

Rapid Sequence Intubation in Trauma: Medication Recommendations for Induction and Neuromuscular Blockade

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Succinylcholine will be the preferred neuromuscular blocking (NMB) agent for trauma patients unless absolute contraindications exist. Relative contraindications should also be considered with the optimal agent chosen in a collaborative manner between Trauma Surgery and Emergency Medicine.

Contraindications to succinylcholine:

Absolute:

- Burns present >24 hours
- Known or highly-suspected hyperkalemia
- Spinal cord injury or stroke (7 days to 6 months after event)
- Crush injury > 7 days
- History of myasthenia gravis
- History of malignant hyperthermia
- Guillain-Barré Syndrome or Lambert-Eaton Syndrome
- History of muscular dystrophy
- Organophosphate poisoning
- Known allergy to succinylcholine

Relative:

- Significant acute crush injury
- Possible hyperkalemia
- ESRD or other renal failure
- Prolonged immobilization (>3 days)
- Pregnancy (Category C)

Dosing

Induction agents (may reduce dose by 33-50% for hypotension or other hemodynamic instability):

- Etomidate – 0.3mg/kg total body weight (TBW)
- Ketamine – 1.5mg/kg TBW

Neuromuscular blocking agents:

- Succinylcholine – 1.5 mg/kg TBW
- Rocuronium – 1.5mg/kg TBW – maximum dose of 150mg

Reversal agents:

- Sugammadex (reversal of nondepolarizing NMBs) – 2-4mg/kg