

TITLE: NEEDLE CRICOTHYROTOMY FOR COMPLETE AIRWAY OBSTRUCTION EMS Policy No. 5926

PURPOSE: The purpose of this policy is to provide guidance for the use of needle cricothyrotomy as an alternative airway adjunct for use in patients with complete airway obstruction.

AUTHORITY: Health and Safety Code, Division 2.5, Section 1797.220, Title 22
California Code of Regulation.

POLICY:

- I. Paramedics who have successfully completed a San Joaquin County approved optional skills training program that included needle cricothyrotomy may perform needle cricothyrotomy using the method described in this procedure.
- II. All paramedics must complete the training program to achieve and maintain local accreditation.
- III. Needle cricothyrotomy may be performed without base hospital consultation when indicated.

IV. INDICATIONS

Needle cricothyrotomy is indicated in circumstances where there is a life threatening upper airway obstruction evidenced by complete inability to ventilate the patient and all other BLS and ALS airway maneuvers and techniques have failed.

V. CONTRAINDICATIONS

- A. Unobstructed airway.
- B. Ability to clear an obstructed airway utilizing other BLS/ALS airway maneuvers and skills.

VI. EQUIPMENT

- A. #10 gauge angiocath
- B. ETT adaptor
- C. BVM

Effective: **JANUARY 1, 2007**

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- D. Jet Insufflation Device

VII. PROCEDURE

- A. Locate the cricothyroid membrane and prep area.
- B. Extend the neck to bring the membrane anterior.
- C. Insert #10 gauge angiocath through membrane at 50 degree angle to the feet.
- D. May consider using second angiocath, in the same puncture site, for expired air outlet.
- E. Aspirate air during the insertion to confirm placement in the trachea.
- F. Once air has been aspirated, advance the catheter towards the feet while withdrawing the needle.
- G. Attach the adaptor to the end of the angiocath.
- H. Ventilate using trans tracheal jet insufflation. at a ratio of one (1) seconds of inflation to five (5) seconds of exhalation.
 - 1. If the airway pressure progressively increases with each insufflation, then briefly disconnect to allow for exhalation or insert second catheter for exhalation port.
 - 2. If subcutaneous emphysema occurs, stop insufflation and attempt second catheter placement

VIII. Continuous Quality Improvement

All cases in which cricothyrotomy is attempted or employed will be reviewed by the ALS provider and referred to the EMS Quality Improvement Coordinator within 72 hours.

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