## CORRESPONDENCE

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## Nasopharyngeal Airways and Nasotracheal Suction

To the Editor:—The unusual complication of nasotracheal suction reported by Ho and Weinger<sup>1</sup> is interesting but not a new phenomenon. A retained nasopharyngeal airway was described previously<sup>2</sup> in a mentally subnormal patient who had a persistent nasal discharge for 1 yr following a dental extraction under general anesthesia. He required further examination under general anesthesia to remove a 6-mm Portex nasopharyngeal airway that had been in his nasopharynx since the previous operation.

The solution advanced by Portex to prevent such eventualities<sup>3</sup> was to include a standard safety pin in the sterile nasopharyngeal airway pack. The safety pin is inserted into the rubber of the flange before the tip of the airway is inserted into the nares, thus preventing the airway from advancing into the nasopharynx. Objects inserted through the nasopharyngeal airway, such as suction catheters, fiber-optic bronchoscopes, and nasogastric tubes, can exert considerable force—tending to push the airway into the nasopharynx—that may be prevented by use of the safety pin.

A similar case<sup>4</sup> was described in a patient in whom a 28-F Rusch nasal airway was used to aid nasotracheal suction. This airway has a detachable, adjustable flange to aid correct positioning of the distal tip of the airway. Such flanges may be more likely to migrate into the patient as described. I investigated the positioning of the distal end of the nasal airway in the hypopharynx<sup>5</sup> and suggested alternative methods of ensuring correct positioning—including a better knowledge of the distance between nares and glottis and the standardization of lengths and internal diameters of nasal airways between manufacturers. In addition, nasal airways could be marked externally in cen-

timeters to indicate the length, which has been done in a similar fashion to tracheal tubes.

By means such as these, this useful addition to airway management may be made safer and more reliable.

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## References

- 1. Ho G, Weinger MB: Unusual complication of nasotracheal suctioning (letter). Anistriesiology 79:630, 1993
- 2. Smith BL: Retained nasopharyngeal airway (letter). Anaesthesia 14:447, 1989
- 3. Mobbs AP: Retained nasopharyngeal airway (letter). Anaesthesia  $\pm 4 \pm 47$ , 1989
- 4. Hayes JD, Lockrem JD: Aspiration of a nasal airway: A case report and principles of management. Anistrustology 62:534–535, 1985
- 5. Stoneham MD: The nasopharyngeal airway: Assessment of position by fibreoptic laryngoscopy. Anaesthesia 48:575–580, 1993

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## The "Ozone-friendly" Lidocaine Spray Affects the Monitoring of Volatile Anesthetics

To the Editor:—A new presentation of the 10% lidocaine spray, free of any propellant gas (the former presentation contained trichlorofluoromethane and dichlorodifluoromethane, 50 g in 80 ml), was marketed recently by Astra Pharmaceuticals. We observed by chance that spraying it on the vocal cords of a patient altered over the subsequent 40–60 s the measurement of the inspired and expired concentrations of the volatile anesthetic in use, as monitored with a Capnomac device (Datex, Helsinki, Finland). We therefore prospectively studied 15 children during induction of anesthesia with halothane in oxygen and nitrous oxide delivered via a Jackson Rees modification of Ayre's T piece. Their vocal cords were sprayed with two

puffs (20 mg) of lidocaine spray (using either the new, n=9, or "old," n=6 formulation) when the level of anesthesia was sufficient to allow tracheal intubation without muscle relaxants. Topical anesthesia of the glottis was performed quickly and the concentration of halothane delivered was kept constant. The inspired and expired concentrations of halothane were measured continuously with a Capnomae device (delay time for changes in halothane concentration  $580 \, \mathrm{ms}$ ), the gases being sampled *via* a special connection at the elbow of the anesthetic mask. Figure 1 compares, for each case, the halothane concentration measured before spraying the cords with the highest value measured within the  $60 \, \mathrm{s}$  following the spraying.