

DOPAMINE (Intropin®)

PHARMACOLOGY & ACTIONS:

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

INDICATIONS:

- Primary indication is cardiogenic shock
- May be useful in other forms of shock except hypovolemic

CONTRAINDICATIONS:

- Infusion should be decreased or stopped if tachyarrhythmias or HTN occur.
- Hypovolemic shock

ADMINISTRATION:

- Adult infusion dose: premix IV bag of 400 mg dopamine in 250 ml NS.
- Infusion rate should start between 2-5 mcg/kg/min, gradually increasing to 10-20 mcg/kg/min until desired effect is achieved. **Microdrip chamber only.**

SIDE EFFECTS & SPECIAL NOTES:

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

CLASS: C

PROTOCOL(S) USED IN: ACLS