

A. Introduction

It may be necessary to provide for a patent airway via an endotracheal tube even when a patient has spontaneous respirations and is not completely unresponsive. Hemorrhagic shock, severe head injury (GCS \leq 8), and heart failure with pulmonary edema are a few examples. When it is indicated, it may be necessary to provide sedation for the patient during the initial procedure and throughout further management.

B. Precautions

The placement of a laryngoscope and artificial airways into the pharynx may increase vagal tone and lead to gagging, retching, vomiting, bradycardia, and even asystole. Attempts at orotracheal intubation should be strictly limited to 30 seconds with effective oxygenation taking place prior to any attempt and between multiple attempts. Be prepared to suction the airway of a patient who vomits.

C. Procedure

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1. Pre-oxygenate the patient via BVM with 100% O₂.
2. Obtain and document a pre-sedation Glasgow Coma Score (GCS) as well as pupillary reaction. Note any significant neurological findings such as movement of extremities, posturing, or changes while under care.
3. Establish IV access (**Procedure 13**). If already obtained, ensure and document patency by dropping the bag and examining for blood return.
4. Monitor and record ECG. Monitoring should continue throughout the procedure. If the patient's heart rate decreases at anytime more than 20 bpm, STOP any attempt and oxygenate with 100% O₂ via BVM for a minimum of two minutes.
5. Monitor SpO₂ throughout procedure.
6. Prepare equipment:
 - a) Suction with rigid tip.
 - b) Laryngoscope (for Oral Intubation)
 - c) Proper size ET tube with 10-12 mL syringe.
 - d) Stylette (for Oral Intubation)
 - e) Capnographer
 - f) Stethoscope or BAAM (for Nasal Intubation)
 - g) Water-soluble lubricant (Lidocaine gel is preferred).
 - h) Device for securing ET tube.



7. Administer medications for sedation:

- a) When necessary, administer **Hurricane Spray (Xylocaine 10%)**, for 1-2 seconds into the oropharynx prior to any oral intubation attempts. Hurricane Spray (Xylocaine 10%) should not be used for patient in CHF.
- b) Administer **Versed (midazolam), 5 mg SLOW IV**. After two minutes if there is no evidence of adequate sedation, administer another 5 mg SLOW IV.

NOTE: Patients who are elderly or who have received Valium (diazepam) prior to sedation, should receive as an initial bolus, 2.5 mg SLOW IV then titrate subsequent doses until adequate sedation is achieved for a maximum dose of 10mg.

8. Sedation should occur in 1-2 minutes. Signs of adequate sedation:

- a) Patient drowsy but responsive.
- b) Slurred speech.
- c) Decreased respiratory rate.

NOTE: Over sedation may be determined in a patient who is unconscious and/or exhibiting snoring respirations.

9. Once adequate sedation is achieved, proceed with oral or nasal intubation. Remember to limit oral attempts to 30 seconds. If the heart rate falls, stop and assist ventilations with 100% O₂ via BVM.
10. Once the ET tube is placed, verify and document proper placement (**Procedure 3**).

MCP

11. Additional medication to maintain sedation.