



Pharmacology: EPINEPHRINE

By Jim Moss

Indications:

- Cardiac Arrest*: ventricular fibrillation, pulseless ventricular tachycardia, Asystole/Pulseless Electrical Activity
- Status Asthmaticus*, refractory to albuterol
- Anaphylaxis*
- Symptomatic Bradycardia*, refractory to Atropine

Precautions/Contraindications:

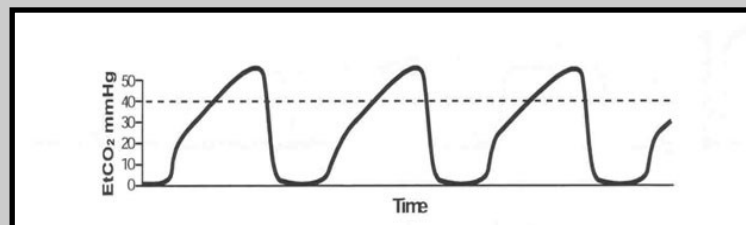
- Hypertension, chest pain
- Administer with caution for asthmatics over 40
- May cause increased myocardial oxygen demand and possible ischemia

Dosing: **ADULTS**— *CARDIAC ARREST* = 1 mg IVP (1:10,000) q 3-5 min, NO MAX
SYMP. BRADYCARDIA = 2-10 mcg/min IV infusion (1mg 1:1,000 in 250ml)
ANAPH./ASTHMA=0.3-0.5mg IM (1:1,000) or 0.1-0.3mg IVP slow (1:10,000)

PEDIATRICS—

CARDIAC ARREST = 0.01 mg/kg IVP (1:10,000) q 3-5 min NO MAX
SYMP. BRADYCARDIA = 0.01 mg/kg IVP (1:10,000) q 3-5 min NO MAX
ANAPH./ASTHMA = 0.01 mg/kg IM (1:1,000) Max single dose 0.3 mg

Scenario: 22 y/o Male c/o of severe dyspnea X1 day. Pt speaks in short bursts, is very agitated and restless. Pmhx of asthma. Pt states that he has tried to use his “puffer,” but it is not working. RR 45, ETCO₂ 60 mm Hg, HR 120, SPO₂ 88% RA, BP 128/70



Plan of care:

Frequent Vital Signs
 Capnography waveform monitoring, confirm bronchoconstriction
 Obtain SAMPLE history to rule out contraindications
 Albuterol 2.5 mg nebulized with BIPAP and 100% O₂, repeat up to 3 times
 IV access
 ECG monitoring
Epinephrine 0.3-0.5 mg IM (1:1,000)
 *Consider Magnesium Sulfate IV, corticosteroids IV, and intubation.