

HEALTHEAST MEDICAL TRANSPORTATION
MEDICAL OPERATIONS MANUAL

7F1 DRUG FACILITATED AIRWAY MANAGEMENT (DFAM)

PATIENT CARE GOALS

- To secure the airway by administering induction and paralytic agents.
- Indications: severe respiratory distress or failure, persistent hypoxia after high flow O₂, altered mental status affecting the patient’s ability to maintain their own airway, airway compromise due to trauma, and potential airway compromise due to acute burns.¹

PARAMEDIC

1. Prepare for the procedure.
 - a. Establish vascular access
 - b. Draw up medications
 - c. Prepare suction equipment
 - d. Select and prepare ET tube, stylet, non-visualized airway, and other airway equipment
 - e. Attach ECG, capnography, and oximetry (ear probe preferred)
2. Pre-oxygenate the patient:
 - a. Apply smart cannula (always) and provide supplemental oxygen as needed.
 - b. For spontaneously breathing patients, apply nasal cannula O₂ at 15 L/min.
 - c. For non-breathing patients or those with significant pre-existing hypoxia, administer 100% O₂ via BVM.

ADULT	PEDIATRIC (less than 60 kg)
<ol style="list-style-type: none"> 3. Pre-treat² with the following medications, if indicated: <ol style="list-style-type: none"> a. Atropine 1 mg IV/IO if excessive respiratory secretions. b. Lidocaine 1 mg/kg IV/IO max dose 100 mg for suspected increased intracranial pressure. 4. Induce:² <ol style="list-style-type: none"> a. Etomidate (Amidate) 0.3 mg/kg IV/IO, push over 30 seconds. 5. Paralyze:² <ol style="list-style-type: none"> a. Succinylcholine (Anectine)³ 1.5 mg/kg IV/IO push, If relaxation does not occur after 90 seconds, administer an additional 0.5 mg/kg IV/IO push 	<ol style="list-style-type: none"> 3. Pre-treat² with the following medications, if indicated: <ol style="list-style-type: none"> a. Atropine 0.01 mg/kg IV/IO (minimum dose 0.1 mg, maximum dose 0.5 mg). b. Lidocaine 1 mg/kg IV/IO max dose 100 mg for suspected increased intracranial pressure 4. Induce:² <ol style="list-style-type: none"> a. Etomidate (Amidate) 0.3 mg/kg IV/IO, push over 30 seconds 5. Paralyze:² <ol style="list-style-type: none"> b. Succinylcholine (Anectine)³ 1.5 mg/kg IV/IO push, If relaxation does not occur after 90 seconds, administer an additional 0.5 mg/kg IV/IO push

6. Place Airway:²
 - a. Intubate the patient following the steps outlined in **7F2 Direct Laryngoscopy** or **7F3 Video Laryngoscopy** or **7E Supraglottic Airway** and confirm proper placement. Terminate intubation attempt if O₂ saturation fall below 90%.

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ADULT	PEDIATRIC (less than 60 kg)
<p>7. Provide sedation and analgesia for <u>all</u> patients using the following medications:</p> <ol style="list-style-type: none"> a. Midazolam (Versed) 5mg IV/IO slow push. Maximum May repeat every 15 minutes as needed. b. Fentanyl (Sublimaze) 2mcg/kg IV/IO. May repeat every 15 minutes as needed <p>8. Consider using a long acting paralytic if the patient regains their gag reflex or is resisting ventilation <u>and</u> is not a candidate for removal of the airway device. Administration of a long acting paralytic should also be considered when a long transport is anticipated. In these situations, administer one of the following:⁴</p> <ol style="list-style-type: none"> a. Vecuronium (Norcuron) 0.1 mg/kg rapid IV/IO push. Repeat as needed. b. Pancuronium 0.1 mg/kg IV/IO over 1 minute. Repeat as needed. c. Rocuronium 1.0 mg/kg IV/IO. Repeat as needed. 	<p>7. Provide sedation and analgesia for <u>all</u> patients using the following medications:</p> <ol style="list-style-type: none"> a. Midazolam (Versed) 0.1 mg/kg IV/IO slow push. Maximum single dose 5 mg. May repeat every 15 minutes as needed. b. Fentanyl (Sublimaze) 2mcg/kg IV/IO. May repeat every 15 minutes as needed <p>8. Consider using a long acting paralytic if the patient regains their gag reflex or is resisting ventilation <u>and</u> is not a candidate for removal of the airway device. Administration of a long acting paralytic should also be considered when a long transport is anticipated. In these situations, administer one of the following:⁴</p> <ol style="list-style-type: none"> a. Vecuronium (Norcuron) 0.1 mg/kg rapid IV/IO push. Repeat as needed. b. Pancuronium 0.1 mg/kg IV/IO over 1 minute. Repeat as needed. c. Rocuronium 1.0 mg/kg IV/IO. Repeat as needed.

DOCUMENTATION KEY POINTS

- Rationale for use of DFAM.
- Performance and timing of each step including drug dosages.
- Continuous monitoring of vital signs and complications (if any) encountered.

NOTES

¹ DFAM is **contraindicated** in the following situations:

- Known allergy to induction or paralytic medications
- Known history of malignant hyperthermia
- Anatomical deformities that would prevent airway placement

² Wait 2-4 minutes after medication is administered before moving on to next step. This allows each medication to take full effect during the procedure.

³ **Succinylcholine (Anectine)** is **contraindicated** in patients with suspected renal failure or other conditions which could cause hyperkalemia (i.e., extensive burns > 4 hours old, excited delirium, metabolic acidosis). In these cases, paralysis should be accomplished using **Vecuronium (Norcuron)**, **Pancuronium**, or **Rocuronium** if not contraindicated. If contraindicated, attempt intubation without paralytic. If unsuccessful, then it is acceptable to administer a long acting paralytic.

⁴ **Vecuronium (Norcuron)**, **Pancuronium** and **Rocuronium** are not to be used as a first line paralytic prior to securing the airway unless **succinylcholine (Anectine)** is contraindicated. Long acting paralytics are also **contraindicated** for use in patients with acute neurological conditions such as: status seizure, suspected stroke (hemorrhagic or embolic) or head trauma.