


NEONATAL MEDICATION PROTOCOLS

DRUG:	VANCOMYCIN			
PRESENTATION:	Vial: 500mg Prefilled Syringe KEMH: 40mg in Glucose 5% 8mL			
ALERTS & RESTRICTIONS:	 HIGH RISK Medication <u>Antimicrobial Restriction: Category B ORANGE Monitored</u>			
ACTION & INDICATION	Glycopeptide antibiotic. <ul style="list-style-type: none"> • Empirical treatment of late onset neonatal sepsis • Gram positive infections including Methicillin resistant <i>Staphylococcus aureus</i> (MRSA) • Coagulase negative staphylococcal (CoNS) infections, Staphylococcal, Enterococcal and Bacillus infections due to strains resistant to other antibiotics. 			
DOSE:	Corrected Gestational Age	Postnatal Age	Dose	Frequency
	< 30 weeks	0-7 days	10mg/kg/dose	12 hourly
		>7 days	10mg/kg/dose	8 hourly
	30-37 weeks	0-7 days	15mg/kg/dose	12 hourly
		>7 days	15mg/kg/dose	8 hourly
	37-44 weeks	All ages	25mg/kg/dose	12 hourly
Higher doses may be requested at the discretion of the microbiologist. Dosage adjustment may be required in cases of renal impairment.				
PREPARATION:	IV: Use solution prepared in Pharmacy if available. If premade solution is not available, use the following process to prepare a 5mg/mL solution. <p>Step 1 – Reconstitution Diluent: Water for Injections Add 10mL of diluent to a 500mg vial.</p> <p>Step 2 - Dilution Withdraw 1mL (50mg/mL) of this solution. Further dilute to 10mL with 0.9% Sodium Chloride or appropriate glucose solution = 50mg/10mL = 5mg/mL</p> Discard any remaining solution from the vial immediately. Concentrations of up to 10mg/mL can be used if fluid restricted			

ADMINISTRATION:	IV Infusion: Infuse over one to two hours via syringe pump. A two hour infusion is recommended for the first dose or after an incidence of “Red man Syndrome”		
ADVERSE EFFECTS:	<p>Nephrotoxicity - reduce dose in renal impairment. Increased risk when administered with other nephrotoxic drugs.</p> <p>Auditory and vestibular deafness. Thrombophlebitis, erythematous rash, hypotension Tachycardia, palpitations, Neutropenia, eosinophilia, thrombocytopenia</p> <p>“Red man Syndrome” – flushing of upper body (red neck), or pain and muscle spasm of the chest & back. Associated with too rapid infusion.</p>		
COMMENTS:	Compatible Fluids: Sodium Chloride 0.9%, Glucose 5%, Glucose 10% Glucose is the preferred diluent due to the duration of the infusion.		
DRUG MONITORING:	Level	Next Level Taken	Target level
	First level OR After change of dose	Trough level just prior to 4 th dose	10-15mg/L OR 15-20mg/L
	Ongoing monitoring	Trough level every 3 days	If proven (CoNS) or MRSA infection
	<p>Note: Blood levels will need repeating if a drug dose is altered or if the infant’s clinical situation (i.e. renal failure) is likely to lead to unpredictable levels.</p> <p>Consider more frequent monitoring if renal function declines or on other nephrotoxic medications.</p> <p>Renal function and electrolytes should be monitored regularly throughout treatment.</p>		
REFERENCES:	KEMH Research/Audits, BNF for Children 2014, Neofax 2014 SHPA Injectable Drugs Handbook 6 th ed.		