Correspondence

The role of the LMA?

To the Editor:

Although we were pleased to see the editorial by Fisher *et al.* which sets out to clarify the role of the LMA in airway management (Can J Anaesth 1992; 39: 1-3) we would like to comment on some conditions for which the LMA was said to be "clearly unsuitable."

Although it is imperative that the patient be either deeply anaesthetised or paralysed for insertion of the LMA under general anaesthesia, the use of topical anaesthesia should also be recognised. Brain was probably the first to self-insert the LMA¹ and this has been reported subsequently by other authors.²⁻⁴ Its application in awake patients for both difficult intubation and bronchoscopy has also been described.^{5,6}

In some patients with laryngeal problems, the LMA deserves to be considered. Its use in the diagnosis and subsequent management of stridor has been reported^{7,8} and it has also been used to treat laryngospasm where the delivery of CPAP was indicated.⁹

The LMA is unsuitable for patients requiring high airway pressure ventilation, but this should not preclude its use in those with a medical history of asthma. Indeed a strong case could be made for its preferential use over the endotracheal tube in patients with respiratory disease since less invasive, more physiological airway can be maintained.^{1,10}

Although the LMA is contra-indicated in patients whose lungs are difficult to ventilate, we disagree that it is unsuitable for patients whose tracheas are known to be difficult to intubate. Many consider that the LMA has a role in elective difficult intubation both as an alternative form of airway management and as an aid to achieving intubation.¹¹⁻¹⁶

Although there is a strong need to avoid inappropriate use of the LMA we should perhaps be cautious when trying to define the limitations of its use at this early stage.

Joseph Brimacombe MB ChB FCAnaes
Neil Shorney MB BS FFARCS
Department of Anaesthetics
Royal Perth Hospital
Wellington St
Perth 6001
Australia

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REPLY

We would like to thank Drs. Brimacombe and Shorney for their interest in our editorial. They refer to several instances where they seem to disagree with the points made in our editorial.

Residual intact upper airway reflexes

They seem to suggest that we erred in stating that the LM should not be used in patients with residual intact upper airway reflexes. The example they give of its use under these circumstances i.e., the use of topical anaesthesia is inappropriate since topicalization does anaesthetize upper airway reflexes which therefore are no longer intact. Similarly, its application in awake patients for facilitating intubation and bronchoscopy is advocated for patients with topicalized airways and we have no argument with this use.

There has been considerable literature on the subject of oropharyngeal guides that direct other flexible guides, fiberoptic bronchoscopes, and endotracheal tubes to the larynx.¹ There are also a number of endoscopic masks described, many in common use. These can be used alone or with oropharyngeal guides to allow the administration of oxygen or anaesthetic gases to spontaneously ventilating patients during fiberoptic laryngoscopy and bronchoscopy.^{1,2} Drs. Brimacombe and Shorney point out that the laryngeal mask (LM) can also be used as a combined oropharyngeal guide to the larynx and endoscopic mask. Notwithstanding the caveats enumerated in our editorial, we agree with Drs. Brimacombe and Shorney that the LM can provide this function. However, we should point out that this is an improvised use and was not contemplated in its original design. Current experience does not suggest that it will provide a higher rate of success or lower rate of complication than the previously described guides.³

Laryngeal problems

In terms of the use of the LM in patients with laryngeal problems, we were objecting to its use in anaesthetized patients with known laryngeal problems. The use cited in the reference in Drs. Brimacombe and Shorney's letter with regard to management of stridor was in the awake topicalized patient. We have no argument with that approach. As for its use in the patient with laryngospasm, it has no advantage and all the disadvantages of the traditional mask and airway approach.

Increased pulmonary inflation pressure

There is a risk in using the LM for positive pressure ventilation in cases where high airway pressures are required.⁴ We have no objection to allowing spontaneous ventilation through the LM by an asthmatic. The authors' own reference for this point refers to spontaneous ventilation as well.⁵

Known difficult airway access

In our view, the basic principle to be followed in the patient with known difficult airway access is that the patient should not be anesthetized and paralyzed until one is able to demonstrate that the patient can be ventilated. We considered the use of the LM as a guide to achieving laryngotracheal intubation in the awake patient and agree that this is an appropriate use. We disagree with the elective use of the LM in the difficult airway in the anaesthetized patient. If ventilation becomes compromised, tracheal intubation may not be successful leading to the scenario of "can't intubate, can't ventilate". The only way to avoid this in the known difficult intubation is to establish the airway via an endotracheal tube while the patient can still protect his own airway.

Joseph A. Fisher MD FRCP
Chidambaram Ananthanarayan MD FRCP
Gerald Edelist MD FRCP
Department of Anaesthesia
University of Toronto

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LMA and respiratory arrest after anterior cervical fusion

To the Editor:

While we agree with a recent study¹ that the laryngeal mask (LM) could not be recommended for use by inexperienced operators during resuscitation, this may result in its exclusion from the resuscitation armamentarium for those experienced in its use. We report a case of respiratory arrest after anterior cervical fusion which was successfully managed by the use of a LMA.

A 63-yr-old, 77-kg man presented for anterior decompression and fusion of the cervical spine (C₄₋₆) for myelopathy secondary to degenerative changes in the cervical spine. Apart from decompression of the right fifth and sixth cervical nerves three years previously he was otherwise healthy. Preoperative assessment of the neck movements demonstrated only slight restriction of extension, and the airway was graded one, according to Mallampati criteria.

Laryngoscopy following inhalational induction revealed a grade II view of the larynx prior to tracheal intubation. The operation, which lasted seven hours, was uneventful and the patient was fitted with a halo jacket. Postoperatively, the trachea remained intubated on the ITU as a precaution against laryngeal swelling and extubation was performed 48 hr later. The following day, while the patient was being monitored on the high dependency unit, the deep Redivac drain was removed from the neck. Five minutes later, the patient asked to be turned on to his right side and this was rapidly followed by signs of acute upper airway obstruction, cyanosis and respiratory arrest in less than one minute. Manual ventilation by face mask, and laryngoscopy and intubation were impossible owing to the nature of the surgery and the halo jacket. A laryngeal mask (size #4) was then inserted without difficulty, to enable manual ventilation of the lungs. The patient resumed spontaneous breathing via the LMA within three minutes. However, initial spon-