CLINICAL GUIDELINE	
Transport Medications	
Scope (Staff):	Nursing and Medical Staff
Scope (Area):	NICU KEMH, NICU PCH, NETS WA

This document should be read in conjunction with this DISCLAIMER

Refer to Neonatal Medication Protocols for full list of Medication Monographs

DRUG	PRESENTATION	DOSE	ROUTE
ACICLOVIR	250mg/10mL vial	<30 weeks: 20mg/kg/dose 12 hrly ≥30 weeks: 20mg/kg/dose 8 hrly Further dilute 1mL from vial to 5mL with 0.9% NaCl = 5mg/mL	UV IV over 1 hour
ADENOSINE	6mg/2mLs vial	Initial dose: 100 micrograms/kg Increase in 50 micrograms/kg increments to max 300 micrograms/kg/dose Dilute 1mL to 10mL with 0.9% NaCl = 300micrograms/mL	**Rapid IV** Increasing doses can be given every 2 minutes until return to sinus rhythm
ADRENALINE	1:10,000 amp (1mg/10mL)	Infusion: 0.1-1micrograms/kg/min Dilute 0.3mg/kg (3mL/kg of 1:10 000) in 50mL glucose/saline solution. 1mL/hr = 0.1micrograms/kg/min	IV UA ETT IO **Acute resus** (all routes): **Term >34 wks:1mL** **Preterm <34 wks: 0.5mL** Repeated doses maybe required

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ALPROSTADIL (PROSTIN)	500 micrograms/mL amp **BEWARE of apnoeas** **Consider intubation**	Starting Dose: 10- 50 nanogram/kg/minute **Maintenance Dose: 2.5- 10 nanogram/kg/minute** Draw up 1mL of alprostadil and make up to 10mL with glucose/ saline solution. Withdraw 0.6mL/kg (30 microgram/kg) from the initial solution and dilute to 50mL with glucose/saline solution. This will give: 1mL/hour= 10nanogram/kg/minute	IV infusion
AMOXYCILLIN	IV: 500 mg vial Add 4.6 mL WFI = 100 mg/mL IV: 1000 mg vial Add 9.2 mL WFI = 100 mg/mL	**For Sepsis: 50mg/kg/dose** All gestations < 7 days = 12 hourly All gestations ≥ 7 days = 8 hourly **FOR MENINGITIS: 100mg/kg/dose** All gestations < 7 days = 12 hourly All gestations ≥ 7 days = 8 hourly	IV IM IM: 500 mg vial Add 1.6 mL WFI = 250mg/mL IM: 1000 mg vial Add 3.2 mL WFI = 250mg/Ml **Do not give simultaneously with Gentamicin, as Y-site incompatible**
ATROPINE	600 micrograms/mL amp	IV: 20 micrograms/kg/dose Dilute to 6mLs with WFI to give 600 micrograms/6mL (100micrograms/mL)	IV

DRUG	PRESENTATION	DOSE	ROUTE
BENZYL PENICILLIN	600 mg vial	60 mg/kg <7 days = 12 hourly ≥7 days = 8 hourly	**IV:** Add 1.6 mL WFI – withdraw contents and further dilute to 10mL Concentration = 600mg/10mL = 60mg/mL Inject slowly over 5-10 minutes if volume <5mL Infuse over 30 minutes if volume >5mL **Do not give simultaneously with Gentamicin, as Y-site incompatible** **IM:** Add 1.6mL WFI = 300 mg/mL
CAFFEINE	50mg/5mL Loading dose does not require dilution	Loading dose: 20mg/kg	IV Infuse over 30 mins
CALCIUM GLUCONATE **DO NOT MIX WITH SODIUM BICARB**	1 gram in 10mLs 10% solution 0.22mmol Ca per mL	**For hypocalcaemia seizures:** Withdraw 2mL/kg and dilute with equal amount NaCl. Infuse over 10 minutes. **Maintenance infusion:** 5mL/kg/24 hrs Withdraw 5mL/kg and dilute to 25mLs with 5% glucose or 0.9% NaCl solutions. Infuse at 1mL/hr.	IV slowly over 10 mins Use central line if available. Make sure UVC tip is not in the heart or liver. INSPECT VIAL BEFORE USE. DO NOT USE IF THE SOLUTION IS CLOUDY OR CONTAINS PARTICLE
CEFOTAXIME	IV 1g vial: Add 9.6mL WFI = 100 mg/mL	50 mg/kg <7 days: 12 hrly >7-21 days: 8 hrly >21 days: 6 hrly	IV IM IM: 1g vial Add 3.4 mL WFI = 300 mg/mL

DRUG	PRESENTATION	DOSE	ROUTE
CLONAZEPAM	1 mg/mL amp	Loading dose 100-250micrograms (NOT per kg) Dilute to 10mLs with WFI = 100micrograms/mL, Repeat in 1 hour if required. Infusion dose:10micrograms/kg/hour Dilute 0.5mL (500 micrograms) to 50mL with glucose/saline solution to make 10 microgram/mL	IV 10micrograms/kg/hr
DIGOXIN	50 microgram/2 mLs amp Use undiluted SLOW IVI over 5 mins	Loading dose: <34 weeks 15-25 micrograms/kg >34 weeks 30-40 micrograms/kg If dilution required dilute to 10 mL with WFI = 50 micrograms/10 mL	IV Give ½ loading dose then ¼ in 8 hours then last ¼ in 8 hours.
DOBUTAMINE	250mg/20mLs amp (Sandoz) 250mg powder for reconstitution (Aspen) - add 18mL WFI to dissolve, withdraw & further dilute to 20mL (250mg/20mL)	1 - 20 micrograms/kg/min (initially 5 microgram/kg/min) Infusion: Dilute 30 mg/kg to 50 mL in glucose/saline solution 1 mL/hr = 10 micrograms/kg/min	IV UV as infusion
DOPAMINE	200 mg/5 mLs amp	5-20 micrograms/kg/min Infusion: Dilute 30mg/kg to 50mLs in 5% glucose or 0.9% sodium chloride 1mL/hr = 10 micrograms/kg/min	IV UV Note: 0.5-5 micrograms/kg/min ↑ renal perfusion 5-15 micrograms/kg/min ↑ renal perfusion & cardiac output, ↑BP >15 microgram/kg/min Vasoconstriction, ↑BP, ↓ renal perfusion

DRUG	PRESENTATION	DOSE	ROUTE
FENTANYL	100 micrograms/2mL amp	4micrograms/kg/dose (pre-intubation) 1-5 micrograms/kg/hour (infusion) Dilute 2mL ampoule to 10 mL with 0.9% sodium chloride = 10 microgram/mL Infusion: Use 100microgram/2mL amps to prepare. Dilute 50 microgram/kg of baby's weight to 50mL glucose/saline solution = 1mL/hr= 1microgram/kg/hour	**Slow** IV UV Continuous infusion
FLUCLOXACILLIN	**500 mg vial** Add 4.6 mL WFI = 100 mg/mL **1g vial** Add 9.3mL WFI = 100mg/mL	25 mg/kg/dose <34 weeks <14 days = 12 hrly <34 weeks ≥14 days = 8 hrly ≥34 weeks <14 days = 8 hrly ≥34 weeks ≥14 days = 6 hrly For Staph aureus bacteraemia, meningitis, osteomyelitis = 50 mg/kg/dose	IV IM Administer IV over 10 min IM: 500mg vial Add 2.1mL WFI = 200 mg/mL 1g vial Add 4.3mL WFI = 200mg/mL
FRUSEMIDE	20 mg/2 mL amp	0.5-1 mg/kg Dilute with WFI/NS	Preferably IV
GENTAMICIN	80 mg/2 mL amp Dilute to 8 mL with NSto give 10 mg/mL IV dose **SLOWLY** over 10 mins **Do not give simultaneously with Penicillins, as Y-site incompatible**	**Corrected GA < 30 weeks:** 0-7 days = 5mg/kg 48 hrly > 7 days = 5mg/kg 24 hrly **Corrected GA 30-35 weeks:** 0-7 days 6mg/kg 48-hrly 0- 7 days = 6mg/kg 48 hrly > 7 days = 6mg/kg 24 hrly **Corrected GA > 35 weeks:** 0-14 days = 4.5mg/kg 24 hrly > 14 days = 7mg/kg 24 hrly	

DRUG	PRESENTATION	DOSE	ROUTE
GLUCAGON	1 mg powder with 1 mL syringe of WFI as diluent	200 micrograms/kg STAT (Max dose 1mg) For infusions: Dilute reconstituted vial to 50 mL with 10% glucose to give 1000 micrograms/50 mL 0.5 mL/kg/hr =10 micrograms/kg/hr Infusion dose:5-20 micrograms/kg/hr	IV IM SC NOTE: 1 unit = 1 mg
HEPARIN SODIUM	NETS only carries 1,000 units/mL amp	0.5 units/mL added to all solutions to be infused centrally i.e.: arterial lines umbilical lines & central venous lines	IV UV UA
ISOPRENALINE	1000 micrograms/ 5mL amp	0.05-0.5 micrograms/kg/min Infusion: Dilute 300 micrograms/kg to 50mLs of 0.9% NaCl or glucose solutions 1 mL/hr = 0.1 micrograms/kg/min	IV UV
LIDOCAINE (LIGNOCAINE) **Use Claris OR Pfizer brand for IV infusion**	50mg/5mLs amp 1%	Loading dose: 2mg/kg over 10minutes Maintenance dose: Weight 2-2.5kg : 6mg/kg/hr for 3.5 hours, then 3mg/kg/hr for 12 hours, then 1.5mg/kg/hr for 12 hours then cease. Weight 2.5-4.5kg : 7mg/kg/hr fpr 3.5 hours, then 3.5mg/kg/hr for 12 hours, then 1.75mg/kg/hr for 12 hours then cease. Dilute 87.5mg/kg (8.75mL/kg) to 50mL NS or G5/G10 to give 1mL/hr= 1.75mg/kg/hr	IV over 5 mins

DRUG	PRESENTATION	DOSE	ROUTE
METRONIDAZOLE	500mg/100mL	Loading dose: 15 mg/kg < 7 days – 7.5 mg/kg 24 hrly ≥ 7 days – 7.5mg/kg 12 hrly > 44 weeks – 7.5 mg/kg 8 hrly	IV Infuse over 20 mins
MIDAZOLAM	15mg/3mL amp (5mg/mL) Dilute 1mL Midazolam with 4mL WFI =5mg/5mL (1mg/mL) 5mg/mL Amp (1mg/mL)	Intermittent dosing: 100–200 micrograms/kg 4-8 hourly Infusion: 1-2 micrograms/kg/min 3 mg/kg of baby's weight diluted to 50 mL glucose/saline solutions 1 mL/hr = 1 micrograms/kg/min	IV UV Slow push over 5 mins
MILRINONE	10mg/10mL Withdraw 1.5mg of Milrinone per kg of baby's weight (1.5mL/kg) and dilute to 50mL with an appropriate infusion fluid. Diluent: Sodium chloride 0.9%, Glucose 5%	**< 30 weeks** ***Loading dose:*** 135microgram/kg given over ***3 hours*** *(run at 1.5mL/hr for 3 hrs)* ***Then maintenance dose:*** 0.2microgram/kg/min *(run at 0.4mL/hr)* **≥ 30 weeks** ***Loading dose:*** 75microgram/kg given over ***60 mins*** *(run at 2.5mL/hr for 1 hour)* ***then maintenance dose:*** 0.5-0.75microgram/kg/min *(run at 1-1.5mL/hr)* **NB: LOADING DOSE CAN CAUSE HYPOTENSION, SO OFTEN OMITTED**	IV as continuous infusion

DRUG	PRESENTATION	DOSE	ROUTE
MORPHINE	**USUALLY** 10 mg/mL amp **Beware: other strengths may be available in different hospitals**	100-200 micrograms/kg/dose Infusions: 10-40micrograms/kg/hour Dilute ampoule to 10mL with WFI = 1mg/1mL Infusion: add 0.5mg/kg to 50mL glucose/saline solution. 1mL = 10 micrograms/kg/ hour	IV UV IM: use undiluted
NEOSTIGMINE **(reversal of muscle relaxants)**	0.5mg/mL (500mcg/mL) **OR** 2.5mg/mL (2500mcg/mL) Give over 1 min	50-80micrograms/kg/dose Diluent: sodium chloride, glucose, Use undiluted or dilute contents of 2.5mg amp to 16.5mL = 150microgram/mL	IV,IM To be used in conjunction with Atropine (20micrograms/kg/dose). IV push
PARACETAMOL	Oral: 250mg/5mL IV: vial 10mg/mL	**ORAL:** 28-32 weeks: loading 20mg/kg then 10-15mg/kg/dose max 30mg/kg/day >32 weeks: loading 20mg/kg then 10-15mg/kg/dose max 60mg/kg/day **IV:** ≥ 32 weeks 7.5mg/kg/dose 8 hrly	IV infuse over 15mins use undiluted
PANCURONIUM	4mg/2mLs amp	100-150 micrograms/kg/dose Repeat after 3 minutes as required Dilute to 10mLs with WFI=400micrograms/Ml	IV UV

DRUG	PRESENTATION	DOSE	ROUTE
PIPERACILLIN-TAZOBACTAM (Tazocin)	4g vial	**Corrected GA <30 weeks** ≤28 days: 100mg/kg/dose 12 hrly >28 days: 100mg/kg/dose 8 hrly **Corrected GA 30-36 weeks** ≤14 days: 100mg/kg/dose 12 hrly >14 days: 100mg/kg/dose 8 hrly **Corrected GA >36 weeks** ≤7 days: 100mg/kg/dose 12 hrly >7 days: 100mg/kg/dose 8 hrly Add 37mL WFI to 4g vial=100mg/mL	IV Infuse over 30 minutes
PHENOBARBITONE	200mg/mL amp	Loading dose: 20 mg/kg STAT If no response a further 10-20 mg/kg Dilute to 10mLs with WFI=20mg/mL	IV Infuse over 10-15 mins
PHENYTOIN	50mg/mL amp	Loading dose 15-20 mg/kg Dilute to 1:10 with 0.9% NaCl **ONLY**. Flush line with 0.9% NaCl pre & post	IV ONLY **Infuse over 30-60 mins** with ECG monitoring
SODIUM BICARBONATE	8.4% in 10mLs amp 1mL 8.4% = 1mmol	Dilute 1mL 8.4% NaHCO3 with 1mL WFI (=4.2% solution) Resus: 1-2mmol/kg over 30 min **Correction of pH (½ correction):** $\frac{0.3 \times \text{wt (kg)} \times \text{base deficit}}{2}$	IV UV

DRUG	PRESENTATION	DOSE	ROUTE
SURFACTANT (SURVANTA)	8mLs vial Use at room temperature	4 mL/kg/dose in at least 2 separate aliquots Up to 4 doses at 6 hrly intervals	ETT Store opened & unopened vials at 2-8 ˚C Discard 12 hours after opening
SUXAMETHONIUM CHLORIDE	100mg/2mLs amp	1-2 mg/kg/dose Dilute 1mL to 5mL 0.9% sodium chloride = 10mg/mL	IV UV 2mg/kg = 5 mins muscle relaxation
VANCOMYCIN	500mg vial	**Corrected GA < 30 weeks:** 0-7 days: 10mg/kg/dose 12 hrly >7 days: 10mg/kg/dose 8 hrly **Corrected GA 30-37 weeks:** 0-7 days: 15mg/kg/dose 12 hrly >7 days: 15mg/kg/dose 8 hrly **Corrected GA 37-44 weeks:** All ages: 25mg/kg/dose 12 hrly Add 10mL WFI to vial. Withdraw 1mL of this solution (50mg/mL) & further dilute to 10mL with 0.9% saline (=50mg/10mL)	IV UV Infuse over 1-2 hrs
VECURONIUM	10mg powder vial Add 10mL WFI to vial =1mg/mL	Usual intermittent dose: 100micrograms/kg/dose Infusion: 1-4 micrograms/kg/min Dilute 6mg /kg to 50mLs with 0.9%NaCl or 5% Glucose solutions Infusion: 0.5mL/hr = 1 micrograms/kg/min	IV UV Repeat dose at 1-2 hr for intermittent dosing.

DRUG	PRESENTATION	DOSE	ROUTE
VITAMIN K (PHYTOMENADIONE)	2mg/0.2mL amp	BW≤1500 grams 0.5mg = 0.05mL BW>1500 grams 1mg = 0.1mL May be diluted to 0.5mL with 0.9% NaCl	UA UV IV IM Over 5 mins IM: use undiluted

Related CAHS internal policies, procedures and guidelines
Neonatal Guideline • Medication Administration: IV, IMI, SC Neonatal Medication Protocols

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