Correspondence

Quick and safe intubation by visualized passage of the tube-armed Bonfils fiberscope into the trachea

SIR — We appreciate the interest of Dr Liu *et al.* of our comparison of the intubation with fiberoptic intubation (FOI) or the Bonfils fiberscope (BF) of children with a difficult airway (1) and we will address each point in turn.

Children with known (documented) difficult and expected difficult tracheal intubation (restricted mouth opening) were included as were children with an unanticipated difficult direct laryngoscopy. This is clearly described within the 'methods' as well as 'results' section. Difficult direct laryngoscopy was confirmed in all patients described in this study.

Dr Liu et al. (2) state that '... it is impossible to advance the Bonfils into the middle of the trachea' and imply a greater risk to the patient if introduced past the vocal cords. This contradicts the initial description of the developer of the BF (3,4) and ignores decades of successful experience with it (5). Dr Liu's description of the intubation with the BF negates one of the main benefits of this device. Others describe the BF intubation technique recently as follows (5): 'The scope is then carefully guided through the glottic aperture, until tracheal rings can be identified.' It is precisely the visualization of the passage of the tube that enables a delicate navigation of the tube over the vulnerable glottis and subglottis. This feature is one of the most important advantages of the BF particularly in the care of children due to the threat of harming the narrow subglottis structures with blind intubation in situations of difficult airways (6). This technique was extensively described in the discussion.

Dr Liu *et al.* question the reason for the longer time for FOI. As described, '... the tip of the fiberscope needs to be placed into the trachea before the tube can be positioned there.... The passing of the tube through the

References

 Kaufmann J, Laschat M, Engelhardt T et al. Tracheal intubation with the Bonfils fiberscope in the difficult pediatric airway: a comparison with fiberoptic intubation. Pediatr Anesth 2014.

2 Liu G-P, Xue F-S, Li R-P. Comparing intubation performance of Bonfils fiberscope and fiberoptic bronchoscope in larynx is the most critical moment for potential failure and laryngeal injury ...'. This maneuver requires time. In comparison, the BF carries the tracheal tube during its placement into the middle of the trachea under continuous visualization. This requires less time than FOI.

Finally, the authors regret that no subgroup analysis was possible. We strongly agree with them and would have liked to recruit more patients. However, as stated (1) '... it is evident that the number of children with a difficult airway is low even in a large pediatric hospital ...'.

Ethics

No ethical approvals are required. This manuscript is a response letter.

Funding

This letter was carried out without funding.

Disclosures

No conflicts of interest occurred.

Jost Kaufmann¹ & Thomas Engelhardt² ¹Department of Anesthesiology and Intensive Care Medicine, University Hospital of Cologne, Köln/Cologne, Germany ²Department of Anaesthesia, Royal Aberdeen Children's Hospital, Aberdeen, UK Email: jost.kaufmann@uni-koeln.de

doi:10.1111/pan.12610

difficult pediatric airways. *Pediatr Anesth* 2014.

- 3 Bonfils P. [Difficult intubation in Pierre-Robin children, a new method: the retromolar route]. *Anaesthesist* 1983; **32**: 363–367.
- 4 Halligan M, Charters P. A clinical evaluation of the Bonfils Intubation Fibrescope. *Anaesthesia* 2003; 58: 1087–1091.
- 5 Thong SY, Wong TG. Clinical uses of the Bonfils Retromolar Intubation Fiberscope: a review. Anesth Analg 2012; 115: 855–866.
- 6 Holzki J, Laschat M, Puder C. Iatrogenic damage to the pediatric airway. Mechanisms and scar development. *Pediatr Anesth* 2009; 19 (Suppl 1): 131–146.