# Correspondence



## Nasotracheal intubation in patients with an unanticipated difficult airway - I

#### To the Editor:

We read, with interest, the recent case report written by Drs. Uria et al.1, and we agree with their assessment that it is important to perform a preliminary laryngoscopy prior to inserting a nasal tube. However, their recommendation to insert a bougie through the RAE® nasal tube, with its distal acute curve, can result in inappropriate bending of the distal portion which is unfavourable to insertion of the bougie into the laryngeal aperture. Also, the gritty feel in contact with the tracheal rings<sup>2</sup> has the potential to interfere with the operator's judgment of correct tracheal placement of the bougie, particularly when a 7.5-mm oral tube is inserted between the vocal cords. Moreover, we have found that digital displacement of the oral tube, posteriorly and rostrally, in patients with an unanticipated difficult airway, cannot always bring the vocal cords into view. Therefore, we consider the airway management plan outlined by Uria et al. to be suitable for those patients where facemask ventilation can be easily achieved or for situations where fibreoptic equipment is unavailable.

When the laryngeal views obtained by preliminary laryngoscopy are Cormack-Lehane grades 3 or 4, we prefer a modified Piepho's algorithm to perform nasal intubation.<sup>3</sup> If facemask ventilation is not difficult, we use fibreoptic nasal intubation as our primary option. To avoid the potential danger of causing bleeding by insertion of a nasal tube, we usually select the nasal tubes made from soft flexible materials such as the Portex® Ivory PVC cuffed tube (Sims Portex Ltd., Kent, UK), because this tube can be passed through the nasal passage with a minimum of mucosal damage.4 We do not encourage use of the RAE® nasal tube during fibreoptic intubation, because its preformed curve can interfere with fibrescopy, and there may be difficulty in advancing the tube over the fibreoptic bronchoscope (FOB) into the trachea.

If facemask ventilation is difficult, an intubating laryngeal mask airway is inserted to maintain a patent airway and to provide a channel for orotracheal intubation using the FOB or the lightwand. To ensure convenience for subsequent tube exchange, we advocate inserting an oral endotracheal tube with an internal diameter 1–1.5 mm smaller than the intended endotracheal tube. After the nasal tube, obturated with an inflated Foley catheter, is guided through the nostril into the hypopharynx, according to the methods described by Russell,<sup>5</sup> the FOB is inserted via the nasal tube into the trachea alongside the oral tube. Next, the oral to nasal tube exchange is completed. In our experience, due to the ability to maintain adequate lung ventilation while minimizing the risk of epistaxis, this modified Piepho's algorithm can provide additional safety during nasotracheal intubation.

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### References

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- 3 Piepho T, Thierbach A, Werner C. Nasotracheal intubation: look before you leap. Br J Anaesth 2005; 94: 859–60.
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- 5 *Russell W*. Atraumatic nasal intubation. Anaesthesia 1996; 51: 1084.

## Nasotracheal intubation in patients with an unanticipated difficult airway - II

### To the Editor:

I read, with interest, the case report: Nasotracheal