



Cricothyrotomy - Needle

INDICATIONS:

Pediatric and adult medical cases:

- Respiratory arrest or impending respiratory failure, especially in the setting of upper airway obstruction due to foreign body or infection and inability to ventilate by any means available.

Trauma:

- Advanced airway is required due to respiratory arrest or inability to maintain airway due to face, neck, or chest trauma, or; impending respiratory failure, inability to ventilate due to obstruction of airway, distortion of area, or inability to extend neck in cases of suspected C-spine injury.

PROCEDURE: (Paramedic provider skill only)

- Palpate the cricothyroid membrane midline just below the thyroid cartilage and above the cricoid cartilage
- Cleanse the area
- Insert a 14-gauge catheter with a 10 cc syringe attached midline directed at a 45-degree angle towards the navel, while aspirating the syringe. When trachea is entered, air will be aspirated easily
- Attach the appropriate adapter and ventilate using high flow device
- Assess for adequacy of ventilation. Listen for breath sounds and observe for chest expansion
- Evaluate the response in the patient. Assess breath sounds, oxygen saturation, and general appearance of the patient
- Monitor capnography, pulse oximetry, and cardiac status. Observe closely for signs of complications
- Document time and response on the patient care report (PCR)
- Consider transport to the closest hospital if difficulty is encountered
- Caution: Despite proper technique, ventilation may still be inadequate, especially of an adult. Patient will require advanced airway (cricothyrotomy with ET, endotracheal intubation, tracheostomy)
- Possible complications include bleeding, perforation of the esophagus or perforation through the trachea, local cellulitis or hematoma and subcutaneous or mediastinal emphysema

