

## NEONATAL MEDICATION PROTOCOLS

**HEPARIN SODIUM**  
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<b>DRUG:</b>	<b>HEPARIN SODIUM</b>
<b>PRESENTATION:</b>	Ampoule: 1000 units / mL
<b>ACTION &amp; INDICATION:</b>	Anticoagulant Prophylaxis and treatment of thromboembolic disorders eg. thrombophlebitis, pulmonary embolus and occlusive vascular disease. Prevention of thromboembolic complications arising from cardiac and vascular surgery, dialysis and other perfusion procedures As a flush solution for umbilical, arterial and intravenous catheters to maintain patency As an anticoagulant in blood transfusions
<b>DOSE:</b>	<b>Treatment of thrombosis after discussion with haematologist</b> Intravenous: ≤ 35 weeks corrected age: 50 units / kg bolus over 10 minutes, then 25 units / kg / hr. > 35 weeks corrected age: 75 units / kg bolus over 10 minutes, then 25 units / kg / hr. Monitor aPTT four hours after commencing therapy . Adjust dose to achieve a target range 60-85 seconds <b>Maintenance of patency of peripheral and central venous catheters :</b> Infusion solution: 0.5 units / mL of solution i.e 50units per 100mL Intra-arterial, umbilical venous, peripheral longlines and central venous lines only
<b>PREPARATION:</b>	<b>Infusion solution for treatment of thrombosis</b> Diluent: 0.9% Sodium Chloride, Glucose 5%, Glucose Saline solutions. To prepare an appropriate concentration for infusion at 1mL/hr: Weight (kg) x desired rate (units/kg/hr) x volume of solution (mL)  Example: To prepare a 50mL syringe for a baby weighing 5kg requiring 20units/kg/hr to infuse at 1mL/hr  $5 \times 20 \times 50 = 5000$ units in 50mL = 100units/mL = 20units/kg/mL <b>Or</b> To prepare a 50mL syringe for a baby weighing 5kg requiring 10units/kg/mL at 1mL/hr  $5 \times 10 \times 50 = 2500$ units in 50mL = 50units/mL = 10units/kg/mL
<b>ADVERSE EFFECTS &amp; COMMENTS:</b>	Haemorrhage ranging from minor local ecchymoses to major haemorrhagic complications Delayed onset thrombocytopenia Hypersensitivity: pruritis, urticaria, asthma like symptoms. <b>Management of heparin overdose or toxicity:</b> Administer protamine sulphate (see Protocol)
<b>REFERENCES:</b>	BNF for Children 2013 Neofax 2012 <a href="http://www.adhb.govt.nz/newborn/drugprotocols/HeparinPharmacology.htm">www.adhb.govt.nz/newborn/drugprotocols/HeparinPharmacology.htm</a> <a href="http://www.rch.org.au/clinicalguide/guideline_index/Anticoagulation_Therapy_Guidelines/#Therapeutic">http://www.rch.org.au/clinicalguide/guideline_index/Anticoagulation_Therapy_Guidelines/#Therapeutic</a> Standard Heparin Infusion
<b>DATE:</b>	August 2013