Preoperative fasting for paediatric anaesthesia

Sir,—I refer to the recent review by Phillips, Daborn and Hatch [1]. Between 1991 and 1993 the Department of Anaesthetics in Newcastle examined the problem of preoperative fasting intervals for children presenting for routine surgery. An initial audit revealed that many children were undergoing prolonged fasting before anaesthesia. After reviewing the literature [2], a clear fluid fast of 2 h was chosen and guidelines circulated to anaesthetists and paediatric wards. About 6 months after these guidelines were introduced we repeated the audit. We investigated children undergoing ENT, general surgical and urological operations. The results are summarized in figure 1.

Before guidelines were introduced, children for morning lists had a median fasting interval of 13.1 h (n = 266). After guidelines were introduced this decreased to 4.1 h (n = 137). For children undergoing afternoon operations the median fasting interval before introduction of the guidelines was 6.4 h (n = 152). After the guidelines were introduced this was reduced to 4.7 h (n = 128). The ranges remained very wide, indicating that some children were still fasting for long periods. The proportion of children (morning and afternoon groups pooled) fasted for more than 12 h decreased from 54% in 1991 to 21% in 1993. The proportion of children taking a drink in the 8 h before surgery increased from 45% to 78% after guidelines were introduced. Overall these results are encouraging. They demonstrate clearly the different response to spinal anaesthesia in these patients and suggested the most appropriate way of treating it.

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Haemodynamic effects of subarachnoid block in the elderly

Sir,—Dr Critchley and colleagues observed differences in the haemodynamic effects of subarachnoid block in elderly patients when they compared patients undergoing elective urological procedures with non-elective orthopaedic cases [1]. They suggested that hypertension was responsible for the haemodynamic differences between the two groups. However, they have overlooked two factors. First, central venous pressure does not have a simple relationship to blood volume and therefore blood loss in the orthopaedic group may still be a contributory factor. Second, there was no mention of duration of starvation, which is likely to be longer in the non-elective group and thus exaggerate the haemodynamic effects of subarachnoid block.

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Posterior column sensory impairment during ambulatory extradural analgesia in labour

Sir,—We did not overlook the factors Dr Lamb mentions. In accordance with standard practice in our hospital, all of the orthopaedic patients in our study received i.v. fluids from the time of admission until surgery, which was usually about 24 h after admission. We would expect any intravascular volume deficit produced by blood loss to have been replaced by the time of anaesthesia using this regimen. Also, we did indeed mention the possibility that blood loss was responsible for the difference, although central venous pressure measurements did not reflect this change. As Dr Lamb correctly observed, this is not surprising given the complex relationship between central venous pressure, mean arterial pressure, and intravascular volume. Several other possible explanations also exist, including the role of hypertension, pain, stress response to trauma and the period of preoperative immobility.

It is interesting to speculate on the possible cause(s) of the increased hypotension in the orthopaedic patients, but as with many clinical studies, the design did not permit a conclusion to be drawn on which of these possibilities was responsible for the differences found between the two groups. The study did however clearly demonstrate the different response to spinal anaesthesia in these patients and suggested the most appropriate way of treating it.

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