Drug Assisted intubation (DAI) Protocol

PURPOSE

To provide guidelines for definitive airway placement in Trauma patients.

PROCEDURE STATEMENTS

1. Indications for DAI
   
   A. Airway obstruction
   B. Hypoventilation (i.e. spinal cord injury)
   C. Severe hemorrhagic sock
   D. Severe hypoxemia (despite supplemental O₂)
   E. GCS ≤ 8
   F. Smoke inhalation or face/upper airway burns with impending airway obstruction
   G. Cardiac arrest

2. Orotracheal intubation (OTI) guided by direct video laryngoscopy is the procedure of choice for trauma patients.

   A. When the patient’s jaws are not flaccid and OTI is indicated, a drug regime should be given to achieve the following clinical objectives:

      • Neuromuscular paralysis
      • Sedation, as needed
      • Maintain normal hemodynamics
      • Prevent vomiting and aspiration
      • Prevent increases in the ICP
      • Prevent increases in intraocular pressure (especially if globe injury)

   B. To provide the best opportunity for successful emergent airway control the following are recommended:

      • The most experienced team available at that time
      • Pulse oximetry
      • Ability to monitor continuous end tidal CO₂ monitoring after intubation
      • Cricoid pressure (Sellick’s maneuver)
      • C-Spine neutrality
C. Cricothyroidotomy is appropriate when OTI fails. King LT is appropriate if expertise in cricothyroidotomy is unavailable.

Success rates of OTI without drug assistance: 80%
Complication rates of OTI without drug assistance: 19%

Success rates of OTI with drug assistance: 96%
Complication rates of OTI with drug assistance: 4%
**Drug Assisted intubation (DAI) Protocol**

**ADULT Practice Management Guideline**

<table>
<thead>
<tr>
<th>Effective: 06/2014</th>
</tr>
</thead>
</table>

**Contact: Trauma Center Medical Director/ Trauma Nurse Practitioner**

Last Reviewed: 01/2020

---

**Is DAI Needed?**

(Clinical Assessment)

---

**YES**

Inform team members of plans for DAI

---

**Verify**

- Working IV
- Cardiac monitor
- Pulse Oximetry
- End tidal CO₂

---

**SEDATION**

Etomidate 0.3 mg/kg (usually 30 mg)

Or

Versed 2-5 mg

---

Cricoid pressure

(Sellick’s maneuver)

Maintain until airway secured

---

**PARALYTIC**

Succinylcholine 1-2 mg/kg (usually 100-150 mg)

Or

Rocuronium 0.5 mg - 1 mg/kg (usually 100 mg)

---

WAIT ONE MINUTE

(or until fasciculation stops)

(Continue to Next Page)

---

Contraindication to Succinylcholine:

- Hyperkalemia
- Severe burns
- Penetrating eye injury
- Hx of malignant hyperthermia
- Increase in intracranial pressure
(Continued) Drug Assisted Intubation (DAI) Algorithm

Orotracheal Intubation

Successful

Failed

Verify position
- Auscultation
- End tidal CO₂
- Pulse Oximetry
- CXR

YES

Unsuccessful

Repeat laryngoscopy x 2
More experienced personnel

Bag Mask
SpO₂ x 90%
Effective ventilation

YES

Experience with surgical airway?

YES

Cricothyroidotomy

NO

King LT

NO