

Correspondence

Fibreoptic bronchoscope and unexpected failed intubation

To the Editor:

The article by Crosby *et al.* claims to be based on literature with original data published between 1990 to 1996, excluding review articles, editorials and comments. However, 14 letters to the editor, 6 abstracts, 5 book chapters, 3 editorials are included in the references with 30 of them published before 1989.¹ The authors have failed to place in correct perspective the role of the fibreoptic bronchoscope in the management of an unanticipated difficult airway.^{2,3} The only thing hindering the routine use of fibrescope in failed intubation, is lack of experience, skill and confidence that is essential under given circumstance. In an accompanying editorial Finucane addresses this issue and I agree with him.⁴

Simultaneous use of rigid and flexible fibreoptic laryngoscopy by two persons was described in 1990.⁵ The suggestion that a rigid fibreoptic laryngoscope, such as the Bullard scope, is a modification of the two-person, two-laryngoscope technique is inaccurate. These scopes cannot play the same role as the combined uses of rigid and flexible fibreoptic laryngoscopes.

In case of failed intubation for Cesarean section and in absence of fetal distress and difficult mask ventilation, there is no reason to awaken the patient after two failed intubation attempts. In these patients the trachea can easily be intubated with a fibreoptic bronchoscope.

I agree with the authors that most training programs lack structured training for management of difficult or failed intubation. As a result, most anesthesiologists have not had the opportunity to master the art of fibreoptic bronchoscopic airway management.

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REPLY:

After the literature search was conducted, the database was circulated to project participants who had the option of adding important references to the database from their own files. Some of these were literature types which would not have been included in the structured search. Dr. Ovassapian observes that most anesthesiologists have not mastered fibreoptic bronchoscopic airway management. This reinforces our observation that its application in scenarios of unanticipated airway difficulties may sometimes be problematic.

We disagree that the Bullard rigid fibreoptic laryngoscope cannot be substituted for the two laryngoscope technique. It is used in this fashion by practitioners experienced in its use and, if fitted with a camera, provides superb airway visualization from lips to larynx.

Finally, we disagree with the suggestion that, after two failed attempts at tracheal intubation for elective Cesarean section, it is prudent to continue the anesthetic. Of the 129 American parturients who died of anesthesia-attributable complications in 1979-1990, more than half died of complications of general anesthesia, most a result of airway management problems.¹ Chadwick, in an analysis of the ASA closed claims project database, noted critical events leading to maternal and neonatal injuries or death most commonly involved difficult or failed intubation, inadequate ventilation and aspiration.²

The association between delayed or failed intubation and morbidity is real. Cricoid pressure cannot provide absolute protection against aspiration in this instance.³⁻⁵ If persistent difficulties are encountered, ventilate and oxygenate the mother, protect her airway as best you can and bail out - wake her up!

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Limited mouth opening and the intubating laryngeal mask

To the Editor:

Asai and colleagues report awake use of the size #4 intubating laryngeal mask (ILM) in a patient with a predicted difficult airway due to mouth opening limited to 20 mm at the incisors and <10 mm between the gums on the right.¹ Although the ILM has a good track record in the awake difficult airway,²⁻⁴ we consider that its use was unwise in this instance. Although the mean external diameter of the adult ILM tube (sizes #3, #4 and #5) is 17.6 mm, the maximum external diameter is 20 mm. This occurs in the plane of the tube's curvature at the point where it is overlapped by the proximal part of the cuff.⁵ Thus, placement of the ILM should be extremely difficult when mouth opening is limited to 20 mm and would put dentition at risk. We therefore consider that the adult sizes of ILM (pediatric sizes are currently planned) are relatively contraindicated if mouth opening is < 25 mm and absolutely contraindicated if ≤ 20 mm. Perhaps, in this instance, the authors would have been wiser to use the standard laryngeal mask airway which has a softer, narrower tube and has been placed in patients with mouth opening of 12-18 mm.⁶

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REPLY:

Although the conventional laryngeal mask could have been used, this does not necessarily mean that the laryngeal mask would have been a better choice than the intubating laryngeal mask. The latter has several advantages over the laryngeal mask. First, whereas it is necessary to insert the index finger into the oropharynx to drive the conventional laryngeal mask reliably into the correct position,^{1,2} it is not necessary for the intubating mask.³ Therefore, when mouth opening is restricted, correct positioning of the intubating laryngeal mask may be easier. Second, after insertion, adjustment of the mask position is easier for the intubating mask than the laryngeal mask.³ Third, the intubating laryngeal mask allows for passage of a larger-bore tracheal tube.³ These advantages should be balanced against the possible disadvantage of the intubating laryngeal mask-damage to the teeth. We thought it justifiable first to attempt to insert the intubating laryngeal mask without undue force, and if there was difficulty, alternative methods, such as fibroscope-aided intubation with/without LMA, would be tried. In fact, there was little difficulty in insertion by rotating the device to the side when the curved part of the metal tube was passing behind the upper teeth.

We believe that all intubation techniques have disadvantages and contraindications and that indication of each technique should be considered in each patient.

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