Efficacy of Antacid Therapy

Sir,—The recent letter from White, Clark and Stanley-Jones (1976) prompted us to review our own results on the efficacy of antacid therapy. In our maternity unit patients in labour receive magnesium trisilicate 20 ml orally at 2-h intervals. Immediately before induction of anaesthesia an additional dose of 20 ml is given irrespective of the time of the preceding dose. In many patients apomorphine is used to empty the stomach before induction of anaesthesia and these patients receive the pre-induction dose of antacid following the apomorphine.

Patients scheduled for elective surgery receive one dose of magnesium trisilicate 20 ml 1 h before, and a second dose immediately before induction of anaesthesia. In all instances in which the pre-induction dose only is given, the volume of antacid is doubled. Aspiration of stomach contents was performed at a convenient time during anaesthesia. In patients undergoing Caesarean section this was after delivery of the infant at a time up to 30 min after the pre-induction dose of magnesium trisilicate.

The pH of the gastric aspirate was measured with M & B indicator paper (table I). In all but two patients, the pH values were greater than 4.5 units. Patient (a) had a gastric pH of 3.0 units. However, the last dose of magnesium trisilicate was given 125 min before induction of anaesthesia and the pre-induction dose had been omitted by mistake. The results in patient (b) cannot be explained, although a similar cause is possible.

We believe that the pre-induction dose of magnesium trisilicate is essential, and probably accounts for the difference between our findings and those of White, Clark and Stanley-Jones (1976). As a result of these findings we believe that our regime provides almost totally effective antacid prophylaxis.

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Use of Air in a Continuous Flow Anaesthetic Machine

Sir,—Anaesthetic gases may be difficult to obtain in many parts of India. The use of compressed air from cylinders or from an oil-free compressor as suggested by Garg and colleagues (1977) may overcome this problem.

If one has to use air only in a Boyle's machine, one may dispense with the compressor. While working at Chandigarh in India one of my colleagues (the late Dr A. V. Badve) devised an ingenious method of using a standard Boyle's machine without carrier gases: the machine was converted to an on-demand (intermittent flow) machine entraining air.

The flowmeters were turned off and the filling plug of the proximal Boyle's bottle vaporizer was removed and the concentration lever placed fully open or the bottle was removed. The tap on the reservoir bag was turned off and a non-rebreathing valve used at the patient end of the circuit. Thus the machine was suitable for a patient breathing spontaneously. The second Boyle's bottle was available for use with volatile anaesthetic agents.

If the reservoir bag was replaced by a self-inflating type with a unidirectional valve proximal to the bag, the machine could be used for manual controlled ventilation.

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Reference