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IN REPLY

In reply: Assessing flexible bronchoscopic intubation through the AuraGain™ laryngeal mask *versus* a slit Guedel tube

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To the Editor,

We thank Liu *et al.* for initiating an important discussion regarding the methodology described in our article.[1] We appreciate the opportunity to elaborate on the reasoning for using our methodology. Supraglottic airway (SGA) devices of the newest generation, such as the AuraGain™ (Ambu A/S; Ballerup, Denmark), allow suction of gastric contents as well as intubation. In our article, we aimed to show that intubation through the AuraGain could be achieved as rapidly and simply as with a slit Guedel device (Johnson & Johnson; Sezanne, France), which is currently considered the gold standard for flexible bronchoscopic intubation (FBI).[2]

In our study, although the time for FBI was used as the primary outcome, it did not include the time required for placing the AuraGain. For the patients' safety, we started the intubation process only when sufficient ventilation had been established with the AuraGain.[3] We used a Unoflex™ (ConvaTec Ltd, Flintshire, UK) endotracheal tube (ETT) because it easily adapted to the contour of the bronchoscope and the SGA.[4] The intubation process was considered complete once correct ETT placement had been confirmed, the bronchoscope removed, and the ETT connected to the ventilator. We then left the AuraGain (together with the ETT) *in situ* for the whole surgical procedure.

Admittedly, having an AuraGain and an ETT together in place for that length of time could result in side effects (i.e., airway morbidity) due to the additional volume of the laryngeal mask airway. Our outcome measures for airway morbidity were chosen according to previous literature.[5] Three parameters were used to assess airway morbidity: dysphagia, hoarseness, sore throat. Our results showed that there was no difference between having an ETT or an ETT and SGA *in situ* for the entire surgical procedure, independent of postoperative pain therapy. We agree, however, that the degree of sore throat (neck pain) may be related to the pain treatment.

One important reason for leaving both devices (AuraGain and ETT) *in situ* until extubating criteria are reached is reflected in the recent guidelines for difficult airways.[6] As our research group is currently investigating the use of SGA devices for difficult airway management, we followed the guideline stating that patient safety requires that, once a safe airway has been established, unnecessary manipulation should be avoided. In this first trial in patients *without* a difficult airway, we showed safe and effective intubation and ventilation with no patient morbidity. This is a critical step for continuing our investigations that include patients *with* a difficult airway.

Conflicts of interest None declared.

Editorial responsibility This submission was handled by Dr. Philip M. Jones, Associate Editor, *Canadian Journal of Anesthesia.*

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