



FIGURE Mobile cart for intubation and teaching

TABLE Equipment on the fiberoptic intubation cart

- Broncho fibroscope: Olympus BF type P20
- Broncho fibroscope: Pentax FI-10P
- Cold light source
- Suction connector device and tubing with oxygen port
- Videocamera: Panasonic KS152
- Monitor: Sony RVM-1443MD

- Videorecorder: Panasonic AG 5700
- Jet Ventilator (portable): Acutronic MK 800
- Laryngoscope: Macintosh, Miller
- Angulated prism laryngoscope (reference)
- Optical stylet
- Retrograde intubation equipment
- Cricothyrotomy device 4 mm ID for adults
- Face masks
- Modified Laerdal face mask<sup>2</sup>
- Oral airways
- Oral airways intubator (Rogers)
- Endotracheal tubes (oral, bowed, nasal): Ivory, Portex
- Endotracheal tubes guides
- Laryngeal masks
- Jet Ventilation insufflation catheter 14 Fr
- Transtracheal canula (HFJV) 13 G for adults
- Silicone spray Universal
- Xylocaine gel 2%
- Antifogging solution (Ultra stop)
- Xylomethazoline HCL 1 % (Otrivine)
- Oxybuprocainurn HCL 1 % (Novesine)
- Spray system of Bilbiss

### *Mallinckrodt reinforced tube for tracheal intubation through the intubating laryngeal mask*

To the Editor:

The intubating laryngeal mask has a potential role for tracheal intubation in patients with difficult airways.<sup>1-3</sup> A specially tailored silicone-made tracheal tube (internal diameter: 8.0 mm) is available for this purpose,<sup>1</sup> but other types of tube can also be used.<sup>1</sup> The Mallinckrodt reinforced tube (Athlone, Ireland) is suitable for tracheal intubation through the conventional laryngeal mask,<sup>4</sup> but one disadvantage of this tube is that the connector is glued to the tube so that it is not possible to remove the laryngeal mask after tracheal intubation. When the conventional laryngeal mask is used, there should be little problem by leaving the mask in place after tracheal intubation.<sup>5</sup> In contrast, because the intubating laryngeal mask has a metal guiding handle, it may be undesirable to leave it in place after tracheal intubation, particularly when the patient is turned to prone position or when operation site is near the mouth.

I have noticed that it is relatively easy to detach the connector of the Mallinckrodt tube by inserting a blunt spatula between the tube and connector without damaging them. After the tube is passed through the

intubating laryngeal mask into the trachea, the connector is detached, the intubating laryngeal mask removed, leaving the tracheal tube in place. The connector is then re-attached to the tube, and the connector can be fixed to the tube either using a super-glue or a string.

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- 2 Brimacombe JR. Difficult airway management with the intubating laryngeal mask. *Anesth Analg* 1997; 85: 1173-5.
- 3 Asai T, Shingu K. Tracheal intubation through the intubating laryngeal mask in a patient with a fixed flexed neck and deviated larynx. *Anaesthesia* (in press).
- 4 Koga K, Asai T, Latto IP, Vaughan RS. Effect of the size of a tracheal tube and the efficacy of the use of the laryngeal mask for fibroscope-aided tracheal intubation. *Anaesthesia* 1997; 52: 131-5.
- 5 Asai T. Tracheal intubation through the laryngeal mask airway (Letter). *Anesthesiology* 1996; 85: 439.

### *Intubation with the LMA*

To the Editor:

Joo and Rose's<sup>1</sup> use of the intubating LMA for difficult airways may be a safe alternative for patients who dread awake intubation, or for those who may develop acute upper airway obstruction after nerve blocks or topical anaesthesia.<sup>2</sup>

The effect of the intubating LMA on tracheal tube curvature for different 8 mm tubes at 25 and 37°C was reported by Brain *et al*<sup>3</sup> but did not mention Joo and Rose's innovation of introducing a PCV tube with its concavity down as it enters the LMA.

Joo and Rose elected to intubate the trachea for airway management of the three difficult airways, although ventilation was achieved with the intubating LMA, the aspiration risk was low, and there was no contraindication to a conventional or flexible LMA. The use of an LMA would also have been consistent with Benumof's modification of the ASA Difficult Airway Algorithm.<sup>4</sup> Only in one patient is a reason offered for intubation. Do "difficult airways" require intubation if the airway can be managed safely with an

LMA? The simple elegance of the LMA is that it allows the separation of airway priorities: effective ventilation and airway protection. If the risk of aspiration is 1: 10,000 in elective ASA I and II patients for traditional airway management or LMA,<sup>5</sup> and the total lung compliance and periglottic anatomy are normal, does a difficult intubation preclude elective use of properly functioning LMA? The LMA compels us to define criteria for tracheal intubation.

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- 2 Benumof JL. *Airway Management Principles and Practice*. Toronto: Mosby, 1996: 74-101.
- 3 Brain AIJ, Verghese C, Addy EV, Kapila A. The intubating laryngeal mask. I: Development of a new device for intubation of the trachea. *Br J Anaesth* 1997; 79: 699-703.
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#### REPLY:

*We believe that the angle of exit of the tracheal tube from the intubating laryngeal mask-airway (ILMA) is important not only in the success rate but possibly on post-operative sore throat. We have had high success rate (97%) in a randomized controlled study using this method.<sup>1</sup>*

*Dr. Beriault's comment on the decision to intubate in the absence of aspiration risk or contraindication to LMA is cogent. The reasons for intubation in the second and third patients were subjective: the possibility of large blood loss and prolonged surgery suggested that tracheal intubation might be beneficial. However, we recognize that the LMA has been advocated as an option for patients with difficult airways if surgery is peripheral and short and when access to the airway is not compromised.<sup>2</sup> There is no evidence that the use of the LMA is any safer than tracheal intubation.*

*The other option in the second and third patients was to leave the ILMA as the primary airway for the surgery without tracheal intubation. However, we were concerned about possible injury to the pharyngeal mucosa after prolonged use, dental damage if the patient bit on*