

Furthermore, Drs. Sum-Ping and Mehta's assumptions about inspired gas temperatures,⁹ expired gas humidity,¹⁰ and the formula they use to estimate vapor mass¹¹ are incorrect. In any case, absolute inspired gas humidity is only important for its ability to decrease respiratory heat loss. Because we directly measured central temperature, we can conclude (without calculations) that both passive and active airway humidification minimize hypothermia.

In summary, both active and passive airway humidification provides sufficient moisture to prevent tracheal ciliary damage. Heat and moisture exchangers are about half as effective as active systems in preventing central hypothermia in anesthetized infants and children. Passive systems are, however, considerably less expensive and much easier to use than the active ones.

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(Accepted for publication December 6, 1989.)

Preoperative Fasting of Children

To the Editor:—I read with concern the paper by Sandhar *et al.*¹ in which it was suggested that children may be given an unspecified amount of oral fluid 2.25 h before surgery without increasing the risk of pulmonary aspiration of gastric contents. This conclusion was largely based on the finding that a small volume of oral fluid (5 ml/kg) given to a limited number of patients 2-3 h preoperatively failed to produce a clinically significant increase in the gastric aspirate at induction of anesthesia. Moreover, 58% of patients given a drink received oral ranitidine, which reduced gastric volume, compared with 44% of patients who maintained their fast.

A further problem with Sandhar *et al.*'s paper is the reference to a study by Miller *et al.*² These authors claimed to have shown that giving gynecologic patients tea and toast 2-3 h preoperatively did not increase the volume of gastric contents at induction of anaesthesia. However, careful reading of the paper reveals that ten of their 23 "fed" patients had actually fasted more than 4 h and the mean fasting time for the group was 3.8 h.

In a previous study we showed that 10 ml/kg of oral fluid given 2-4 h preoperatively to unpremedicated children did produce a clinically significant increase in the residual gastric volume at induction of anesthesia.³ Unless more substantial evidence can be produced to refute this, it would seem imprudent to abandon the established practice of withholding fluids from children for a minimum of 4 h preoperatively.

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(Accepted for publication December 21, 1989.)