

23-year-old paper actually draws attention to the fact that the majority of the fiberoptic intubations were performed by trainees.

The authors state that this new technique achieved a mean intubation time of 6.3 min in patients with difficult laryngeal exposure, and compared this to a mean of 16.1 min in the study predominantly carried out by trainees. To prove the real benefit of this technique it would seem far more sensible to compare their new results with figures from their institute using the standard technique. This would eliminate the major confounder of comparing novice trainees with experienced fiberoptic intubators. Until this is done, the benefit of fibrecapnic intubation is not evidence-based.

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A reply

In response to the letters from Dr Kushakovskyy and Dr Lupton we would like to make the following comments. Awake fibrecapnic intubation is a novel technique for intubation of head and neck cancer patients with a difficult airway that has been developed and used at our cancer centre since December 2005. We experienced intubation problems in some head and neck cancer patients with severely obstructed airways using the standard techniques that are currently taught: direct laryngoscopy may not be possible in patients with a trismus or with T3 or T4 tumours with involvement of the base of the tongue; fiberoptic intubation

has several limitations (for example an obstructed view, insertion cord sometimes too large); and a tracheostomy may not be possible in patients with a subglottic tracheal tumour or thyroid mass. Because we work at a tertiary cancer centre and frequently see patients with very distorted airways, we think that the available techniques are just not good enough.

Awake fibrecapnic intubation can certainly prevent tracheostomies, for example in patients who present for emergency airway management due to severe tumour obstruction. In some patients the head and neck surgeons can perform laser debulking to secure the airway. Hypoxic periods are prevented by continuous supplementation of oxygen through the catheter. Suction is normally not necessary because the oxygen flow will blow away any secretions. Suction is still possible through the mouth if required.

We think we have explained clearly in our paper the problems we had with the intubation of the '110 kg stridorous, morbidly obese patient'. The trans-glottic tumour started bleeding after the tube was advanced over the bronchoscope because it was an inappropriately sized tube (6 mm) for the very narrow airway. 'Good old-fashioned direct laryngoscopy' for emergency intubation was only used to push a tube with force through the tumour; not a very elegant way, but the only means that was possible at that moment to secure the airway. The surgeons then performed laser tumour debulking and the patient was extubated uneventfully without the need for a tracheostomy. A total laryngectomy was carried out 4 weeks later. The three-dimensional CT reconstruction was not available pre-operatively. Had we known the patient's small airway diameter we would probably have intubated him with a smaller size fibrescope and smaller tube (with all its limitations in a patient of these proportions) or alternatively with a rigid scope for laser debulking.

We compared our data with the landmark study of Ovassapian et al. because in their study the difficulty of

laryngeal exposure during fiberoptic intubation was clearly defined. We agree with both Dr Kushakovskyy and Dr Lupton that a randomised trial should be carried out to compare awake fiberoptic intubation with awake fibrecapnic intubation.

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Airtraq® for awake tracheal intubation

The Airtraq® (Prodol Meditec S.A., Vizcaya, Spain) is a new single-use tracheal intubation device which is passed over the dorsum of the tongue to provide an indirect view of the glottis without the need to achieve a direct line of sight by conventional use of the 'sniffing' position and displacement of the tongue to the left. Because the tongue is not displaced and forceful elevation of the epiglottis is not required, the Airtraq probably requires less force to be applied than during conventional direct laryngoscopy [1]. It should therefore be suitable for awake intubation.

We used the Airtraq for awake tracheal intubation of an elderly woman with gastro-oesophageal regurgitation after previous proximal gastrectomy who was scheduled for residual gastrectomy. She had a known history of difficult laryngoscopy (Cormack and Lehane grade 3). A rapid sequence technique with cricoid pressure was not attempted because she was at risk of regurgitation in the presence of difficult intubation. Therefore, awake intubation was scheduled. The patient's oral cavity was topicalised with lidocaine 8% spray before intubation was attempted. An initial attempt with the conventional Macintosh blade was unsuccessful because laryngoscopy was difficult and poorly tolerated due to an active gag reflex. An attempt was next made with the Airtraq with some modification of the device (Fig. 1). The tracheal tube was placed in the side channel of the Airtraq and

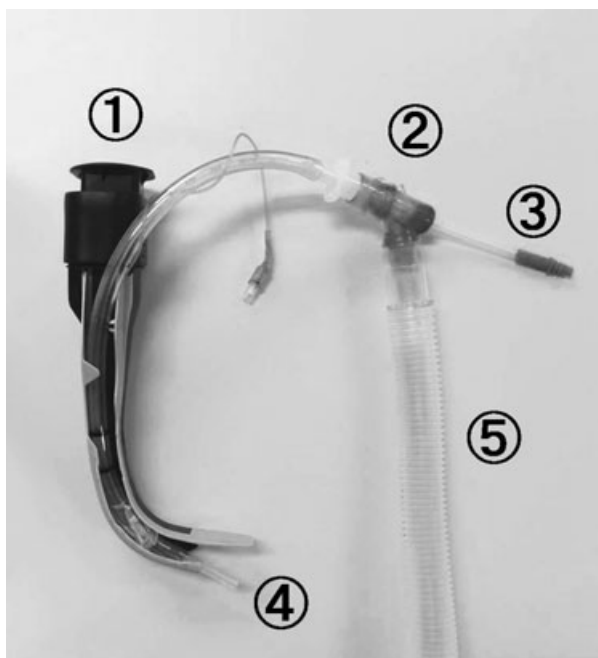


Figure 1 Modification of the Airtraq for awake intubation. 1 – Airtraq, 2 – Bodai Suction Safe swivel Y-connector, 3 – 14Fr suction catheter, 4 – tip of suction catheter, 5 – breathing circuit.

connected to the respiratory circuit via a Bodai Suction Safe[®] swivel Y-connector (Sontec Medical, Lexington, MA). Oxygen at 10 l.min⁻¹ was administered to prevent both desaturation of the patient and to reduce the risk of fogging of the blade-tip lens during the intubation procedure. Excessive saliva in the oropharynx was removed under vision via a 14Fr suction catheter inserted through the tracheal tube via the Bodai connector. Visualisation of the patient's vocal cords was achieved easily, the percentage of glottic opening (POGO) score [2] being 70%. After additional topical anaesthesia was applied to the vocal cords with a tracheal spray tube, the patient's trachea was intubated uneventfully at the first attempt. We conclude that the Airtraq with the modifications described above can be a useful and well-tolerated device in management of patients who require awake tracheal intubation.

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Airway management skills for novices: is there a role for tracheal intubation?

I read with interest the comparison of the Airtraq and Macintosh laryngoscope blades [1]. The authors state that tracheal intubation is a 'lifesaving manoeuvre'. Tracheal intubation is rarely, if ever, a lifesaving procedure when performed by novice and

infrequent users. Patients die from failed oxygenation, not failed intubation. This is backed up by the Difficult Airway Society guidelines in which intubation constitutes 'Plan A' [2]. The rescue techniques and life-saving manoeuvres appear in 'Plan C' and 'Plan D'. These include the use of supraglottic airways and cricothyroid membrane puncture. Whilst tracheal intubation is the 'gold standard' for securing the airway, to state that it is lifesaving when performed by novices may encourage the view that tracheal intubation is the 'be all and end all' of emergency airway management. Tracheal intubation is associated with a significant morbidity and mortality, particularly when performed by those who undertake the technique infrequently. Failure of tracheal intubation under optimum conditions has been reported in up to 30% of paramedic intubations [3] and, even in that paper the overall 6-month success rate in a manikin with the Airtraq and Macintosh blades was 85% and 70%, respectively. The 6-month retention of insertion skills of the LMA Classic laryngeal mask airway has previously been reported as 100% [4]. It is for this reason that tracheal intubation is no longer taught on Advanced Life Support provider courses. Whilst I applaud the efforts of the authors to make tracheal intubation more 'user friendly' for the novice and infrequent user, we must consider whether there is any place for this technique for this group and certainly should not regard intubation by the inexperienced user as a lifesaving technique.

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