

## DOPAMINE (Intropin)

### **ACTION: Inotropic, Chronotropic**

- Catecholamine (sympathomimetic)
- Dose depend stimulation of alpha, beta and dopaminergic receptors.
- At low doses (2 to 5 mcg/kg/min) stimulates dopaminergic receptors (renal and mesenteric artery dilation).
- At medium doses (5 to 10 mcg/kg/min) stimulates beta receptors (increased heart rate and contractility resulting in increased cardiac output).
- At high doses (greater than 10 mcg/kg/min) stimulates alpha-adrenergic receptors (peripheral vasoconstriction, increased blood pressure).

### **INDICATIONS:**

Hypotension due to:

- **Cardiogenic shock.**
- **Distributive shock:** Neurogenic and anaphylactic shock.
- **Symptomatic bradycardias** unresponsive to other treatments such as atropine and pacing.

### **CONTRAINDICATIONS:**

- Tachydysrhythmias.
- Use only 1/10 the normal dose in patients on Monoamine Oxidase Inhibitors (MAOI's) such as: Eutonyl, Parnate, Nardil as they potentiate the effects of Dopamine.

### **POTENTIAL SIDE EFFECTS:**

- Tachydysrhythmias including V-Tach and V-Fib.
- Hypertension.
- Nausea and vomiting.
- Chest pain, ischemia and acute MI exacerbation.
- Extravasation causes tissue necrosis.

### **ADULT DOSE/ROUTE:**

⇒ **Cardiogenic or distributive shock:** 5-20 mcg/kg/min IV/IO infusion. Titrate to SBP >90 mmHg.

### **PEDIATRIC DOSE/ROUTE:**

⇒ **Cardiogenic or distributive shock:** 5-20 mcg/kg/min IV/IO infusion. Initiate only per instructions from Base Hospital MD.

### **NOTES:**

- Do not infuse in same line with sodium bicarbonate
- Ensure that the patient is not hypovolemic before infusing dopamine.

**EPINEPHRINE 1MG/1000ML (1MCG/ML) INFUSION  
FOR USE ONLY WHEN DOPAMINE ON SHORTAGE**

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- Dose dependent stimulation of alpha, beta and dopaminergic receptors.

**INDICATIONS** Hypotension due to:

- **Cardiogenic shock.**
- **Distributive shock:** Neurogenic and anaphylactic shock.
- **Symptomatic bradycardias** unresponsive to other treatments such as atropine and pacing.

**CONTRAINDICATIONS:**

- None in life threatening situation

**POTENTIAL SIDE EFFECTS:**

- Tachydysrhythmias including V-Tach and V-Fib
- Hypertension
- Nausea and vomiting
- Chest pain, ischemia and acute MI exacerbation
- Extravasation causes tissue necrosis

**ADULT DOSE/ROUTE:**

⇒ **Cardiogenic or distributive shock:** Inject 1mg (1:1000 OR 1:10,000) epinephrine into 1000ml of 0.9% sodium chloride. **DO NOT USE PRESSURE BAG**, run it at ~10-20ml/min using the drip chamber. If SBP>90mm Hg, use roller clamp to slow rate.

**PEDIATRIC DOSE/ROUTE:**

⇒ **NOT FOR PEDIATRIC USE. Contact Base Hospital MD.**

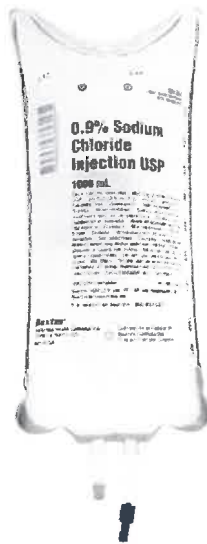
**NOTES:**

- Do not infuse in same line with sodium bicarbonate
- Ensure that the patient is not hypovolemic before infusing
- Label bag clearly to prevent rapid infusion

## Epinephrine 1mcg/ml infusion preparation



Add 1ml of 1:1000 = 1mg      **OR**      10ml of 1:10,000 = 1mg  
to 1000ml 0.9% sodium chloride



And run at 10-20ml/min on largest gauge IV site

**DO NOT PRESSURE BAG**