REGIONAL PEDIATRIC PARENTERAL DRUG MONOGRAPH

GENERIC NAME

DOPamine

Effective Date: Dec 2011

Revised Date: Dec 2022

CLASSIFICATION	OTHER NAMES	PAGE
Sympathomimetic	**Intropin** **Revimine**	1 of 2

ADMINISTRATION POLICY:

IV Infusion: Administration restricted to nurses experienced in ED/Cardiac Room/ICU/PACU

RECONSTITUTION/DILUTION/ADMINISTRATION:

Available as: 200 mg in 250 mL PVC bag premixed (800 mcg/mL = 0.8 mg/mL)

Central: Preferred site of administration

Peripheral: Administration may be used only as an interim measure until CVAD is established

Intraosseus (IO): No special considerations

IV Infusion: Pump Library:

Drug Library	**Dose Rate**	**Short Name**	**Care Unit**
Yes	mcg/kg/min	dopa200	Pediatric
Drug	**Diluent**	**Final Volume (VTBI)**	**Final Concentration**
200 mg premixed	250 mL premixed	250 mL	0.8 mg/mL
Clinical Advisory: High Alert			
Soft Low Dose Limit: 1 mcg/kg/min		Soft High Dose Limit: 20 mcg/kg/min	

DOSAGE:

IV Infusion: Initial: 1 to 5 mcg/kg/minute and increase by 1 to 2.5 mcg/kg/minute every 10 to 15 minutes until clinical response achieved

Maximum rate: 20 mcg/kg/minute

Maximum concentration: 800 mcg/mL (0.8 mg/mL)

STABILITY/COMPATIBILITY:

Stability of Premixed bag: Change infusion bags every 24 hours

Compatibility: Compatible with D5W, normal saline, dextrose/saline solutions, Lactated Ringer

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PRECAUTIONS, POTENTIAL ADVERSE REACTIONS:

- Most symptoms associated with a rapid increase in blood pressure, and usually disappear with discontinuation of infusion or a reduction of infusion rate
- CV: Tachycardia, ectopic beats, dysrhythmias, conduction abnormalities, hypertension, anginal pain
- GI: Nausea, vomiting
- Neuro: Headache, anxiety, piloerection
- Renal: Decreased urine output (especially with dosages greater than 10 mcg/kg/min), azotemia
- Local: Vasoconstriction, venous streaking, gangrene of extremities Extravasation with tissue necrosis (refer to ADDITIONAL NOTES)
- Other: Dilated pupils; allergic reactions in patients sensitive to sulfite
- Caution: Correct hypovolemia preferably before initiating dopamine
- Caution: Increased risk of gangrene of extremities secondary to vasoconstriction with peripheral IV or umbilical catheter (UC) administration, high dosages (greater than 20 mcg/kg/minute) or in patients with cold injury or occlusive vascular disease (even at low dosages)
- phenytoin – concurrent administration (especially rapid administration): hypotension, bradycardia, seizures
- MAO inhibitors (including Linezolid) – severe hypertension during concurrent administration: start at 1 mcg/kg/minute and increase every 15 – 30 minutes
- Contraindicated with sensitivity to sulfites
- Pheochromocytoma
- Uncorrected tachydysrhythmias or ventricular fibrillation
- Do not administer through an umbilical catheter (UC)

ADDITIONAL NOTES AND NURSING CONSIDERATIONS:

Dose related effects

- Low dose: 2 to 5 mcg/kg/minute — Increased renal blood flow, little effect on heart rate and cardiac output
- Intermediate dose: 6 to 10 mcg/kg/minute — Increased cardiac contractility, cardiac output and heart rate
- High dose: Greater than 10 mcg/kg/minute — Alpha adrenergic effects predominate with vasoconstriction, decreased renal perfusion

Dosages greater than 20 mcg/kg/minute rarely necessary

NOTE: *Neonates and chronically ill cardiac patients may require higher dosages due to depletion of endogenous norepinephrine stores*

Extravasation

- Significant risk with peripheral IV site but may also occur with central venous

Required monitoring

- Blood Pressure, Heart Rate: Baseline and every 15 minutes during dosage adjustments
  Continuous cardiac and blood pressure monitoring preferred but not required
- Peripheral site: Check IV site hourly and for blanching, localized edema or discoloration