Nasotracheal Intubation 5.5

PARAMEDIC STANDING ORDERS - ADULT

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INDICATIONS

- Impending respiratory failure, with intact gag reflex or jaw is clenched and unable to be opened. Only after basic procedures are deemed inappropriate or have proven to be inadequate should more advanced methods be used. Use a graded approach for treatment by using least invasive method first. NRFM → BVM → SGA → ETT → Cric.

CONTRAINDICATION

- Apnea.
- Nasal obstruction.
- Suspected basilar skull fracture.
- Patient fits on a pediatric length-based resuscitation tape (e.g., Broselow Tape).

PROCEDURE

1. Pre-medicate nasal mucosa with 2% lidocaine jelly and nasal decongestant spray, if available.
2. Pre-oxygenate the patient.
3. Select the largest and least obstructed nostril and insert a lubricated nasal airway to help dilate the nasal passage.
4. Lubricate the ETT with water-based lubricant.
5. Remove the nasal airway and gently insert the ETT with continuous quantitative waveform capnography monitoring, keeping the bevel toward the septum (a gentle rotation movement may be necessary at the turbinates).
6. Continue to advance the ETT while listening for maximum air movement and watching for capnography wave form.
7. At the point of maximum air movement, indicating proximity to the level of the glottis, gently and evenly advance the tube through the glottic opening on inspiration.
   - If resistance is encountered, the tube may have become lodged into the pyriform sinus and you may note tenting of the skin on either side of the thyroid cartilage. If this happens, slightly withdraw the ETT and rotate it toward the midline and attempt to advance tube again with the next inspiration.
8. Upon entering the trachea, the tube may cause the patient to cough, buck, strain, or gag. This is normal. Do not remove the ETT. Be prepared to control the cervical spine and the patient, and be alert for vomiting.
9. Placement depth from the nares to the tip of the tube should be approximately 28cm in males and 26 cm in females.
10. Inflate cuff with 5 – 10ml of air.
11. Confirm appropriate placement by quantitative waveform capnography, symmetrical chest-wall rise, auscultation of equal breath sounds over the chest and a lack of epigastric sounds with bagging, and condensation in the ETT.
12. Secure the ETT, consider applying a cervical-collar and securing patient to a long backboard (even for the medical patient) to protect the placement of the ETT.

Protocol Continues

5.5 Nasotracheal Intubation

Protocol Continued

PARAMEDIC STANDING ORDERS

13. Ongoing monitoring of ETT placement and ventilation status using waveform capnography is required for all patients.

14. Document each attempt as a separate procedure so it can be time stamped in the ePCR. **An attempt is defined as placement of the tube into the patient's nare**. For each attempt, document the time, provider, placement success, pre-oxygenation, airway grade, ETT size, placement depth, placement landmark (e.g. cm at the patient's lip), and confirmation of tube placement including chest rise, bilateral, equal breath sounds, absence of epigastric sounds and end-tidal CO_2 readings.

If continued intubation attempts are unsuccessful (maximum of 3 attempts) consider Cricothyrotomy. See Cricothyrotomy Procedures 5.2 OR 7.4.

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POST INTUBATION CARE - ADULT

Sedation:

- Midazolam 2 – 5 mg IV, every 5 – 10 minutes as needed, **OR**
- Lorazepam 1 – 2mg IV every 15 minutes as needed (maximum: 10mg) **AND**
- Fentanyl 50 – 100 micrograms IV.