

## A Randomised Comparison Of The Ambu AuraGain And The LMA Supreme In Infants And Children

### Equipment / Oral Presentation

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The Ambu AuraGain is a newer second-generation supraglottic airway. We conducted a randomised trial to compare this device with the LMA Supreme.<sup>1,2</sup>

Approval was obtained from the Ann & Robert H. Lurie Children's Hospital of Chicago's Institutional Review Board, and written informed consent was obtained from the parents of all patients. This trial was registered on <http://clinicaltrials.gov> (NCT02380768). One hundred children 3 months to 6 years of age were randomised to receive either the Ambu AuraGain or LMA Supreme for airway maintenance with neuromuscular blockade and mechanical ventilation. The primary outcomes were initial and 10-minute airway leak pressures. Ease, time and success rates for device and gastric tube insertion, fiberoptic grades of view, airway quality during anesthetic maintenance, and complications were also assessed.

There were no differences in the initial and 10 minute airway leak pressures between the Ambu AuraGain and LMA Supreme, median (IQR [range]); initial: 19 (16 to 22 [10-34]) vs. 18 (14 to 24 [8-40]) cmH<sub>2</sub>O;  $p=0.4$ , and 10-minute: 22 (18 to 26 [11-40]) vs. 20 (16 to 26 [12-40]) cmH<sub>2</sub>O;  $p=0.08$ , respectively. Ease, time and success rates for device placement, gastric tube insertion, and complications were also not significantly different. Children receiving the LMA Supreme required more airway manoeuvres (7 vs. 1 patient;  $p=0.06$ ) to maintain a patent airway.

Our results suggest that the Ambu AuraGain may be a useful alternative to the LMA Supreme, as demonstrated by comparable overall clinical performance in children.

#### References

1. Jagannathan N, Sohn L, Sommers K, et al. A randomized comparison of the laryngeal mask airway supreme and laryngeal mask airway unique in infants and children: does cuff pressure influence leak pressure? *Pediatric Anesthesia* 2013; 23: 927-33.
2. Kristensen MS, Teoh WH, Asai T Which supraglottic airway will serve my patient best? *Anaesthesia* 2014; 69: 1189-92.