

NEONATAL MEDICATION PROTOCOLS

CALCULATION OF THE COMPOSITION OF MEDICATION INFUSIONS

Created by: NCCU
 Date for review: Sept 2016

NCCU Clinical Guidelines
 KEMH/PMH
 Perth, Western Australia

CALCULATION OF THE COMPOSITION OF DRUG INFUSIONS (50mL SYRINGE PUMP)

1. SELECT DESIRED DRUG DOSAGE TO BE DELIVERED IN microgram/kg/min.
2. SELECT INFUSION RATE OF SYRINGE PUMP IN mL/HOUR (FROM CENTRE OF TABLE).
3. CALCULATE NUMBER OF MILLIGRAMS OF DRUG TO BE MIXED IN 50mL SYRINGE.

EG: 10kg CHILD, 0.1-0.2 microgram/kg/min, Infusion rate 1-2mL/hr PUT 0.3 milligram/kg (3 milligram) IN 50mL. mg= milligram

Infusion rate required	0.15mg/kg in 50mL	0.3mg/kg in 50mL	0.6mg/kg in 50mL	1.5mg/kg in 50mL	3mg/kg in 50mL	6mg/kg in 50mL	15mg/kg in 50mL	30mg/kg in 50mL	60mg/kg in 50mL	Suggested doses for commencement of treatment
Microgram/kg/min	mL/hr	mL/hr	mL/hr	mL/hr	mL/hr	mL/hr	mL/hr	mL/hr	mL/hr	Adrenaline, Noradrenaline infusions: 0.1-0.2 microgram/kg/min Increase to a maximum of 1.5 microgram/kg/min Isoprenaline infusion: 0.1 microgram /kg/min
0.05	1	1								
0.1	2	1	1							
0.2	4	2	1							
0.3	6	3	1.5							
0.4	8	4	2	mL/hr						
0.5	10	5		1						
0.6	12	6	3							Midazolam, Vecuronium infusions: 1-2 microgram/kg/min
0.7	14	7								
0.8	16	8	4							
0.9	18	9			mL/hr					
1.0	20	10	5	2	1					
1.5		15		3	1.5	mL/hr				Dopamine, Dobutamine infusions: 5-10 microgram/kg/min Increase to a maximum of 20 microgram/kg/min
2.0		20	10	4	2	1				
3.0				6	3	1.5				
4.0			20	8	4	2	mL/hr			
5.0				10	5		1			
6.0				12	6	3				
7.0				14	7					
8.0				16	8	4				
9.0				18	9			mL/hr		
10.0				20	10	5	2	1		
12.0					12	6				
14.0					14	7				
15.0					15		3	1.5	mL/hr	
20.0					20	10	4	2	1	
25.0							5			
30.0						15	6	3	1.5	
40.0						20	8	4	2	
50.0							10	5		
100.0							20	10	5	
150.0								15		
200.0								20	10	