Fibreoptic Guided Tracheal Intubation Through Supraglottic Airway Device (SAD) Using an Airway Exchange Catheter in Children

This technique is for intubating through a SAD when the Aintree Intubation Catheter is too large for the patient. The technique is NOT suitable for airway rescue, and should be performed as a controlled, stepwise process. It is described here in children, but can also be used in the adult population with narrow airway diameter.

1. With the SAD immobilised by an assistant, introduce the fibrescope through the top port of the swivel connector and advance.

2. Sequentially visualise SAD aperture bars (a), if present, glottis (b), tracheal rings (c) and carina (d). Insert the ETT into the trachea through the SAD, using direct vision to position the tip of the ETT in the mid-tracheal point. Never advance beyond carina. Remove fibrescope and confirm ventilation with capnography.

3. Leaving SAD in place, connect circuit to ETT and ventilate via ETT.

4. Disconnect anaesthesia circuit and insert lubricated AEC through the ETT, being careful not to advance beyond previously measured ETT depth.

5. Taking care not to advance the AEC, apply counter pressure to the AEC, remove both the SAD and ETT and leave the AEC in place.

6. Using a laryngoscope, railroad the desired size of ETT over the AEC, maintaining a ‘tip anterior’ orientation.

7. Remove the AEC, confirm ventilation with capnography and, if possible, confirm final position of ETT with fibrescope.

* Select Appropriate Size of airway exchange catheter

The AEC must fit down the interior of the ETT, and the ETT must fit down the interior of the SAD
- Cook 8 FR AEC will fit ETT down to 3.0 ID
- Cook 11 FR AEC will fit ETT down to 4.0 ID
- Cook 14 FR AEC will fit ETT down to 5.0 ID

N.B. Oxygen can be delivered via the AEC in situations where railroading of the ETT is prolonged. Oxygenation via this route is sub-optimal and should only be undertaken with great care. Refer to manufacturer’s guidelines for methods of oxygen delivery.

*See guide at foot of document

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Guide written by Neal Willis, NHS Tayside, with photographs supplied as above.