P120 LFD PROCEDURE PROTOCOL: PERCUTANEOUS CRICOTHYROTOMY

Introduction:

Paramedic

- Percutaneous cricothyrotomy is a difficult and hazardous procedure that is to be used only in extraordinary circumstances as defined below. The reason for performing this procedure must be documented and submitted for review to the EMS Medical Director within 24 hours.

Indications:

- A life-threatening condition exists ***AND*** advanced airway management is indicated, ***AND*** adequate oxygenation and ventilation cannot be accomplished by other less invasive means. **("Cannot Intubate/ Cannot Ventilate")**

Contraindications:

- If a patient can be ventilated and oxygenated by less invasive means.

Technique:

1. Ensure patent upper airway with placement of an oral airway and nasal airway, unless contraindicated.
2. Open pre-prepared kit, attach angiocath to syringe, and aspirate 1-2 mL of saline into syringe 3. Prepare skin using aseptic solution
4. Insert the IV catheter through the skin and cricothyroid membrane into the trachea. Direct the needle at a 45° angle caudally (toward the feet). When the needle penetrates the trachea a “pop” will be felt.
5. Aspirate with the syringe. If air is retuned easily or bubbles are seen (with saline), the needle is in the trachea.
6. Advance the catheter over the needle while holding the needle in position, then withdraw needle after catheter is advanced flush to skin.
7. Remove the plunger and attach the 3 mL syringe to the catheter hub
8. Attach the 15 mm adaptor to the needle hub
9. Oxygenate the patient with bag-valve-mask device using the 15 mm adaptor provide high flow oxygen.
10. Confirm and document catheter placement by: a. Waveform capnography b. Rising pulse oximetry
11. **Do not let go of catheter and be careful not to kink the catheter**. There is no reliable way to secure it in place, and it is only a temporizing measure until a definitive airway can be established at the hospital
12. Observe for subcutaneous air, which may indicate tracheal injury or extra- tracheal catheter position
13. Continually reassess oxygenation and catheter position.