Surgical Cricothyrotomy (≥ PL5)

Clinical Indications:

1. Patient ≥ 10 years of age with a failed airway

Contraindications:

1. Anytime a less invasive maneuver would allow adequate oxygenation and ventilation of the patient.
2. Tracheal transection.
3. Fractured larynx, significant damage to cricoid cartilage or larynx, or inability to identify appropriate landmarks.

Preparation for Use:

1. Don appropriate PPE
2. Position patient supine with head slightly extended, unless contraindicated due to suspected cervical spine injury.
3. Apply appropriate respiratory and cardiac patient monitoring.
4. Ensure all equipment is readily available: Scalpel, Chlorhexidine or betadine, Kerlix/gauze, endotracheal tubes (ETT) and Bougie, device or tape to secure ETT.
5. If the patient is possibly conscious, then administer Fentanyl or Ketamine for anesthesia as time allows.

Procedure:

1. Locate and palpate landmarks then prepare anterior surface of the neck with chlorohexidine as time allows.
2. Place thumb and index finger of non-dominant hand on either side of the tracheal cartilage to stabilize the trachea and anchor and stretch the skin slightly.
3. Palpate the tracheal cartilage and locate the cricothyroid (CT) membrane, perform a vertical incision over the CT membrane midline beginning ½ - 1 inch superior and extending ½ - 1 inch inferior.
4. Visualize the CT membrane and perform a horizontal punch incision through the CT membrane. Upon completion of this incision, activate the blade safety component.
5. After blade safety activation place finger of non-dominant hand into the incision to dilate the incision and serve as a landmark.
6. Advance the angled end of an Bougie past your finger through the incision. Remove your finger once the tip of the Bougie is confirmed inside the incision. The bougie should advance easily until “hold-up”.
7. Advance an appropriately sized cuffed endotracheal tube (ETT) over the bougie (1-2 cm past cuff) and remove the bougie.
8. Maintaining control of the proximal end of the ETT, inflate the cuff and confirm placement of the ETT.
9. Secure the ETT with tape maintaining continuous stabilization by hand. ETT is to be secured by hand at all times.
10. Providers may continue to use backboards to assist in patient movement as needed.