



CCT-RN/Paramedic Treatment Guideline 1901/2901

Advanced Airway Management (RSI)

Page 1 of 3

Rapid Sequence Intubation (RSI) should only be performed if a rapid airway is indicated, and benefits outweigh potential risks. This guideline is for patients that require intubation but are awake, continue to have respiratory effort, and intact cough/gag reflex. Whenever possible, RSI should be performed prior to transport. This guideline is not intended for patients in cardiac arrest because they should be intubated without drugs per **Airway Management Protocol 4901**.

The EMS provider must have a backup/rescue airway plan (LMA, Combitube, cric, etc.) in mind and immediately accessible for all patients under consideration for RSI prior to proceeding:

A. General Information.

1. Patient should be on a cardiac monitor and pulse oximeter. Maintain patient on high flow supplemental oxygen either by mask or bag-valve-mask. Confirm or initiate two IVs if possible, preferably large bore. Have suction hooked up and on. Have bag-valve-mask hooked to oxygen and immediately available.

2. Pre-oxygenate the patient using 100% oxygen. Assure that you can assist ventilations with a bag-valve-mask prior to proceeding. **DO NOT BAG VENTILATE the patient unless necessary**—this only causes increased gastric distention and the increased risk of aspiration.

B. RSI Procedure.

1. If suspected closed head injury or other reason for high ICP, give lidocaine 1.0 – 1.5 mg/kg IV push at least 3 minutes prior to intubation if possible.

2. Defasciculating agent if time permits. May skip if etomidate is used in Step 5.
a. vecuronium (*Norcuron*): 0.01 mg/kg IV push (max. dose 1 mg; usual dose in adult is 1 mg); **OR**
b. rocuronium (*Zemuron*): 0.06 mg/kg IV push

3. Consider fentanyl (*Sublimaze*): 1 – 3 mcg/kg IV slow push. Withhold if hypotensive or if rapid airway management is mandatory.

4. Apply cricoid pressure (Sellick's Maneuver).



CCT-RN/Paramedic Treatment Guideline 1901/2901

Advanced Airway Management (RSI)

Page 2 of 3

5. Sedative agent:

- a. etomidate* (*Amidate*): 0.3 mg/kg (use 0.2 mg/kg if hypotensive) **OR**
- b. midazolam (*Versed*): 2 – 10 mg IV push (max. dose 0.1 mg/kg).

Do not use midazolam in hypotensive patients.

*Note: Etomidate is the preferred sedative, especially in patients with possible hemodynamic compromise. If etomidate is used, succinylcholine should already be drawn up and ***immediately*** follow the etomidate administration.

6. Pre-treat (prophylactically against bradycardia) children < 5 years old prior to administration of succinylcholine.

- a. atropine 0.02 mg/kg IV (minimum dose 0.1 mg; max. dose 1 mg)

7. If not contraindicated,** consider succinylcholine (*Anectine*): 1.5 – 2.0 mg/kg IV push. When paralysis is achieved (in about 30 – 45 seconds), orally intubate patient, inflate cuff, and confirm tube placement (bilateral breath sounds, tube fogging, good oxygen saturations, appropriate End Tidal CO₂ readings, etc.).

**Note: Contraindications include high intraocular pressure, high potassium (K>5.5), burns and spinal cord injuries > 24 hours old, pseudocholinesterase deficiency.

8. If unable to intubate, consider suctioning, jaw thrust, changing operators, using a different blade, etc.; monitor oxygen saturations and use bag-valve-mask to ventilate between attempts if needed.

9. Use rescue airway plan (LMA, Combitube, King, cricothyrotomy, etc.) and/or bag-valve-mask if unable to intubate after 3 attempts.

10. Once intubation is confirmed, if patient requires continued sedation, long term paralytics***, or analgesics, consider the following drugs and repeat as necessary based upon patient response and drug duration of action:

a. Sedation:

1. midazolam (*Versed*): 0.1 mg/kg IV push (if not hypotensive) **OR**
2. lorazepam (*Ativan*): 1 - 2 mg IV push, **OR**
3. diazepam (*Valium*): 5 mg slow IV push over 2 minutes



CCT-RN/Paramedic Treatment Guideline 1901/2901

Advanced Airway Management (RSI)

Page 3 of 3

b. Analgesia:

1. fentanyl (*Sublimaze*): 1 - 3 mcg/kg slow IV push, **OR**
2. morphine sulfate: 2 - 4 mg slow IV push

c. Long-term paralytics:***

1. vecuronium (*Norcuron*): 0.1 mg/kg IV push, **OR**
2. rocuronium (*Zemuron*): 1 mg/kg IV push

*****Note: an agent for long term paralyzation must never be given until endotracheal tube placement is fully confirmed.**

11. All patients given a long-term paralytic agent *must* also periodically be given sedation while they remain paralyzed.

C. **Contact Medical Command** enroute with patient update for all patients requiring intubation.

