



AIRWAY MANAGEMENT: “7 Ps of RSI”

1. Preparation:

- a. Monitor pulse oximetry, blood pressure (BP), cardiac rhythm
- b. At least one functioning (IV) line (preferably two)
- c. BVM, Yankauer suction, end tidal carbon dioxide (CO₂) capnography
- d. Functioning laryngoscope with blade of choice
- e. Endotracheal tube [man: 8.0mm, woman 7.0mm internal diameter (ID); pediatric: use length-based (Broselow tape) system or rough guide [four plus age (in years) divided by 4], check cuff, load and shape stylet, 10mL syringe
- f. All RSI medications ready to be administered
- g. Assess for possible difficult airway

2. Preoxygenation:

- a. 3 minutes of normal tidal volume breathing or eight vital capacity breaths with 100% oxygen (O₂) [use non-rebreathing (NRB) oxygen mask if 100% O₂ source not available]: prevents desaturation during intubation

3. Pretreatment:

- a. Lidocaine 1.5 mg/kg IV – reduces intracranial and bronchospastic response to laryngoscopy in patients with elevated intracranial pressure (ICP) or reactive airway disease
- b. Fentanyl 3 µg/kg IV (over 1 minute) – reduces sympathetic response [elevated heart rate (HR) and blood pressure (BP)] to intubation in patients with elevated ICP, intracranial hemorrhage, cardiac ischemia, or aortic dissection
- c. Vecuronium bromide 0.01 mg/kg IV (or pancuronium bromide) – blunts ICP elevation caused by succinylcholine in patients with elevated ICP
- d. Atropine: Consider pretreatment with atropine in children under age one



4. **Paralysis with induction:**
 - a. One of the following induction agents (or equivalent) given rapid IV push prior to paralysis:
 - i. Etomidate 0.3 mg/kg IV
 - ii. Midazolam 0.3 mg/kg IV
 - iii. Ketamine hydrochloride 1.5 mg/kg IV
 - iv. Propofol 1-2mg/kg IV
 - b. Paralytic agent by IV push immediately after induction agent:
 - i. Succinylcholine 1.5 mg/kg IV
 - ii. Rocuronium 1 mg/kg IV if succinylcholine contraindicated (see table below)
5. **Protection:**
 - a. Sellick maneuver (firm pressure on cricoid cartilage to prevent gastric regurgitation) should be applied as soon as consciousness lapses and be maintained throughout intubation until tube placement confirmed
6. **Placement:**
 - a. Insert endotracheal tube with direct visualization of the vocal cords
 - b. Inflate cuff
 - c. Confirm endotracheal tube is in the trachea using end tidal CO₂ capnography
 - d. Auscultate lungs bilaterally to ensure right mainstem intubation has not occurred
 - e. Secure endotracheal tube with tape
 - f. Release Sellick maneuver
7. **Post-intubation management:**
 - a. Chest x-ray to assess placement of endotracheal tube (tip should be at mid trachea)
 - b. Long-acting sedatives and, if necessary, paralytics
 - i. Lorazepam 0.05 mg/kg IV for sedation
 - ii. Vecuronium 0.1 mg/kg IV for paralysis
 - c. Initiate mechanical ventilation
 - d. Sedative: Propofol bolus/drip



Succinylcholine contraindications
Hyperkalemia <ul style="list-style-type: none">• Burn >10% body surface beyond 72 h and less than 6 mo• Paralysis beyond 3 d and less than 6 mo• Denervation syndrome until inactive for 6 mo• Crush injury beyond 3 d and less than 6 mo• Abdominal sepsis beyond 3 d
Increased intraocular pressure (i.e., penetrating globe injury)
History of malignant hyperthermia
Muscular dystrophy, multiple sclerosis, and amyotrophic lateral sclerosis always contraindicated

RIS – standard patient (70 kg)
100% oxygen (3 min or 8 VC breaths)
Etomidate 20 mg IV
Succinylcholine 100 mg IV
WAIT 45 S
Intubation
<i>RSI, rapid-sequence intubation; VC, vital capacity; IV, intravenous.</i>

RSI – patient with increased ICP (70 kg)
100% oxygen (3 min or 8VC breaths)
Lidocaine 100 mg IV
Vecuronium 1 mg IV
Fentanyl 200 µg IV
WAIT 3 MIN
Etomidate 20 mg IV
Succinylcholine 100 mg IV
WAIT 45 S
Intubation
<i>RSI, rapid-sequence intubation; ICP, intracranial pressure; VC, vital capacity; IV, intravenous.</i>

RSI – asthma/COPD patient (70kg)
100% oxygen (3 min or 8 VC breaths)
Lidocaine 100 mg IV
WAIT 3 MIN
Ketamine 100 mg IV
Succinylcholine 100 mg IV
WAIT 45 S
Intubation
<i>RSI, rapid-sequence intubation; VC, vital capacity; IV, intravenous; COPD, chronic obstructive pulmonary disease.</i>

RSI – pediatric patient (<10 y old)
100% oxygen (3 min or 8 VC breaths)
Atropine 0.02 mg/kg IV
WAIT 3 MIN
Etomidate 0.3 mg/kg IV
Succinylcholine 2 mg/kg IV
WAIT 45 S
Intubation
<i>RSI, rapid-sequence intubation; VC, vital capacity; IV, intravenous;</i>