

CLASS: A

PROTOCOL(S) USED IN: Cardiac Arrest Post Resuscitation, Cardiac Dysrhythmia Bradycardia, Respiratory Distress, Shock

PHARMACOLOGY AND ACTIONS:

- A. Chemical precursor of epinephrine which occurs naturally in man.
- B. Has both alpha- and beta- receptor stimulating actions depending upon the dose.
- C. 1-2 mcg/kg: dilates renal and mesenteric vessels.
- D. 2-10 mcg/kg: beta effects on heart which usually increase cardiac output without increasing heart rate or blood pressure.
- E. 10-20 mcg/kg: alpha peripheral effects cause peripheral vasoconstriction and increase blood pressure.
- F. 20-40 mcg/kg: alpha effects reverse dilation of renal and mesenteric vessels resulting in decreased flow.

INDICATIONS:

- A. Primary indication is cardiogenic shock.
- B. May be useful in other forms of shock, except hypovolemic.

CONTRAINDICATIONS:

- A. Hypovolemic shock
- B. Decrease or stop infusion if tachyarrhythmias or HTN occur.

SIDE EFFECTS AND NOTES:

- A. Ectopic beats, N/V, angina, VT, VF, HTN, headache, ischemia, AMI
- B. Can precipitate hypersensitivity crisis in susceptible individuals especially those on MAO inhibitors.
- C. Best administered by an infusion pump to accurately regulate rate.
- D. Rule out hypovolemic shock and treat with appropriate fluids before administration of dopamine.
- E. Should not be added to sodium bicarbonate or other alkaline solutions since dopamine will be deactivated in alkaline solutions.

ADULT DOSING:

Infusion rate should start between 2-10 mcg/kg/min based on specific treatment protocol, gradually increasing to 10-20 mcg/kg/min until desired effect is achieved.
Use microdrip chamber only.

PEDIATRIC DOSING:

Same as adult.