Difficult to intubate, mandatory to oxygenate

doi: 10.1017/S0265021507001135

EDITOR:

We read with great interest the paper by Slater and Bhatia [1]. In patients such as the one described in which surgery could represent a potential physical conflict for airway management, airway preoperative evaluation should be rigorous and precise, so as to allow planning of first-line strategy and of a 'plan B' in case of failure. In this case, no such information was available for the reader except for an 'unremarkable' preanaesthetic evaluation and a generic 'some limitations of mouth opening'. According to the Italian Difficult Airway Management Guidelines [2], and representing general commonsense, mouth opening limitation represents, even as an isolated finding, a prediction of potential major difficulty requiring very careful considerations and strategies.

In fact, a reduction in mouth opening, especially in the presence of limited mandibular protrusion, represents a critical step not only for intubation (no space for laryngoscope insertion and/or airway manoeuvres) [3] but also for ventilation with both face-mask [4] or laryngeal mask or other extraglottic devices. So, despite this 'unremarkable' isolated finding, the safest strategy would have been, in our opinion, awake fibreoptic intubation or, in the event of lack of patient cooperation, by fibreoptic intubation in a sedated but spontaneously breathing patient. This is especially so considering of the concomitant presence of facial deformity due to previous surgery and radiotherapy (before which, presumably, ventilation was uneventful).

Insertion of a laryngeal mask in cases of difficult ventilation is an appropriate choice although it may be inadvisable to remove it to perform laryngoscopy, place it again and then finally remove it before proceeding to an asleep fibreoptic intubation. These manoeuvres could have compromised further ventilation or fibreoptic intubation because of bleeding, secretions or minor pharyngo-laryngeal trauma. Italian guidelines prefer direct vision techniques to blind attempts, though recognizing the value of a bougie or, better, of hollow introducers [2]. Particularly, in this case, fibreoptic intubation via a laryngeal mask using the Aintree[®] catheter (Cook Critical Care, Bloomington, IN, USA), once the laryngeal mask was placed and ventilation was guaranteed [5], could have been the best option. Asleep fibreoptic intubation, we believe, could have led to dangerous desaturation, especially if performed in an apnoeic patient without dedicated devices such as a Berman-like cannula or endoscopy mask. We would finally consider protected extubation (such as over an airway exchange catheter under local anaesthesia) [2] as a strategy for similar cases.

Our message is hopefully clear – might intubation be difficult, guarantee oxygenation first. If either ventilation or intubation is predicted to be difficult, safety first. The fibreoptic awake intubation technique is the definitive choice, particularly in elective situations.

> M. Sorbello Anaesthesia and Intensive Care AOU POliclinico Catania Catania, Italy

> A. Guarino Anaesthesia and Intensive Care PO Villa Scassi Genova, Italy

> G. Merli Anaesthesia and Intensive Care Centro Cardiologico Monzino Milan, Italy

> F. Petrini Anaesthesia and Intensive Care Università di Chieti Pescara Chieti Pescara, Italy

> G. Frova Anaesthesia and Intensive Care Università di Milano Milan, Italy

References

- 1. Slater R, Bhatia K. Cannot ventilate, difficult to intubate. *Eur J Anaesthesiol* 2007; 24: 377–378.
- SIAARTI Difficult Airways Study Group. Task Force: Petrini F, Guarino A, Merli G, Sorbello M, Frova G. Recommendations for airway control and difficult airway management. *Minerva Anestesiol* 2005; 71: 617–656.

© 2007 Copyright European Society of Anaesthesiology, European Journal of Anaesthesiology 24: 889-901

Correspondence to: Massimiliano Sorbello, Anaesthesia and Intensive Care, AOU POliclinico Catania, Via Santa Sofia 78, Catania CT 95100, Italy. E-mail: massimilianosorbello@libero.it; Tel: +390953782307; Fax: +390953782315

Accepted for publication 1 June 2007 EJA 4574 First published online 3 August 2007

- 3. Rosenblatt WH. planning of airway management in critical care patients. *Crit Care Med* 2004; **32**(Suppl. 4): S186–S192.
- Langeron O, Masso E, Huraux C et al. Prediction of difficult mask ventilation. Anesthesiology 2000; 92(5): 1229–1236.
- 5. Blair EJ, Mihai R, Cook TM. intubation via the Classic and Proseal laryngeal mask airways: a manikin study using the Aintree Intubating Catheter. *Anaesthesia* 2007; 62(4): 385–387.

Cannot ventilate, difficult to intubate

doi: 10.1017/S0265021507001172

EDITOR:

We read with interest the letter by Slater and Bhatia [1] and would like to congratulate them on their successful management. We agree that the safest approach for their patient would have been an awake fibreoptic intubation. However, we would like to make a few comments.

From the history and picture, it is not clear whether the patient had a prosthesis fitted into the left orbital cavity. If so it could have deceived the airway assessment at preoperative visit. Difficult mask ventilation is, however, still appreciable as it appears to be impossible to achieve a seal with the face mask. In addition to this, a history of radiotherapy associated with limited mouth opening are ominous signs. Although the patient has had an anaesthetic for grommet insertion, it is possible that a spontaneously ventilating technique with a laryngeal mask airway (LMA) was used. If that was the case, the airway remains unchallenged after the radiotherapy following the initial craniofacial resection. We therefore believe that an awake fibreoptic intubation would have been a safer choice of securing the airway in the first place.

Once the situation of inability to ventilate the patient with a face mask was rescued by the LMA, the difficulty with intubation could have been dealt with one of the two options. Firstly, the trachea could have been blindly intubated via the size 5 LMA. Blind tracheal intubation via the laryngeal mask has been reported [2] and it is recognized as one of the alternative approaches for tracheal intubation in the ASA difficult airway management algorithm [3]. However, the Difficult Airway Society guidelines draw attention to the fact that the classic LMA is not designed for this purpose and does not recommend blind intubation via the classic LMA. The other option is fibreoptic-assisted intubation through the LMA, which may have a higher chance of success [4]. Secondly, an intubating laryngeal mask airway (ILMA) could have been used. Intubation could then have been blind via the ILMA or under direct vision using the fibreoptic scope. This technique has been used in patients in whom tracheal intubation using traditional methods had failed and also when other known or anticipated intubation difficulties were expected. Using an Aintree catheter with assisted fibreoptic intubation via these supraglottic devices is also reported and well recognized [5-7]. By adopting any of these techniques the oxygenation would have been uninterrupted via a dedicated patent airway while allowing tracheal intubation. It would then have been possible to avoid the nasal route.

> D. B. Chethan, S. Rassam Department of Anaesthetics University Hospital of Wales Cardiff, UK

References

- 1. Slater R, Bhatia K. Cannot ventilate, difficult to intubate. *Eur J Anaesthesiol* 2007; 24: 377–379.
- Heath ML, Allagain J. Intubation through the laryngeal mask. A technique for unexpected difficult intubation. *Anaesthesia* 1991; 46: 545–548.
- 3. Practice guidelines for management of the difficult airway: an updated report by the American Society of Anesthesiologists Task Force on Management of the Difficult Airway. *Anesthesiology* 2003; **98**: 1269–1277.
- 4. Pandit JJ, MacLachlan K, Dravid RM, Popat MT. Comparison of times to achieve tracheal intubation with three techniques using the laryngeal or intubating laryngeal mask airway. *Anaesthesia* 2002; 57: 128–132.
- Higgs A, Clark E, Premraj K. Low-skill fibreoptic intubation: use of the Aintree catheter with the classic LMA. *Anaesthesia* 2005; 60: 915–920.

© 2007 Copyright European Society of Anaesthesiology, European Journal of Anaesthesiology 24: 889-901

Correspondence to: Doddamanegowda Benkappa Chethan, Department of Anaesthetics, University Hospital of Wales, Cardiff CF14 4XW. E-mail: doddamane@gmail.com; Tel: +44 2920 743107; Fax: +44 2920 745489

Accepted for publication 1 June 2007 EJA 4547 First published online 1 August 2007