

Yorkshire and Humber Neonatal Operational Delivery Network

Drug Administration Guide

Dopamine

Indication	Hypotension
Dose	Initially 5 micrograms/kg/minute Adjust dose according to response (2 to 20 micrograms/kg/minute)
Route of administration	IV infusion via central line In an emergency dopamine 60mg in 50mL may be given peripherally while central access is obtained. The site should be continually monitored. It can cause severe extravasation injuries.
To prepare an infusion	200mg in 5mL vials (40mg/mL) Preferred diluent: glucose 10%, glucose 5% Other diluents: sodium chloride 0.9% Standard: 60mg in 50mL total Draw up 1.5mL of 200mg/5mL dopamine (60mg) and add to 48.5mL of diluent Double strength: 120mg in 50mL total Draw up 3mL of 200mg/5mL dopamine (120mg) and add to 47mL of diluent
Compatibilities	Adrenaline, alprostadil, amiodarone, atracurium, aztreonam, caffeine citrate, ceftazidime, clarithromycin, dobutamine, fentanyl, fluconazole, heparin, hydrocortisone, linezolid, meropenem, metronidazole, midazolam, milrinone, morphine sulphate, noradrenaline, pancuronium, potassium chloride, ranitidine, tazocin, vasopressin, vecuronium, zidovudine Note: parenteral nutrition compatible when dopamine strength <3.2mg/ml.
Known incompatibilities	Aciclovir, alteplase, amphotericin B, insulin, furosemide, sodium bicarbonate, THAM. Note: parenteral nutrition not compatible when dopamine strength ≥160mg/50mL
Notes	Monitor blood pressure and heart rate. If urine output falls, dosage should be reduced. <u>Quadruple strength:</u> 240mg in 50mls total Draw up 6mls of 200mg/5ml dopamine (240mg) and add to 44mls of diluent At doses below 8 to 10 micrograms/kg/min dopamine increases blood pressure by a direct and indirect inotropic and beta-adrenergic effect on the heart. At higher doses an alpha-adrenergic effect dominates and there is increasing vasoconstriction in all vascular beds. Low dose dopamine is often referred to as a 'renal dose' because of alleged renal vasodilatation through dopaminergic action. There is little evidence to support this and a renal action is strongly disputed by many, if not most, authorities. If there is no compatibility information for specific drugs, do not assume compatibility. For incompatible drugs or those with no compatibility information use a separate line. For side-effects see the BNFc - Dopamine BNFc
References	Leeds Teaching Hospitals neonatal prescribing and administration monograph, BNFc, Handbook or Injectable Drugs Trissel et al, Medusa.

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Clinicians must accept individual responsibility for using this information and prescribing safely.