this is a subject which requires investigation. We can,

however, comment on patients' comfort after operation. Several patients with bilateral veins were disappointed to learn that two operations would be required. But after the first operation, without exception, they were relieved that a bilateral operation had not been performed because they felt that bilateral discomfort, especially in the groins, would have limited their mobility after surgery.

We would be interested to know the views of other surgeons on this subject as we suspect that we are out of line with many of our colleagues.

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1 Campbell WB. Varicose veins. *Br Med J* 1990;300:763-4. (24 March.)

The toxic shock syndrome

SIR,—Your editorial on the toxic shock syndrome states that the usefulness of treatment with antitoxin has not yet been determined.¹ Nevertheless, 95% of healthy adults have antibody to toxic shock syndrome toxin-1, whereas only 18% of acute phase sera and 20-30% of convalescent sera of patients with toxic shock syndrome show the antibody.^{2,3} This greater serosusceptibility of patients with toxic shock syndrome is further shown by the high rates of recurrence of the syndrome that have been reported.⁴

Considerable antibody titres are present in both intravenous and intramuscular gammaglobulin, and, although of untested benefit in clinical trials, such sources of antitoxin should be considered as an additional option in treating life threatening episodes of toxic shock syndrome.⁵

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Consultant based service in obstetrics and neonatal paediatrics

SIR,—I enjoyed the article by Mr M J Hare and colleagues on five years' experience in a consultant based obstetric service.¹ We have decided recently to convert the Maidstone obstetrics unit to a three tier structure after 15 years with only a consultant and a senior house officer, usually a vocational trainee, on duty.

The decision to change was partly due to workload. When the number of deliveries each year reaches about 2500 events requiring the presence of a doctor at the unit tend to occur simultaneously. With sufficient good will such a challenge is not insurmountable but I have concluded that most of the profession would not countenance continuing a two tier scheme, and a recent meeting at the Royal College of Obstetricians and Gynaecologists verified this.

This is a pity in many ways. The two tier unit gives the only opportunity for consultants to use and improve their obstetric skills; the current system is like learning to play a violin, only to