

Dopamine Drips

WHAT: Dopamine is a sympathomimetic which acts directly on the alpha receptors (Peripheral vessel constriction) and beta adrenergic receptors (Increased contractility) having a positive inotropic effect.

WHEN: REMS Protocols

- II-07 Hypotension: If a patient remains hypotensive (SBP <80mmHg) after 2 liters of NS, Administer Dopamine Hcl starting at 5mcg/kg/min and titrate to SBP of 90 mmHg. (max dose 20mcg/kg/min.)
- II-04.3 Bradycardia: Bradycardia refractory to Atropine. Dopamine infusion at 2-10 mcg/kg/min.
- II-04.6 ROSC: Inadequate perfusion (SBP <80) after 20 cc/kg NS infusion up to 2L, administer Dopamine 2-10 mcg/kg/min.



HOW SUPPLIED: We receive Dopamine supplied in a premixed bag with 1600mcg/ml concentration. The volume of the bag has been known to change depending on the hospital supply, but the concentration remains the same. Typically we see 400mg/250ml or 800mg/500ml.

ADMINISTRATION: Dopamine is administered via drip, not an iv bolus. Below you will find some quick and easy methods that will assist you with your calculations. Utilize the one that works best for you.

Method 1: Kilogram quick method
 Formula: $mL/hr = .0375(\text{constant}) \times \text{weight (kg)} \times \text{dose (mcg/kg/min)}$
 *Typical Dose (2-10mcg/Kg/min)
 (since a microdrip (60gtt/ml) is used, mL/hr is equal to gtt/min.)

Example: Kilogram Quick Method

Dose: 5mcg/kg/min
 Pt weight in KG: 80

$Ml/hr(gtt/min) = 0.0375 \times 80kg \times 5mcg/kg/min$
 Flow rate=15gtts/min

Method 2: Pounds (LBS) quick method
 Formula: 1) Weight in LBS
 2) Remove last number
 3) Subtract 2 (if weight <299lbs)
 " 3 (if weight between 300-399lbs)
 " 4 (if weight >400 lbs)
 4) Answer obtained is gtts/min. Dose is based on 5 mcg/kg/min
 *60gtt set required.

Example: LBS Quick Method

Dose: 5mcg/kg/min
 Pt weight in LBS: 176 (80kg)

- 1) 176 (remove last number)=17
- 2) Subtract 2: 17-2=15
- 3) Flow rate=15gtts/min using microdrip