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**Comparison of the blockbustertm and air-q®supraglottic airway devices as a conduit to blind endotracheal intubation in paediatric patients: a randomised controlled trial.**

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**Background and Aims:** There is scarcity of literature recommending the use of supraglottic airway devices (SADs) as conduits for blind endotracheal intubation. This study was conducted to compare the efficacy of two laryngeal mask airways (Blockbuster™SAD and air-Q® SAD) in acting as a conduit for blind endotracheal intubation in paediatric patients undergoing non-emergency surgeries under general anaesthesia.

**Methods:** In this randomised controlled trial, 80 paediatric patients with American Society of Anesthesiologists (ASA) physical status I and II, aged between 6 months and 10 years and weighing between 5 to 30 kg, were randomly allocated to two groups in which the airway was secured either with Blockbuster™SAD or air-Q® SAD followed by blind endotracheal intubation. The primary outcome was the percentage of successful blind endotracheal intubation in a single attempt. The secondary outcomes were oropharyngeal leak pressure (OLP), insertion time, manipulations, perioperative complications.

**Results:** Success rate of intubation with Blockbuster™SAD was significantly higher (p value = 0.03) as compared to with air-Q® SAD (77.5% vs 55%). OLP was also significantly higher (p value = 0.001) with Blockbuster™ SAD (25.74 ± 7.05) cm H<sub>2</sub>O as compared to air-Q® SAD (15.2 ± 5.58) cm H<sub>2</sub>O. Complications were comparable in the groups.

Variable	Blockbuster	Air-Q	P
Successful	31 (77.5%)	22 (55%)	0.033
Unsuccessful	9 (22.5%)	18 (45%)	
OLP (cm H <sub>2</sub> O)	25.74±7.05	15.20±5.58	0.001

**Conclusion:** We found that both Blockbuster™ and air-Q® SAD have good success rate; however, Blockbuster success rate was significantly higher. Hence we conclude that Blockbuster™ is a better SAD for use as a conduit to blind endotracheal intubation in paediatric patients. It can

reliably be used as a ventilatory device as well because of better OLP.

**Key Words:** airway;intubation,intratracheal;paediatrics

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