

RIE ED Surgical Airway Procedure: In-Hospital

EQUIPMENT CHECKLIST [MANDATORY]

- Scalpel
- Tracheal hook
- Bougie (15mm for Adult)
- Size 6.0 Tracheostomy tube (Portex; obturator removed)
- Tracheostomy ties
- Size 6.0 Endotracheal tube
- 10ml Syringe



Procedure:

1. Ensure Anaesthetics have been alerted and are attending.
2. If there is time [predicted difficult airway], prepare skin with chlorhexidine, don sterile gloves, mark cricothyroid membrane with skin marker & consider 2% Lignocaine/Adrenaline 5ml sc local infiltration.
3. Identify cricothyroid membrane; stabilize with non-dominant hand.
4. With scalpel in dominant hand, incise cricothyroid membrane horizontally using “stab / rocking” technique. Hold scalpel blade in position.
5. With non-dominant hand, insert tracheal hook into incision following line of the scalpel blade; rotate through 90 degrees. Apply caudal (inferior) traction to cricoid cartilage.
6. Remove scalpel & insert bougie into trachea.
7. Insert 6.0mm tracheostomy tube over bougie (lubricated if necessary) & into trachea.
8. Remove tracheal hook whilst ensuring tracheostomy tube remains fully inserted.
9. Remove bougie whilst maintaining tracheostomy tube position.
10. Inflate cuff & verify ventilation & tube position as per standard anaesthesia post-intubation checks. Secure tracheostomy tube with ties.

Modifications:

- If the cricothyroid membrane cannot be identified easily using surface landmarks, first use a midline longitudinal incision to identify the underlying structures then proceed with the horizontal incision.
- If there are significant face and neck burns or oedema (e.g. risk of further swelling), a size 6.0 ETT may be used instead of a tracheostomy tube.
- If the surgical cricothyroidotomy fails, consider reinserting iGel/LMA for transfer/until further expert assistance arrives.