# Dopamine (Intropin®) – 20.120

**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.**