

Tracheal intubation through SADs: Still blind when the ray of light available!

There are wide variety of airway devices and airway adjuncts available in the airway armamentarium. These broad spectra of devices have not only increased the success rate of tracheal intubation but also gave us the power to intubate under direct or indirect vision. With the discovery of devices like supraglottic airway devices (SADs), we can protect the patient's airway and simultaneously ventilate the lungs without endotracheal intubation. The consideration of tracheal intubation through SADs is the need for it, the type of tracheal tube, and the technique of its placement.

Intubating LMA (iLMA) was the first SAD designed to facilitate blind intubation. iLMA became part of the difficult airway guidelines in the year 2004.^[1] Performing blind intubation with the help of iLMA takes less time as compared to visualized intubation technique. Still, the success rate may vary from 40% to 100% depending upon a number of attempts and operators experience.^[2,3] Airway trauma, oesophageal intubation, dislodgment of the tube during removal of SADs are reported adverse events with blind intubation.^[4,5]

This issue of the journal publishes a randomized prospective trial comparing the air-Q intubating laryngeal airway (ILA) and Ambu AuraGain laryngeal mask for blind tracheal intubation.^[6] We understand the purpose of the study is to find a suitable alternative technique of intubation, but somehow the literature is not supportive of blind intubation technique through SADs. In the past, blind intubation has been performed in both adults and children. The studies reported the need for multiple attempts, lesser success rate, increased time, oesophageal intubations, airway trauma, and many such limitations with blind tracheal intubation through SADs. The success of tracheal intubation through SADs depends on the technique used, type of tracheal tube, number of attempts, routine or an emergency procedure, maneuvers used for positioning of the patient, and anesthesiologists' experience.^[7-10] But the current evidence recommends against blind intubation through SADs, rather intubation through SAD must be performed under vision.^[6,7] With the emerging evidence of the limitations of blind tracheal intubation through SADs, it has almost become obsolete and tracheal intubation through SADs is recommended only with visualized technique as it has shown higher success rate and less incidence of adverse events like trauma, oesophageal intubation etc.^[9] It is well

documented that blind intubation has a risk of even complete loss of established airway.^[9,10]

The authors have reported important and interesting finding of different fiberoptic laryngeal view for two devices air-Q ILA and Ambu AuraGain. Despite higher grades in Ambu AuraGain, the first attempt success rate was more in air-Q ILA but with a greater number of maneuvers required. The specific maneuvers required for the success of tracheal tube placement through various SADs are not well known. The multiple maneuvers for a blind tracheal tube placement not only increase multiple attempts but also increases the time is taken and the airway trauma. Also, the time taken for tracheal tube placement was ranging up to 44-137 vs 41-98 seconds for two devices (air-Q ILA vs Ambu AuraGain) in this study, which may be clinically unacceptable in a difficult airway scenario.^[7] The glaring outcome of multiple attempts for successful tracheal intubation and esophageal intubation in almost one-third patient in AmbuAuraGain is worrisome, as these group requires clinically prolonged time for tube placement and then to find it in the esophagus.^[7] The other concern shall be that the present study was done in patients with normal airways. However, the technique of tracheal intubation through SADs is usually required for patients who could not be tracheal intubated directly and/or required placement of SADs as a rescue measure to maintain ventilation and oxygenation that is in the situation of difficult airways. So, the clinical applicability of such outcome remains grossly limited and probably the outcome measures shall be worst in the difficult airway. The authors' conclusion of the study "air-Q ILA resulted in significantly more success rate and ease of intubation as compared to AmbuAuraGain" may be redefined given outcome data, as the blind tracheal intubation should be avoided through either of the SADs.

Though it may be understood in certain situations of difficult airway scenarios where the visualized technique may not be available, even than blind technique should be avoided. Instead, use alternate methods to improve the success rate as the use of Aintree Intubation Catheter (AIC). Even in the absence of FOB, it is recommended to intubate with the assistance of AIC or to continue the procedure while ventilating the patient with SAD or wake up the patient with the abandonment of the procedure.^[11]

The study highlights the importance of the type tracheal tube used for tracheal intubation through the SADs. The dedicated tubes used for this purpose like silicon tipped flexible tracheal tubes are suggested. The newer additions like the use of a parker flex tip tube have also been shown to be advantageous.

The Parker Flex-Tip with a flexible, curved, centered, tapered distal tip geometry explicitly designed for rapid, easy, and non-traumatic intubation. This tip is expected to gently glide over the structures, rather than getting stuck and injuring the structures when it is advanced. Thus, we must be vigilant while dealing with the patient's airway and the safest approach so far is under direct vision.

We conclude that it is the right time to understand the importance of abandoning the blind and to prefer the visualized technique for tracheal tube placement through the SADs. The ray of light may be the ray of success for the right entry at the right time.

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