

RBHSC Induction

May 2022

Programme

- Meeting with CS – 0800 at Theatres.
- Pain nurse
- Technicians
- Tour of hospital
- Simulation training

Clinical Supervisor

- Sarah Gallagher – 07716 580248
 - Amy Wilson; Emma Murray; Anne Meaklim.
- Peter Fee – 07815 705301
 - Daniel Donnelly; Emma Gardiner; Hannah Cooper.

Duties

- Normal day
 - 0800-1730
- Long day
 - 0800-2030
- Night
 - 2000-0830
- Primarily responsible for theatres
- Other areas
 - PICU
 - A&E
 - Wards

COVID-19

- At the moment, we are still advised to wear full PPE for any airway intervention.
- Please continue to keep up to date with relevant developments
- We will be trying as far as possible to provide a good training experience; numbers of cases will be slightly reduced; don't worry unduly about that.

On Call

- Intermediate trainees: under 5's
- Higher trainees: under 3's
 - If in doubt – call

On call

- If you think you will need help in theatre, let us know and we will come in.

- No 7am cases
- 2nd theatre and MRI is consultant to consultant
- Life or limb applies as normal but generally surgeons are good about not breaking this
- Appendicitis is always appropriate to do, especially pre-schoolers.
- On Call Accommodation

- Anaesthetic charts kept in Knox Ward and theatres
- Wards/ED may not have them – bring from theatres
– small filing chest of drawers at theatre reception
- First choice pre-med usually buccal midazolam /
2nd choice = dexmedetomidine (see protocol)

- Bleep 2003 carried during day by long day trainee
- Check if there is a pain nurse on duty – if not LD trainee needs to do pain round during week.
Currently pain nurse is only present for part of the week.
- Always do pain round at weekend
- Theatre coordinator phone
- Vocera

Who to call from ED

- Will admission be medical or surgical? Will they be coming to theatre?
- E.g.
 - inhaled foreign body – theatre consultant
 - Bronchiolitis – ICU consultant
 - GCS < 8 – overdose = PICU
 - GCS < 8 – trauma – theatre +/- PICU
- If unable to get one for whatever reason always consider the other.

PICU

- You will be expected to see PICU referrals
- All experience is good
- Anyone in higher training or Dual ICM will be assigned a week on PICU; if anyone would like more than that, please let us know.

Pre-op visit

- Mandatory
- Cancellation *only* after discussion with consultant
- Written info where possible

Documentation

After any patient contact

- Pre-op
- Pain
- A&E
- PICU

Documentation

- Mandatory: Paracetamol and Fluids should be on kardex/fluid balance as well as anaesthetic chart. Gentamicin chart is in use now – must be filled in by someone! I recommend making a note on the back of the anaesthetic chart to remind the surgeons to do the chart. Other drugs at your discretion.
- Mandatory: Tick 'Anaesthetic chart' box and write the date beside it on front of Drug Kardex

Common Errors

- Flush Cannula
- Antibiotic dosing
- IV Paracetamol
- IV Fluids
- Drug Calculations



Prescribe				Prepare	Administer					
Age/Weight	Recommended Dose*	Weight	Dose	Preparation to be used	Volume of 10mg/mL Paracetamol infusion					
	mg/kg	kg	mg		mL	!				
Pre-Term Neonate	Use BNFC Dosing									
Term neonate & Infant under 10 kg	7.5 mg/kg Every 6 Hours *Max. 30mg/kg/24 Hrs.	3	22.5	100mg/10mL	2.3	Draw up exact volume into syringe for administration				
		4	30		3					
		5	37.5		3.8					
		6	45		4.5					
		7	52.5		5.3					
		8	60		6					
		9	67.5		6.8					
		Child body weight 10-50 kg	15 mg/kg Every 4-6 Hours Max. 60mg/kg/24 Hrs.		10		150	500 mg/50 mL	15	Draw up the exact volume required from a 500mg/50ml vial into a syringe prior to administration
					11		165		16.5	
12	180			18						
13	195			19.5						
14	210			21						
15	225			22.5						
16	240			24						
17	255			25.5						
18	270			27						
19	285			28.5						
20	300			30						
21	315			31.5						
22	330			33						
23	345			34.5						
24	360			36						
25	375			37.5						
26	390			39						
27	405			40.5						
28	420			42						
29	435			43.5						
30	450			45						
31	465			46.5						
32	480			48						
33	495			49.5						
34	510			51						
35	525			52.5						
36	540			54						
37	555			55.5						
38	570			57						
39	585			58.5						
40	600			60						
41	615			61.5						
42	630			63						
43	645			64.5						
44	660			66						
45	675			67.5						
46	690			69						
47	705			70.5						
48	720			72						
49	735	73.5								
50	750	75								
Child >50 kg	1g Every 4-6 Hours Max. 4g/24 Hrs.	Over 50 kg	1000 (1g)	1g/100 mL	51	Withdraw excess infusion solution from 1g/100ml vial and discard prior to administration				
					52.5					
					54					
					55.5					
					57					
					58.5					
					60					
					61.5					
					63					
					64.5					
					66					
					67.5					
					69					
					70.5					
					72					
					73.5					
75										
					Administer whole 1000mg(1g)/100ml vial					

*Dosing for overweight patients should be based on the Ideal body weight for the child

*Dosing differs from that in BNFC

REMEMBER - All IV Paracetamol products contain 10mg Paracetamol per 1ml

*Dosing for overweight patients should be based on the ideal body weight for the child

*Dosing differs from that in BNFC

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The information contained in this document should be used as a guide only and does not replace the need for clinical judgement

Prescribing Clinical Pharmacy Team, BHSC January 2020

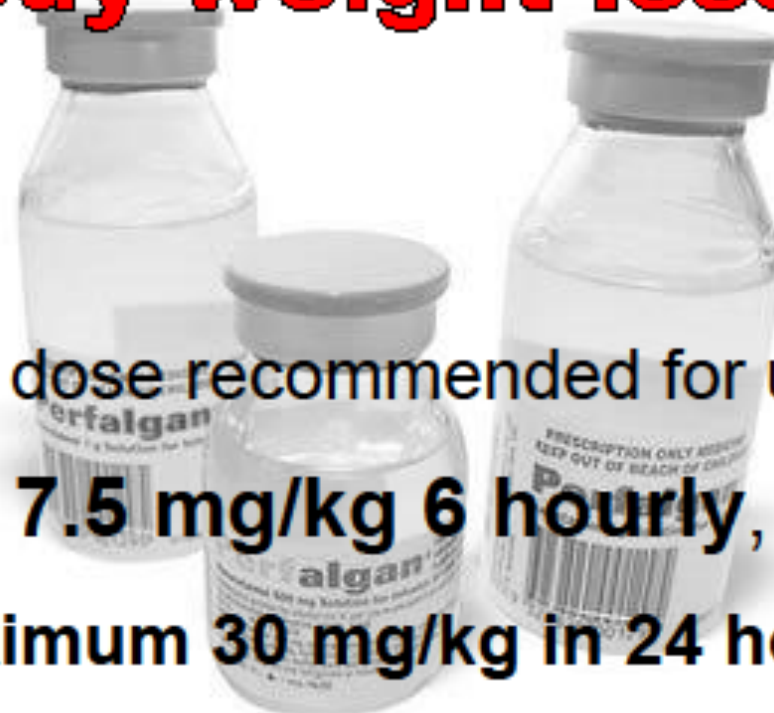
- **IV PARACETAMOL**
- IV paracetamol is a particularly high risk drug
- Whilst being certain to prescribe and administer the correct dose you should also ensure that the child has not already received a dose which would prevent them from receiving another.
- You should check all potential prescription paperwork (ward kardex, knox ward kardex, ED flimsy, referring hospital flimsy) before prescribing or administering.
- If there is any confusion regarding paracetamol dosing please feel free to chat to any of the consultants.



Intravenous Paracetamol

Term neonate and

Children body-weight less than 10kg



Please note the dose recommended for use in BHSCCT is

7.5 mg/kg 6 hourly,

Maximum 30 mg/kg in 24 hours

Do not use the dose recommended in BNFc 2014-15

All IV Paracetamol products contain **10mg Paracetamol per 1 mL**



Prescribing of Enteral Paracetamol for Inpatient Term Neonates & Children in the Royal Belfast Hospital for Sick Children

Paracetamol dosing regimens are to be prescribed based on body-weight

This guidance differs from age-banded regimens in the BNF for Children

Special considerations

Children who are underweight, overweight or obese

Calculation by body-weight in the overweight child may result in higher doses being administered than necessary. In such cases, the dose should be calculated from an ideal weight for height.

- If **underweight**: dose on actual weight
- If **overweight or obese**: dose on ideal weight for height

Risks of toxicity

Consider dose reduction if risk(s) of toxicity e.g. those with risk factors for hepatotoxicity; chronic dehydration; chronic malnutrition; co-administration of enzyme-inducing antiepileptic medications (Consult BNFc).

Enteral Paracetamol Dosing Regimen

Indications		15 mg/kg every 4 - 6 hours	
Pain Post-operative pain Pyrexia with discomfort			
		Patients weighing 50kg or greater: 1g every 4 - 6 hours (Maximum four doses in 24 hours)	
Weight (Kg)	Dose (mg)	Weight (Kg)	Dose (mg)
3	45	27	405
4	60	28	420
5	75	29	435
6	90	30	450
7	105	31	465
8	120	32	480
9	135	33	495
10	150	34	510
11	165	35	525
12	180	36	540
13	195	37	555
14	210	38	570
15	225	39	585
16	240	40	600
17	255	41	615
18	270	42	630
19	285	43	645
20	300	44	660
21	315	45	675
22	330	46	690
23	345	47	705
24	360	48	720
25	375	49	735
26	390		
Patients weighing 50 kg or greater: 1g every 4 - 6 hours (Maximum four doses in 24 hours)			

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- ENTERAL PARACETAMOL dosing chart



Keep a copy on your smartphone – Please scan the QR code

Recovery

- Complete handover
- IV flushed and documented
- Ensure all paperwork correct
- Ensure recovery staff happy with patient and post-op plan
- Think about opioids – protocol for fractures and for appendicectomy

Pain

- One pain nurse, **not full time cover(!)**
- Daily pain round, incl weekends - Long day trainee to conduct round if no pain nurse – check in recovery in the morning if pain nurse is on duty
- If in doubt – PCA/NCA - Prescribe early
- Reg IV Paracetamol, PRN Ondansetron & Naloxone **MUST** be prescribed
- **Listen to Andree and the recovery nurses**
- If consultant that looked after the child is present seek them out first, otherwise ask any of us

- Dedicated colour coded giving sets for PCA; epidural and LA infusions – don't mix and match

Prescribing

- Errors have a bigger impact than in adults
- Paracetamol dosing
- Opiate dosing
- Complete fluid balance chart in full
- If post-op fluids appropriate – prescribe them – 2/3 maintenance.
- Black Ink

Teamwork

- Listen to experienced nurses
- Esp recovery nurses
- Lots of junior nurses too
- Good practice to do a focused chat with anaesthetic nurse about emergency plan

Teaching

- 0800 Tuesday and Friday
- Peer led, 15 min talk including time for discussion
- Fellow to organise roster
- **MUST** be presented with time for discussion and out of room by 0825, therefore prompt start **ESSENTIAL**
- Get the most out of your subspecialties, let us know early if you have any particular needs but feel free to negotiate among yourselves

Audit/QI Projects/Progress

- Need to hit the ground running, esp post Fellowship trainees.
- Those doing exams probably have other priorities but remember not to lose track of your clinical experience,
 - you will find your first time in Paeds much more stressful if you take off lots of days at the start and don't get the daytime experience that you need. Whilst you'll get there in the end, you'll find you gain confidence quicker if you get some good experience early in the rotation.
 - If you struggle, you're not the first, but please come and talk to us so we can help you get on track

- We want you to get the most out of this rotation
- You will need to be proactive in achieving this
- If you aren't getting the specialties/variety/case mix/consultant mix/volume you feel you need to keep improving let us know
- Within reason we can move you around so you get the experience you need
- You can also swap lists with your colleagues (but out of courtesy discuss with the supervising consultant)

Theatre IV access requests

- A perennial issue
- We're trying to make it better
- Line booking form
- 'Long' lines for all sick appendicities/joint wash outs – anyone that you anticipate will be on IV therapy for more than a couple of days
- Communicate with surgeon
- We DO NOT accept referrals direct from other centres. ALL referrals should be redirected to medical/surgical consultant on call for consideration, admission & booking (if deemed appropriate)
- There is NOT a dedicated lines service. We provide assistance and all lines should be discussed at consultant level on BOTH sides.

Protocols

- Various protocols exist in the department, of which these are the major ones at present which are specific to RBHSC, so please use them:
 - Epidural; PCA/NCA; LA infusion
 - Dexmedetomidine premed
 - VTE prophylaxis
 - Diabetic management
 - Steroid management
 - Fracture pain pathway
 - Appendicectomy pathway inc. IV access requirements.

<https://paeds.herokuapp.com>

- Shona Chan has kindly created a webpage / app which is partly a calculator and partly a store for our protocols; so please use this and feedback on it too!
- More details to follow, including using the password protected area.

Paperwork

- Get all assessments done
 - I am not totally sure what these are changing to!!
 - Intermediate: ACEX; CbD; DOPS
 - Higher: ACEX; CbD
- Do a Paeds specific PDP – for CUT
- Keep a paeds specific logbook – for CUT
- There will be feedback – College have emphasised it's importance

Core outcomes

- Intermediate

Learning outcomes:

- Build on the knowledge and skills gained during Basic Level training
- Develop in-depth knowledge and understanding of the anaesthetic needs of children and neonates
- Understand the potential hazards associated with paediatric anaesthesia and have obtained practical skills in the management of such events

Core clinical learning outcome:

- Deliver safe perioperative anaesthetic care to ASA 1 and 2 children aged 5 years and over for minor elective and emergency surgery (e.g. inguinal hernia repair, orchidopexy, circumcision, superficial plastic surgery, grommets, manipulation of fractures, appendicectomy) with distant supervision

- Higher

Learning outcomes:

- Capture the maturation process by building on the knowledge, understanding and skills gained during intermediate training
- Become more independent in managing paediatric anaesthesia as demonstrated by requiring less consultant guidance and supervision
- Be competent at managing complications that arise in paediatric anaesthesia without immediate consultant support

Core clinical learning outcomes:

- Be able to resuscitate and stabilise a sick baby or child prior to transfer to a specialist centre
- Provide perioperative anaesthetic care for common surgical conditions, both elective and emergency, for children aged 3 years and older with distant supervision

Higher/ICU Trainees

- Higher trainees and ICU dual CCT trainees will be allocated a week of PICU

Sickness / Absence

- We all get sick from time to time
- Communication is key

Swaps, AL & SL requests

- We are on a separate site and in a different Directorate to A Block. We also have no CLW Rota, and have our own Secretary (Anne Brown).
- Let us know / book any leave requests as early as possible, we will always do our best to be as reasonable as we can. (Minimum staffing is 2)
- **ALL** proposed changes to the rota **must** be emailed to Anne and us in advance.
- anne.brown@belfasttrust.hscni.net

Finally...

- Enjoy your rotation.
- Desperately sad circumstances right now, please speak to us if we can do anything to help, or if you have any suggestions for us.