## CORRESPONDENCE

Columbus Hospital and Northwestern University Medical School Chicago, IL 60611

## REFERENCES

- Carr R, Reyford H, Belani K, Boufflers E, Krivosic-Horber R, Palahaniuk R. Evaluation of the Augustine Guide<sup>™</sup> for difficult tracheal intubation. Can J Anaesth 1995; 42: 1171–5.
- 2 Cormack RS, Lehane J. Difficult tracheal intubation in obstetrics. Anaesthesia 1984; 39: 1105-11.
- 3 Samsoon GLT, Young JRB. Difficult tracheal intubation: a retrospective study. Anaesthesia 1987; 42: 487-90.
- 4 Basmajian JV. Grant's Method of Anatomy, 8th ed. Baltimore: Williams and Wilkins, 1971, 631-3.

## REPLY

Dr. Meyer's description of the Cormack and Lehane grading scheme for view obtained on direct laryngoscopy as modified by Samsoon and Young is accurate and correct. Unfortunately, he has guoted our paper out of context. In it, we do not provide a description of the grading scheme since this scheme is both widely used and understood. The portion of our paper that Dr. Meyer quotes is the paragraph describing the sequence of events in eight patients with unexpectedly encountered difficult airways and appears in the methods section, not in the results section. For clarity, the paragraph would have been better written if it read: "... the vocal cords and laryngeal inlet could not be seen (Cormack and Lehane grade III or IV) and blind intubation was not successful." As our description appears in this paragraph, we make no mention of the epiglottis and this obviously leads to the confusion that Dr. Meyer has pointed out. Since these eight patients were unable to be intubated by conventional direct laryngoscopy they were included in our difficult airway population. We didn't believe that it was critical to include in the results section the exact breakdown of laryngoscopy grading among these eight patients (four were grade III, four were grade IV). The grading system as used by our observers was in agreement with that described in the relevant papers and quoted by Dr. Meyer. We did not think that this would cause confusion but thank Dr. Meyer for his clarification.

Dr. Meyer also correctly quotes Cormack and Lehane's paper in estimating the incidence of grade IV laryngoscopy in normal patients as less than 1/100,000. However as is abundantly clear in our paper, our study was a cohort review of a population of patients with difficult (not normal) intubation. In other words, we did not review the charts of all patients who came to the operating rooms at the two separate hospitals but only those with a difficult airway for reasons listed in the paper. This in all likelihood, accounts for the high incidence of grade III and IV laryngoscopy. In addition, a recent article reports 60 grade IV laryngoscopies among 3325 patients (1.8%) with airways thought not to be difficult.<sup>1</sup> This emphasizes that even in a normal airway population, the incidence of grade IV laryngoscopy may be higher than that reported originally by Cormack and Lehane.

To answer Dr. Meyer's final questions, both straight and curved blades (not both in all cases) were used during direct laryngoscopy – indeed direct laryngoscopy was not performed in 17 cases; and in the cases of unexpected failed conventional intubation, laryngeal pressure was combined with laryngoscopy before resorting to the Augustine Guide. R.J. Carr MD H. Reyford MD K.G. Belani MBBS MS E. Boufflers MD R. Krisovic-Horber MD R.J. Palahniuk MD Department of Anesthesiology University of Minnesota Twin Cities Campus

## REFERENCE

1 Rose DK, Cohen MM. The incidence of airway problems depends on the definition used. Can J Anaesth 1996; 43: 30-4.