taneous breathing was inadequate and this was managed by using assisted spontaneous breathing mode on the Drager ventilator (Evita) using pressure support (20 cm H₂O) and CPAP (5 cm H₂O) via the LMA.

Fibreoptic laryngoscopy through the LMA revealed generalized swelling of supraglottic structures and oedematous vocal cords, and the trachea appeared to be inflamed. The patient was also noted to have a very swollen tongue and a lateral x-ray of the cervical spine showed widening of pre-vertebral space. Insertion of an LMA in this patient bypassed the supraglottic swelling and relieved the upper airway obstruction. Subsequently the patient had an urgent tracheostomy while breathing spontaneously through the LMA and recovered uneventfully six hours after the respiratory arrest.

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Rubber and plastic endotracheal tube cuffs are highly vulnerable to the CO₂ laser

To the Editor:

The laser has become an important surgical tool for airway surgery. However, laser-induced airway fires have been shown to be the most common serious complication of these cases.¹ The shafts of combustible endotracheal tubes can be protected from the CO₂ laser by techniques such as wrapping them with the appropriate metallic foil tape.² However, the cuffs of these protected endotracheal tubes remain vulnerable to the effects of the laser.

To compare the combustibility of Rusch red rubber (RR) with Mallinckrodt polyvinylchloride (PVC) endotracheal tube cuffs, six endotracheal tubes of each type were inserted into 250 ml Erlenmeyer flasks. The tubes and flasks were then flushed with oxygen. The cuffs were inflated with air and a Lasersonics CO₂ laser set to 3W was directed at the cuff. The laser's output was then continued until combustion occurred. The mean times to combustion of the RR and PVC endotracheal tube cuffs and the adjacent shaft were 11.2 ± 11.1 (mean ± SD) and 5.6 ± 4.7 sec, respectively. These results were not

statistically different. It is concluded that the cuffs of RR and PVC endotracheal tubes are highly vulnerable to the CO₂ laser and should be protected by filling them with saline³ and by packing them off with wet pledgets⁴ during laser airway surgery.

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Exposure to N₂O

To the Editor:

We read with interest the paper by Wood *et al.* concerning exposure of operating room staff to nitrous oxide.¹ We were disturbed, however, by their conclusion that the NIOSH recommended maximum exposure levels were unattainable in practice.

Recently, we measured atmospheric levels of N₂O in the operating rooms in our Daycare unit using a Miran 1B Portable Ambient Air Analyzer coupled with a Hewlett Packard model 7133A recorder. We were able to record graphically the levels of N₂O for a full day or, using a higher recorder speed, a detailed record during individual anaesthetics. We showed that the greatest single factor in keeping down N₂O levels in the atmosphere was ventilation. We were interested then to read in Wood's article that all their measurements were taken with room ventilation of twelve air changes per hour which is described as "standard room ventilation."

Our results showed that at ten room exchanges per hour the level of N₂O increased steadily through the day from 25 ppm after approximately 30 min to 40-50 ppm after seven hours of anaesthesia. Further there were 20 peaks of between 50 and 100 ppm in the nitrous oxide levels during the day. When a similar list of anaesthetics was performed in the same room with the room vent-