

Correspondence

Management of the 'anesthetized but cannot-ventilate' situation

To the Editor:

I read with interest the case report by JR Boyce¹ entitled: "Poor Man's LMA: achieving adequate ventilation with a poor mask seal". Mask ventilation could not be performed adequately because of the air leak due to the patient's beard and facial deformity. With the help of an assistant, the anesthesiologist could ventilate successfully by using a cuffed endotracheal tube like a cuffed oropharyngeal airway. Fortunately, intubation under direct laryngoscopy was accomplished easily.

There was a similar and earlier report on the ventilation through a cuffed endotracheal tube inserted in the pharynx.² With the technique described,^{1,2} we can 'buy time' only for a limited duration, a major disadvantage in the 'cannot-ventilate, cannot-intubate' or 'cannot-ventilate, hard-to-intubate' situation. Boyce described the laryngeal mask airway (LMA) as just one of the useful options.¹ We believe the LMA's utility and versatility is being underestimated. Use of the LMA frees the anesthesiologist's hands for other vital tasks.³ A LMA may be used repeatedly to preoxygenate before attempting to intubate,⁴ in the same way a conventional mask is used before direct laryngoscopy. According to the ASA difficult airway algorithm, the LMA can be used as a fiberoptic conduit or ventilatory device by itself during difficult airway management.³ Even if the intubating LMA is not available, a conventional LMA can be used as a conduit for tracheal intubation in a patient with a difficult airway.³ The flexible LMA, if available, can improve intraoral surgical access and, in addition, has a protective effect against blood aspiration during oral surgery.⁵ The recently introduced Proseal-LMA appears to improve our ability to apply positive pressure ventilation.

In brief, the LMA is not a special airway equipment anymore. It should be included in the anesthesiologists routine material, and, in the absence of periglottic pathology,³ we believe it should be the first choice in the 'anesthetized but cannot-ventilate' situation.

Jae-Hyon Bahk MD
Seoul, Korea

References

- 1 Boyce JR. Poor Man's LMA: achieving adequate ventilation with a poor mask seal. *Can J Anesth* 2001; 48: 483-5.
- 2 Panadero A, Monedero P, Olavide I, Fernandez-Liesa I, Mendieta JM, Marcias A. Inflation of the endotracheal tube cuff in the pharynx for ventilation of paralyzed patients with unanticipated difficult airway (Letter). *Anesthesiology* 1999; 91: 1178-9.
- 3 Benumof JL. Laryngeal mask airway and the ASA difficult airway algorithm. *Anesthesiology* 1996; 84: 686-99.
- 4 Bahk JH, Kim JK, Kim CS. Use of the laryngeal mask airway to preoxygenate in a paediatric patient with Treacher-Collins syndrome (Letter). *Paediatr Anaesth* 1998; 8: 274-5.
- 5 Quinn AC, Samaan A, McAteer EM, Moss E, Vucevic M. The reinforced laryngeal mask airway for dentoalveolar surgery. *Br J Anaesth* 1996; 77: 185-8.

"Poor Man's LMA"

To the Editor:

Boyce¹ states that his patient "preferred to keep his full beard intact on religious grounds", but it appears that this was a hasty solution to an unexpectedly difficult mask airway.

Most disturbing was the scant disregard for caution in managing this patient's anesthetic induction. A morbidly obese, edentulous gentleman with a full beard and obstructive symptoms during sleep should set off alarm signals. Yet anesthesia was induced with thiopentone, fentanyl and rocuronium without ensuring the ability to maintain the airway or ventilate with a mask prior to inducing apnea.

To then rationalize the extra time available to intubate by the use of intermediate-acting depolarizing agents "where laryngoscopy or intubation are predicted to be challenging" is risky without having assessed the ability to ventilate by mask.

The 'Poor Man's LMA' brings to mind two potentially lethal consequences of placing a tube in the oropharynx and ventilating the lungs and, probably, the stomach. Gastric insufflation was a major hazard here with its attendant risks of pulmonary aspiration and gastric rupture. Strategies to improve the mask seal in

patients with beards may have been successful had they been tried. A LMA would have facilitated effective ventilation prior to intubation and there is a good case for stating that it should have been available.

My contention is that, in the context described, this is a potentially dangerous manoeuvre from which the patient and the author are fortunate to have emerged without an adverse outcome.

Kirk Lalwani, FRCA
Portland, Oregon

Reference

- 1 *Boyce JR*. Poor Man's LMA: achieving adequate ventilation with a poor mask seal. *Can J Anesth* 2001; 48: 483-5.

An unusual solution to unsuspected difficult airway: the esophageal dilator guide

To the Editor:

A 40-yr-old (153 cm, 50 kg, ASA-I) woman was scheduled for excision of a recurrent ameloblastic carcinoma involving the right upper alveolus and maxilla. Earlier, she had received uneventful general anesthesia twice and radiotherapy. Airway assessment revealed a mouth opening of 4 cm, loose incisors, an absent left alveolar ridge with collapsed overlying cheek secondary to the previous left maxillectomy, a Mallampati¹ class-I airway and a maxillary growth barely protruding over the right faucial pillars without obstructing the view of the oropharyngeal structures. Neck mobility was normal. An axial tomogram of the head showed the maxillary mass occupying both nares and a destroyed septum (Figure).

Following preoxygenation, anesthesia was induced with propofol 2.5 mg·kg⁻¹ and suxamethonium 1.5 mg·kg⁻¹ was administered intravenously after ensuring mask ventilation. Laryngoscopy with a No.2 Macintosh blade revealed a Cormack and Lehane² grade 1 view of the vocal cords. An intubation attempt using a 7.0 mm ID endotracheal tube (ETT) failed, as the maxillary growth had reduced the available oropharyngeal space. Any further displacement of the tongue to the left resulted in the laryngoscope blade giving way at the missing alveolar ridge. We overcame this difficulty in a novel manner; a straight blade (Harlake No.2) was introduced and the tongue shifted as much possible to the left. An esophageal dilator (No.18, Porges Neoplex, France 4001) was advanced



FIGURE Computed tomography (axial view) of the head showing a maxillary mass occupying both nasal cavities with destruction of the nasal septum.

gently into the tracheal inlet along the flange, the laryngoscope removed and a 6.5 mm ETT was railroaded over it into the trachea.

Our case represents an unsuspected difficult airway, where the view at laryngoscopy was adequate but the oropharyngeal space insufficient to intubate. The esophageal bougie (90 cm, flexible, atraumatic tip) may prove a useful alternative to conventional guides^{3,4} and/or fibroscope⁵ in situations where they are not readily available.

Amitabh Dutta MD
Y.K. Batra MD MNAMS
A. Ram Mohan MBBS
Pramila Chari MD MNAMS FAMS

References

- 1 *Mallampati SR, Gatt SP, Gugino LD, et al*. A clinical sign to predict difficult tracheal intubation: a prospective study. *Can Anaesth Soc J* 1985; 32: 429-34.
- 2 *Cormack RS, Lehane J*. Difficult tracheal intubation in obstetrics. *Anaesthesia* 1984; 39: 1105-11.