



## Pharmacology:

### DOPAMINE

by Jim Moss

**Indications:**

- Cardiogenic, Neurogenic, and Septic (Norepinephrine preferred) shock
- Symptomatic bradycardia refractory to Atropine
- Hypovolemic shock AFTER administration of 2 liters of IV fluids (Adults)

**Precautions/Contraindications:**

- Tachyarrhythmias
- Co-administration with Sodium Bicarbonate will cause mixture to precipitate
- Pheochromocytoma (hypersecretion of catecholamines—EPI/NOREPI)

**Dosing:**

ADULTS— 2-20 mcg/kg/min

PEDIATRICS— 2-20 mcg/kg/min

*\*Mix 400 mg Dopamine in 250 ml bag of D5W, titrate to desired effect*

**Scenario:**

**26 y/o Male involved in a motorcycle accident, thrown from the motorcycle. Pt is confused, skin is WARM and dry, lower extremities have no motor/sensation. HR 40, BP 80/40, RR 20, SPO2 92% RA, BG 100 mg/dl. Weight: 60 kg.**



**Plan of care:**

**NEUROGENIC SHOCK (severing of spinal cord ↓ catecholamine release)**  
 Frequent Vital Signs  
 Spinal Immobilization, per protocol  
 Oxygen Therapy  
 IV access X2, large bore  
 Consider fluid bolus  
*Dopamine 2-20 mcg/kg/min IV infusion, titrated to adequate HR and BP*  
 ECG monitor

**IV bag Volume X Dose MCG X Drip Set X Weight = Drips/Minute**

**Amount of Drug in Bag X Time**

**250cc X 10 mcg X 60 gtts X 60 kg = 22.5 gtts/min**

**400,000 mcg X 1 minute**