outcome. It simply means that a competent anaesthetist should be present.

Unfortunately, this study does not answer the basic question of whether the LMA is a useful or good alternative to endotracheal intubation in children who undergo adenotonsillectomy.

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REPLY

We appreciate Dr. Hackmann's analysis of our paper, and the opportunity to reply to his observations. Dr. Hackmann is quite correct in pointing out that the greater incidence of difficulty in inserting the LMA was due to our initial unfamiliarity with the technique. The dose of propofol recommended for induction of paediatric anaesthesia ($2.5 \text{ mg} \cdot \text{kg}^{-1}$) did not consistently provide adequate conditions for insertion of the LMA. Once we increased our induction dose, we experienced no further difficulty in positioning the airway. Similarly, the cause of airway obstruction seen after opening the B-D gag and surgical stimulation was not immediately apparent. When we realized that the probable cause was reflex laryngeal closure with inadequate depth of anaesthesia, the incidence of problems diminished. These difficulties did lead early to bias against the LMA but, rather than redesign the study, we reported our problems in order that others may benefit from our experience. No child needed hospitalization or suffered any damage from these or other adverse events.

It has been shown that insertion of the LMA in the adult produces less cardiovascular response than laryngoscopy and intubation.¹ It is reasonable to postulate that similar effects are seen in children. We acknowledge the possible contribution of atropine and succinylcholine to haemodynamic differences in our two study groups. One of the advantages of the LMA is that it is not necessary to give either drug.

The difference in blood loss in the two groups may be attributable not only to differences in systemic arterial pressure, but also in venous pressure. Positive pressure ventilation, during which central venous pressure is increased, was required more often in the tracheal intubation group.

The shorter interval from iv induction to establishment of an airway with the LMA is primarily due to the extra time required to wait for the action of succinylcholine. In the ET

group there was wide variance in the interval before onset of spontaneous breathing, reflected in large SD's. Some patients required assisted ventilation throughout surgery. The Kruskal-Wallis test used in the analysis is a non-parametric test, and does not assume that the data is normally distributed.

An $\text{SpO}_2 \leq 94\%$ defines a desaturation threshold, intended to provide early warning of hypoxic events. Transitory desaturation below this point is unlikely to have clinical significance. We agree with Dr. Hackmann that the difference in oxyhaemoglobin saturation between groups on arrival in the PACU, reported as mean values and SD, is probably not clinically relevant.

The significance of stridor is that it may herald the more serious complication of laryngospasm. Although it can readily be handled by the alert anaesthetist, most of us would prefer to avoid it. Controversy continues concerning the optimum condition for tracheal extubation in children. We extubated the trachea and the LMA with the child sufficiently deeply anaesthetized to suppress airway reflexes. Incidents of upper airway obstruction before return of consciousness led to insertion of oropharyngeal airways, and further potential upper airway irritation.

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Postoperative recurrent paralysis in an infant after mivacurium infusion

To the Editor:

We wish to report a healthy two-month-old, 6-kg girl who underwent repair of a congenital cleft lip. During general anaesthesia, a mivacurium continuous infusion was used for neuromuscular blockade and was monitored with a nerve stimulator. Fifty minutes after starting the infusion, 60 mg mivacurium had been administered ($0.2 \text{ mg} \cdot \text{kg}^{-1} \cdot \text{min}^{-1}$). Because of concerns for volume overload, the infusion was discontinued and neuromuscular blockade was maintained with bolus dosing. Additional doses of 0.08, 0.04, and 0.04 $\text{mg} \cdot \text{kg}^{-1}$ were given at approximately 30 min intervals with two to three twitches remaining after each dose. Approximately five minutes after the last dose was given, the surgical procedure ended and neostigmine, 0.07 $\text{mg} \cdot \text{kg}^{-1}$, and atropine, 0.025 $\text{mg} \cdot \text{kg}^{-1}$ were administered. Reappearance of four twitches was confirmed and the trachea was extubated