EPINEPHRINE

PHARMACOLOGY & ACTIONS:

- Catecholamine with alpha & beta effects
- Increased heart rate, arterial blood pressure, systemic vascular resistance, automaticity, myocardial O2 consumption, and myocardial contractile force.
- Potent bronchodilator

INDICATIONS:

- Ventricular fibrillation
- Asystole
- Pulseless Electrical Activity
- Systemic allergic reactions
- Asthma in patients under 50

CONTRAINDICATIONS:

- Use caution in patients with peripheral vascular insufficiency.

ADMINISTRATION:

- Adult dose: Cardiac arrest dosing options:

    a. 1.0 mg (1:10,000) IV every 3-5 minutes during arrest
    b. 2-5 mg (1:1,000 diluted in 10 ml NS) every 3-5 minutes
    c. .01 mg/kg (1:1,000 diluted in 10 ml NS) every 3-5 minutes
    d. May be given via ET at 2-2.5 times IV dose

- Allergic reaction, anaphylaxis shock, laryngeal edema, severe asthma:

    a. .3 (1:1,000) SQ, IM
    b. 2-3 ml 1:10,000 IV over 30-60 seconds

- Pediatric dose: Cardiac arrest:

    a. .01 mg/kg (1:10,000) IV or IO every 5 minutes

- Allergic reaction, anaphylaxis shock, laryngeal edema, severe asthma:

    a. .01 mg/kg (1:1,000) SQ, IM, IO or injected SL
    b. 1-2 ml (1:10,000) IV over 30-60 seconds

SIDE EFFECTS & SPECIAL NOTES:

- Anxiety, tremor, headache, tachycardia, palpitations, PVCs, angina, and HTN
- Should not be added directly to bicarbonate infusion; catecholamine may be partially deactivated by alkaline solution.
- When used for allergic reactions, increased cardiac work may precipitate angina and/or MI in susceptible individuals.
- Wheezing in an elderly patient is considered pulmonary edema or pulmonary embolus until proven otherwise.

CLASS: **A**

PROTOCOL(S) USED IN: **Anaphylaxis, ACLS, Asthma, Respiratory Distress**