

# Letter to the Editor

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## Corresponding author:

Patrick Wong, M.B.B.S., F.R.C.A. Department of Anesthesiology, Singapore General Hospital, Outram Road, Singapore 169608, Singapore

Tel: +65-6321-4220 Fax: +65-6326-6494

Email: patrick.wong@singhealth.com.sg ORCID: https://orcid.org/0000-0002-3212-9496

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# Response to comments on "Awake supraglottic airway guided flexible bronchoscopic intubation in patients with anticipated difficult airways: a case series and narrative review"

# Patrick Wong, Wan Yen Lim

Department of Anesthesiology, Singapore General Hospital, Singapore, Singapore

We thank the authors for their reply; many of their initial statements were covered in our article. We agree that the cuff inflation (to 60 cm $\rm H_2O$ ) of a second-generation supraglottic airway device (SAD) allows for better airway seal. However, we keep the cuff deflated for various reasons: It minimizes the oropharyngeal pressure and may help relieve patient discomfort; it avoids the risk of obscuring the glottic view; and the cuff can be inflated later, if required, for instance, for positive pressure ventilation. In one study, with no cuff inflation, the optimal glottic view (only cords seen) occurred in 30% of patients compared to the 0% occurring with an intracuff volume of 40 ml [1].

Oxygen insufflation at 10-15 L/min using our described technique is highly unlikely to cause gastric insufflation. Firstly, oxygen insufflation at the entrance of the proximal end of the SAD ventilation port can be considered to be in an open circuit. Any buildup of pressure would dissipate quickly via the path of least resistance (retrograde to the atmosphere) rather than moving anterograde through the ventilation port occupied by the bronchoscope. Secondly, 50 L/min of high-flow nasal oxygen only achieves a mean airway pressure of up to 7 cmH<sub>2</sub>O [2], which would not overcome a resting lower esophageal sphincter pressure of 15–35 mmHg (20–47 cmH<sub>2</sub>O) [3] to cause gastric insufflation. Awake insertion of SADs does not alter the gastroesophageal barrier pressure [4]. The following two studies evaluating gastric insufflation with antral ultrasonography also supported a low risk of gastric insufflation. First, face mask ventilation at 10 cmH<sub>2</sub>O under anesthesia without neuromuscular blockade showed that gastric insufflation occurred in 0% of cases [5]. Second, all 30 fasted patients who were administered with high-flow nasal oxygen at 70 L/min for a total of 30 min had grade 0 or 1 antrum scores, consistent with fasting. Moreover, in the sitting position, the stomach is lower in relation to the glottis; therefore, the risk of regurgitation and aspiration is potentially reduced.

# **Conflicts of Interest**

No potential conflict of interest relevant to this article was reported.

### **Author Contributions**

Patrick Wong (Conceptualization; Supervision; Validation; Writing – original draft; Writing – review & editing)

Wan Yen Lim (Conceptualization; Resources; Validation; Writing – original draft; Writing – review & editing)

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# **ORCID**

Patrick Wong, https://orcid.org/0000-0002-3212-9496 Wan Yen Lim, https://orcid.org/0000-0002-0335-0255

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