

Trauma Department Practice Manual

TITLE: Rapid Sequence Induction in the Trauma Bay

EFFECTIVE: November 5, 2012

PURPOSE: This is a clinical practice guideline for medication administration for rapid sequence induction and intubation in the trauma bay

I. Scope

Trauma service, Departments of Anesthesiology and Critical Care,
Department of Emergency Medicine

This is a guideline only. This does not constitute a standard of care or hospital policy. Clinicians can deviate from this guideline when clinically appropriate but must document a reason for doing so.

II. Procedures

- A. The final decision as to the need for intubation rests with the trauma attending surgeon in collaboration with the attending anesthesiologist. However, the means with which induction and intubation is to proceed will be determined by the attending physician overseeing this task.
- B. When possible, patients should received lidocaine 100 mg iv x 1 three minutes prior to induction.
- C. The induction agent of choice is Propofol 50-200 mg iv x 1. In instances when this agent is not available or contraindicated, the anesthesiology attending shall determine the induction agent to be used.
- D. It is recommended that Ketamine 1-3 mg/kg iv x 1 be used as a second-line agent if propofol is not available or contraindicated.
- E. Barring standard contraindications to its use, intubation should be facilitated by pharmacologic relaxation using Succinyl Choline 1 mg/kg iv x 1. If SuccinylCholine is not immediately available or contraindicated, the next preferred agent is Vecuronium 10 mg iv x 1.
- F. Following induction and intubation, patients should receive Vecuronium 10 mg iv x 1, if it has not been already been administered. Additionally, patients should receive sufficient benzodiazepine and narcotic to assure amnesia and pain control.
- G. Following administration of paralytics, A BIS monitor is strongly recommended to optimize depth of sedation. The target BIS score is 40-60.
- H. Continuous end-tidal CO₂ monitoring is strongly recommended following intubation, especially in patients with traumatic head injury. The end-tidal CO₂ should be maintained between 33-36 mmHg.

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- I. Propofol may be used as a maintenance agent following intubation once the patient's hemodynamic status has been stabilized. In these instances, narcotic administration is still required to address the patient's analgesic needs.
- J. In instances where neither IV nor intraosseus (IO) access is possible and the patient must be chemically restrained in order to establish intravascular or IO access, the following regimen is recommended: ketamine 5 mg/kg IM x 1 followed by succinylcholine 5 mg/kg IM x 1. Once IV/IO access has been established, the above guidelines should be used in inducing for intubation.

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