



CHARLOTTESVILLE-ALBEMARLE RESCUE SQUAD

Clinical Review and Training

Epinephrine (Adrenalin) 1:1,000

Class: Sympathetic agonist

Indications

Skill Level: E, I/P

- Bronchial constriction with asthma,
- COPD exacerbation
- Anaphylaxis

Contraindications

- None in anaphylaxis
- Do not give in any patient over 50 with cardiac history
- Tachycardia with pulse greater than 140 in adult
- Tachycardia with pulse greater than 180 in child
- Hypertensive

Mechanism of Action

- Stimulates α - and β -adrenergic receptors
- Alpha-1: Bronchial, skin, renal, and visceral arteriolar constriction
- Beta-1: Positive inotropic and chronotropic effects; increases automaticity
- Beta-2: Bronchial smooth muscle relaxation and dilation of skeletal vasculature

Pharmacokinetics

- Onset: 3-10 minutes (subcutaneous)
- Peak Effects: 20 minutes
- Duration: 20-30 minutes
- Half-Life: Varies

Side Effects

- Palpitations
- Hypertension
- Dysrhythmias

Dosage

- Adult: **0.3 mg SQ**
- Pediatric: **0.01 mg/kg SQ**

Supplied

- Glass ampule: 1 mg/1 mL
- Multi-dose vial: 30 mL or 1 mg/1 mL