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Approved by:

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Women and Children's
Services**

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PAEDIATRIC POLICY

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1.0 Mission Statement

Our aim is for children who attend or are admitted to the Queen's Hospital Burton on Trent to have their pain treated so that, if not pain free, at most they will have discomfort that is acceptable to them and their condition. We will achieve this by the adequate provision of prescribed pain relief, through the use of diversionary measures such as play, and also through the use of complimentary treatments in accordance with hospital policies.

2.0 Background

- "Pain is whatever the experiencing person says it is, existing wherever they say it does".¹
- "Pain is both an individual and a subjective phenomenon."²
- The International Association for the Study of Pain³ defines pain as "An unpleasant sensory and emotional experience with actual or potential tissue damage".

2.1 Pain is always subjective. Each individual learns the application of the word through experiences related to injury in early life. It is unquestionably a sensation in a part of the body, but it is also unpleasant, and therefore also an emotional experience. Almost everyone suffers from pain at some stage in their life. Pain is simply the body's way of letting us know that there is something wrong.

2.2 All concerned with the care of children have a duty to anticipate and avoid as well as to relieve pain and the psychological and emotional threats of illness and injury. Children feel pain just as adults, apart from a few rare congenital conditions. However, like adults no two children will feel pain in the same way. It is important to treat pain appropriately as having well controlled pain can assist in a speedier recovery. Children may be frightened by their experience of pain which may make recovery prolonged and more difficult.

2.3. Children can only apply pain perception from their previous experiences and may therefore apply seemingly inappropriate labels such as "I have a tummy ache" for pain anywhere or "I have a tummy ache in my ear" for earache.

2.4 Some people including children report pain in the absence of any evidence of tissue damage or even when the healing/recovery process appears complete.

3.0 Strategy for managing acute pain

The aim of effective acute pain management is to provide humane and safe that will return the child to

Achievement of this relies on the following key points:

- Psychological
 - Reassurance & explanation to both child and parents
 - Quiet, calm, child oriented environment
- Physical
 - Alleviating pressure and movement from the pain site
- Monitoring
 - Pain should be pro-actively managed by regular pain assessment

- Recheck after treatment to ensure effectiveness of strategy
- Pharmacological
 - Regular simple and non-opioid analgesia
 - Supplementary analgesia as required
 - Titrating the

A stepwise approach (the Analgesic Ladder is a popular concept for this) is useful starting with simple analgesic methods with few side effects progressing to the sequential addition of other analgesics having greater effect but additional side effects.

Wherever possible, local anaesthetic techniques should be used to provide part of the post-operative analgesia.

3.1 Analgesic ladder (Omit NSAID's if contra-indicated)

					Systemic morphine
				Oral morphine (0.2mg/kg)	
			Oral Morphine (0.1mg/kg)		
		NSAID	NSAID	NSAID	(NSAID)
	Paracetamol	Paracetamol	Paracetamol	(Paracetamol)	(Paracetamol)
No pain	Mild	Mild to moderate	Moderate	Moderate to severe	Severe

The ladder is a best used as a simple guide to how to add in analgesic drugs and methods as more severe pain is encountered and to remove them as pain lessens in a series of steps. The aim is to achieve mild or no pain throughout, and the categories at the bottom might be considered as the pain that would exist if no analgesia were administered. Clearly, a patient effectively treated with a combination of paracetamol, NSAID and systemic morphine to achieve mild pain will be unlikely to cope with paracetamol alone on the next dose. The other problem is that the pain assessment scores can be categorised into mild, moderate and severe pain but this is not consistent across the methods. The best solution is to assess the pain, score and document it, then administer drugs according to the score and by expectation from the type of surgery or trauma. Assess the effectiveness of the treatment and move up and down the analgesic ladder as necessary. Whilst numerous complicated and visually appealing algorithms exist based on the scores measured from various pain assessment tools, they are grossly simplistic for manipulating an extremely complex physiological process. There is really no substitute from experience and accurate frequent pain assessment feeds into that learning process.

Note: Codeine should not be used in children under the age of 12. Recently, concerns over respiratory depression in patients with Obstructive Sleep Apnoea and in patients who are ultra-fast metabolisers of codeine have caused the MHRA to restrict its use to patients over the age of 12 years who do not have these conditions and in whom analgesia cannot be achieved with other drugs. Given that morphine is more potent and predictable in its action, it is difficult to see any further role for codeine in paediatric pain.

3.2 Multi-modal analgesia

- 3.2.1 It is un- common for a single analgesic drug to be completely effective so different types of analgesia may be given together and by different routes depending on the patient's requirements. This is called "**multi-modal**" analgesia.
- 3.2.2 Analgesics can be administered by the following routes. The condition of the child may change during their hospital stay and their most appropriate initial drug or route may change:
- orally (including naso-gastric and peg administration)
 - rectally (parental consent is required unless the situation is an emergency)
 - intra-venously (IV) – bolus or PCA
 - intra-muscularly – (IM) very rarely
 - intranasal (Emergency department)
 - local anaesthetic nerve blocks (eg; femoral nerve block for fractured femoral shaft)
 - local anaesthetic regional blocks (eg; epidural, caudal or spinal.)
- 3.2.3 See suggested regimes for Mild, Moderate and Severe pain in children and babies Appendix A, B, C, and D.

3.3 Patient Controlled Analgesia (PCA)

- 3.3.1 This technique of delivering analgesia is very effective and can be used for many children. It does rely on clear instructions and understanding. Thorough assessment of the child's capabilities is essential. A child / parent / patient information sheet is available for use with this device.
- 3.3.2 Several drugs can be used with PCA and via a variety of routes such as intra venous, and epidural. In this hospital the drug of choice for use in PCA is Morphine Sulphate (analgesia) unless contraindicated and this is to be administered via the intra venous route.
- 3.3.3 "Rescue analgesia" as IV should be prescribed in the case of machine or intra venous access failure.
- 3.3.4 Oxygen should be routinely prescribed for patients with PCA in progress, 1 or 2 litres per minute by nasal cannulae are adequate if oxygen is not otherwise required for the patient's condition. This should be administered according to peripheral oxygen saturation levels.
- 3.3.5 Naloxone (Narcan) should also always be prescribed in patients with a PCA for the emergency treatment of respiratory depression associated with opioid use. (Appendix E)

3.4 Inhalational analgesia

Entonox

Entonox® is a 50:50 mixture of oxygen and the analgesic anaesthetic agent, nitrous oxide. It is a quick acting, usually safe and effective analgesic which is breathed.

Uses

Entonox® may be used for the short term relief of pain in children having simple procedures performed. Examples include: venepuncture, suture of lacerations, change of dressing, removal of drains, insertion of long lines.

Administration

The gas is administered using a facemask or mouthpiece; gas flow is controlled by a sensitive demand-valve activated by the patient's inspired breath. This allows pressurised gas from the cylinder to flow through a pressure regulator into the lungs at a steady rate. Longer deeper breaths allow greater volumes of gas to be taken into the lungs if necessary.

Entonox is a safe for any age group as long as the patient is able to comprehend the activity and be physically capable of operating the system(self-administered). The same caution and care in use must therefore apply for all ages. Whilst parents or carers may support the child during the procedure they **MUST** not take over the positioning of the face mask. It can cause unconsciousness but will be dropped before a dangerous level is achieved. The patient should be supervised throughout by a trained member of staff. The use an anaesthetic machine in the absence of an anaesthetist to make a "Homemade" entonox is extremely hazardous and is not permitted.

Contraindications

- Altered conscious level
- Pneumothorax or risk of having it
- Intestinal obstruction

4.0 Pain Control for Non-surgical Patients

4.1 All children admitted onto the Emergency department or Children's ward with a potentially painful condition should have at least two types of analgesia prescribed. This analgesia should cover at least two routes of administration where appropriate (e.g. oral, IV or PR or intranasal). Thought should be given to the patient's condition and consequences such as nausea, vomiting, dysphagia, diarrhoea, pyrexia, starvation, bleeding tendency etc.

4.2 The above also applies to children with pyrexia or the potential to develop one. Paracetamol and Non-Steroidal Anti-inflammatory agents are both appropriate antipyretics and may be given orally or rectally.

4.3 Nasal diamorphine is a fast acting analgesic for the relief of moderate to severe pain (cBNF, 2011). Giving drugs by the nasal route is well described and has many advantages. It is now recommended for Severe Pain in children by the College of Emergency Medicine (July 2013 – Management of Pain in Children). It is very useful in

situations such as no cannula in-situ, or when other methods of pain relief are not suitable or adequate e.g. PR medications in the older child. It is also useful as a first line analgesic while waiting for topic local anaesthesia to work prior to cannulation.

Please refer to the Intranasal -

Policy(<http://bhftintranet.burtonft.nhs.uk/Departments/emergency-dept/Documents/Diamorphine%202013.pdf>) for more information.

4.4 Following a pain assessment, analgesia should be prescribed and administered according to the patient's requirements. Anti-emetics should be prescribed to be administered with opioids when required.

4.5 Children above the age of 1 month who may be undergoing venepuncture, intra-venous cannulation, lumbar puncture or any similar medical procedure should have 4% Amethocaine Gel ('Ametop') applied. This is applied by the nursing staff at the relevant site following discussion with the paediatricians. The time of administration of 'Ametop' should be written on the occlusive dressing. (Please note at least 30 minutes is required for 'Ametop' to be effective)

To prevent adverse reactions or blanching of skin it should be removed after the following time:

- Prior to venepuncture - remove after 30 minutes administration
- Prior to cannulation - remove after 45 minutes administration

4.6 Children under the age of 1 month should not receive Ametop due to the rare complication of Methaemaglobinaemia from accidental overdose or prolonged absorption.

4.7 Entonox or Ethyl Chloride may be considered as alternatives for enabling the above procedures in specific patients.

4.7.1 **Ethyl chloride spray** is not recommended in children under 5 yrs of age or those with eczema/other skin disorders as there is no published data on the safety and efficacy in these groups. The spray should also not be applied to eyes/mouth or on skin close to open wounds.

4.7.2 Ethyl chloride should be held with the nozzle 20 cm/8" away from the skin and should be sprayed continuously for a period **not exceeding 10 seconds**.

4.7.3 **Do not** repeat spraying on the same skin area as there is a possible associated risk of **chemical frost bite** caused by prolonged spraying⁴.

5.0 Pain Control for Surgical patients

5.1 Pre-operatively

5.1.1 All children admitted onto the Children's ward should have at least two types of analgesia prescribed. The prescribed analgesia should cover at least two routes of administration as appropriate (e.g. oral, IV or PR). Thought should be given to the patient's condition and its consequences (nausea, vomiting, diarrhoea, starvation, dysphagia, pyrexia, bleeding tendency, etc.).

5.1.2 Many children admitted under the care of the Surgeons (including Orthopaedic Surgeons and ENT) will not have an immediate operation so pain medication should

be considered and prescribed at admission for any pain which they may develop during their stay.

5.1.3 Children undergoing venepuncture or a general anaesthetic requiring intra-venous induction should have 4% Amethocaine Gel ('Ametop') applied before the procedure. This is applied by the nursing staff onto the back of the child's hand, or an alternative site at the nursing staff's discretion. The time of administration of the gel should be written onto the occlusive dressing. To prevent adverse reactions or blanching of skin it should be removed after the following time: Please note at least 30 minutes is required for Amethocaine Gel to be effective.

- Prior to venepuncture - remove after 30 minutes administration
- Prior to cannulation - remove after 45 minutes administration

5.1.4 Children above the age of 1 month who may be undergoing venepuncture, lumbar puncture or any similar medical procedure should also have Amethocaine Gel applied where time allows.

5.1.5 There is increasing evidence that the pre-operative administration of oral analgesic drugs may aid recovery. These should be prescribed on Electronic Prescribing and do not interfere with the pre-operative starvation guidelines. Any additional pre-operative medication or requests will be at the anaesthetist's discretion, and following discussion with the nursing staff.

5.1.6 Explanations of any pain likely to be caused by surgery and the plan for analgesia administration should always be given to the parents and the child as appropriate, this may help in the post-operative period. All children should be familiarised with pain assessment tools pre-operatively and assessment explained.

5.2 Intra-operatively

Analgesia / anti-emetics will be administered at the anaesthetist's discretion. Nursing staff should ensure that the child has a low pain score and that appropriate analgesia and anti-emetics have been prescribed when collecting the child from the Theatre Recovery Ward.

5.3 Post-operatively

All children returning from Theatre should already have at least two types of appropriate analgesia by at least two routes prescribed. Thought should be given to the operation performed which may differ from that expected and the analgesia and routes of administration altered as necessary. All children should already be familiar with pain assessment tools from pre-op, and assessment should continue.

5.4 Discharge Medication

Appropriate drugs should be prescribed by the admitting team for children who may continue to have pain after discharge; either surgical post-operative pain or a continuing painful condition. If severe pain is anticipated at home i.e post- tonsillectomy, Oral Morphine Solution may be dispensed, but given the inability to monitor its effect, the dose should be restricted to 0.1mg/kg 6 hourly MAX 4 DOSES ONLY. Please try to familiarise the child with the particular preparation prior to discharge. Leaflet on Pain management after day surgery should be provided to parents/carers on discharge. (Appendix H)

- 5.5 See suggested regimes for Mild, Moderate and Severe pain in children and babies Appendix A, B, C, and D.

6.0 Control of Nausea and Vomiting

- 6.1.1 Nausea and Vomiting can be a very debilitating experience for the post-op or ill patient and needs to be addressed as quickly as possible.
- 6.1.2 Nausea and vomiting are less common in children postoperatively nowadays due to the decreased use of Nitrous Oxide (Laughing gas) and an increased use of non opiate methods of analgesia.
- 6.1.3 Nausea and vomiting can have a variety of causes, including pain, pyrexia, hypotension, electrolyte imbalance, postoperative paralytic ileus (especially following bowel operations) middle ear conditions as well as a side effect of anaesthesia and opiate analgesia.
- 6.1.4 Non-opioid causes of nausea and vomiting should always be considered as the treatment may not be an anti-emetic. As examples;
- antipyretics for raised temperature causing vomiting
 - naso-gastric tube drainage of the stomach for a post operative paralytic ileus causing vomiting.
- 6.1.5 Anti emetics can be useful in controlling symptoms, they should be prescribed routinely, for use as required when nausea and vomiting are likely, especially in conjunction with opiate analgesia.

7.0 Anti-emetic Drugs:

Many adult anti-emetics are not recognised for use in children, we suggest the following:

- **Ondansetron** This is a 5HT3 antagonist initially developed for use with chemotherapy agents. It can be given to children over one month of age. It has intravenous and oral preparations. The tablets are easily dispersible in water.
 - **Cyclizine** This is an antihistamine with anti emetic properties and can be given to children over one month intravenously or as tablets (if not actively vomiting).
- 7.1 Metoclopramide, Prochlorperazine and Domperidone are not recommended for routine use as anti-emetics in children. They may be used after Consultant discussion in extreme cases such as after chemotherapy and radiotherapy.

8.0 Assessment of Acute Pain

We use three different assessment tools depending on the age and maturity of the child.

New born to 4 years **FLACC**
5-7 years **Faces pain scale**
7 years + **Faces pain scale, Numerical Rating scale**

These tools have different ranges to be documented so it is **essential** that the method used is documented on the recording chart

One of the following methods should be used and the method used should be documented on the chart used to record the child's pain.

These "scores" are relate to ranked categories and are used to facilitate documentation in the limited space available on the chart. Comparisons between the scoring systems cannot be made (eg a score of 2 is not the same in each system), and averages are meaningless and misleading.

8.1 FLACC(Faces, Legs, Activity, Cry, Consolability) for Neonates to 4 Years

Indicator	Score		
	0	1	2
Face	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested	Frequent to constant quivering chin, clenched jaw
Legs	Normal position or relaxed	Uneasy, restless, tense	Kicking, or legs drawn up
Activity	Lying quietly, normal position, moves quietly	Squirming, shifting back and forth, tense	Arched, rigid or jerking
Cry	No cry (awake or asleep)	Moans or whimpers, occasional complaint	Crying steadily, screams or sobs, frequent complaints
Consolability	Content, relaxed	Reassured by occasional touching, hugging or being talked to, distractible	Difficult to console or comfort
Each of the five categories is scored from 0 to 2 to give a total score of 0 to 10			

Pain level

0-2 No pain to Mild
 3-5 Moderate pain
 >5 Severe pain

8.2 'Faces' Pain Scale for 5 years plus (Appendix F)

The pain assessment chart consists of five faces numbered zero to four. (The first face is happy and without pain, the last in crying in pain).

- **Either:** Ask the child to point to the appropriate face which best explains how they feel.
- **Or:** Let the child read or have read out the descriptions under the faces and say which is the closest to the way they feel.

8.3 Numerical Rating Scale for 7years plus

This is used for older children in exactly the same way as in adult patients

Pain on movement	Score
None	0
Mild	1
Moderate	2
Severe	3

9.0 Pain Assessment Guide

9.1 Ideally both the CHILD and the PARENTS should be involved in the assessments if possible. If the child is having a planned operation, they should be introduced to the assessment sheet on admission. Remember any method of pain assessment in children should be a combination of the subjective and objective tools above.

9.2 Each child's pain should be assessed and scored regularly, as well as:

- **Before** - any interventions are performed
- **half an hour** - after intervention.
- **one hour** - after intervention.

9.3 The pain score and any interventions should be recorded on the pain chart provided (PEWS chart).

10.0 Sedation

A simple sedations score based on the **AVPU** response is adequate.

Patient	ALERT	A	1
Responds to	VOICE	V	2
Responds to	PAIN	P	3
Patient	UNRESPONSIVE	U	4

11. Disclaimer

The doses and details in Appendix A, B, C, D, and E serve only as a guideline to the administration of pain relief and anti-emetics. If nursing staff do not agree with the prescribed dose they should liaise with the senior doctor on duty. If in doubt, it is also recommended that reference be sought in the Children's drug dosage book provided on each ward. This is currently the BNF for Children⁵.

12. **Audit:** Regular audit on different aspects of this guideline should be organised.

13. References

1. International Association for the Study of Pain 1979
2. Ref: "Ethyl Chloride (cryogesic TM): application for the management of venepuncture pain" GOSH NHS Trust (2005)
3. BNF for Children 2016-17
4. West Midland Paediatric Anaesthetic Network-Recommendations for acute pain management in children(January 2011)

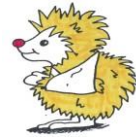
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Updated: November 2016

Review:November 2019

**APPENDIX A
MILD PAIN**

**Suggested Analgesia Administration Regimes
Children over one year of age**



PARACETAMOL Syrup 120 mg/5ml or 250 mg/5ml
 Tablets 500mg or Soluble 500mg
 Suppositories 60mg, 125mg, 240mg, 500mg, 1G

CHILD				
ROUTE	SIZE	FREQUENCY	DOSE	COMMENT
Oral	Up-to 50 kg	4-6 times/day	15 mg/kg/dose	Max 90mg/kg daily Ensure STOP DATE
	More than 50 kg	4-6 times/day	1000 mg (1G)	MAX. 4g /24 hrs
Rectal	Loading Dose	Once	30 mg/kg/dose	1-2 hrs before needed
	Maintenance	4-6 times/day	20 mg/kg/dose	Slow onset

**AND
IBUPROFEN** Syrup 100 mg/5ml
 Tablets 200mg 400mg

Caution : Renal failure poorly controlled asthma dehydration systemic illness
 bleeding disorders anticoagulant therapy ie with aspirin and warfarin

ROUTE	CHILD SIZE	FREQUENCY	DOSE	COMMENT
Oral	Less than 50kg	3-4 times daily	5-10 mg/kg/dose	
	More than 50kg		200-400 mg per dose	

OR DICLOFENAC Tablets 25mg 50mg
 Soluble 50mg
 Suppositories 12.5mg 25mg 50mg

Caution : Renal failure poorly controlled asthma dehydration systemic illness
 bleeding disorders anticoagulant therapy ie with aspirin and warfarin

CHILD				
ROUTE	SIZE	FREQUENCY	DOSE	COMMENT
Oral	Above 6 months	3 times daily	MAX 1 mg/kg/dose	MAX . 150mg in 24 hours
Rectal	Above 6 months	3 times daily	MAX 1 mg/kg/dose	MAX . 150mg in 24 hours

MODERATE PAIN Children over one year of age

APPENDIX B

PARACETAMOL Syrup 120 mg/5ml or 20 mg/1ml
 Tablets 500mg or Soluble 500mg
 Suppositories 60mg, 125mg, 250mg, 500mg, 1G
 IV 500 mg/50ml or 1000mg/100ml



ROUTE	CHILD SIZE	FREQUENCY	DOSE	COMMENT
Oral / IV (over 15 mins)	10kg to 50 kg	4 times/day	15 mg/kg/dose	Max 60mg/kg /day Ensure STOP DATE
	More than 50 kg	4 times/day	1000 mg (1G)	MAX. 4g /24 hrs
Rectal				
	ALL	4 times/day	20 mg/kg/dose	Slow onset

AND Syrup 100 mg/ml
IBUPROFEN Tablets 200mg 400mg

Caution : Renal failure, poorly controlled asthma ,dehydration, systemic illness
 bleeding disorders,anticoagulant therapy ie with aspirin and warfarin

ROUTE	CHILD SIZE	FREQUENCY	DOSE	COMMENT
Oral	Less than 50 kg	3-4 times daily	5-10 mg/kg/dose	
	More than 50 kg	3 times daily	200-400 mg	

OR Tablets 25mg 50mg Soluble 50mg **DICLOFENAC**
 Suppositories 12.5mg 25mg 50mg 100mg **Caution same as Ibuprofen**
 IV infusion 75 mg/ampoule

ROUTE	CHILD SIZE	FREQUENCY	DOSE	COMMENT
Oral	Above 6 months	3 times daily	1 mg/kg/dose	MAX 150mg/day
Rectal	Above 6 months	3 times daily	1 mg/kg/dose	MAX 150mg/day
IV dilute with 50-100 ml Sodium Chloride 0.9% over 30 min	2-18 YEARS	1-2 times daily for max 2 days	0.3-1mg/kg/dose	MAX 150mg in 24 hours

ADD ORAL MORPHINE

ROUTE	CHILD SIZE	FREQUENCY	DOSE	COMMENT
oral	1 - 12 years	6 times daily MAX.	0.1 mg/kg/dose	Increase if needed to 0.2 mg/kg

	12 years plus	6 times daily	10 mg/dose	See below
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SEVERE PAIN Children over one year of age

APPENDIX C

Continue to give as in moderate pain:-



IV PARACETAMOL AND IBUPROFEN/DICLOFENAC AS ABOVE

plus:

ADD MORPHINE

Morphine Oral Solution 10mg/5ml

ROUTE	CHILD SIZE	FREQUENCY	DOSE	COMMENT
oral	1 - 12 years	6 times daily MAX.	0.2 mg/kg/dose	Increase if needed to 0.4 mg/kg
	12 years plus	6 times daily	10 - 15 mg/dose	See below

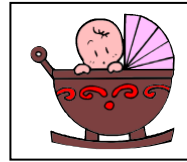
Morphine Sulphate 10mg/ml

ROUTE	CHILD SIZE	FREQUENCY	DOSE	COMMENT
IV	1 - 12 years	6 times daily MAX	0.1mg/kg/dose up to 0.2mg/kg/dose	MONITOR Resp Rate MEASURE Saturation
	12 years plus	6 times daily MAX	5-10 mg/dose	GIVE oxygen
SC / IM	ALL	6 times daily MAX	0.2 mg/kg/dose	Give only if IV access unobtainable
PCA	Consult Acute Pain Team for assessment and advice			

- Check frequency with anaesthetist/doctor.
- If pain is not relieved by two doses of opiate the drug dosage may need to be increased.

See Morphine Administration Guidelines ³.

Children under one year of age.



APPENDIX D

MILD TO MODERATE PAIN

DRUG	ROUTE	FREQUENCY	DOSE	COMMENT
Paracetamol	oral	4 times/day	7.5 mg/kg/dose	Max 4 times daily 30 mg/kg/24 hrs
	PR	3 times/day	20 mg/kg/dose	

DRUG	ROUTE	FREQUENCY	DOSE	COMMENT
Ibuprofen	oral	3 times daily.	5 mg/kg/dose May give up to 10 mg/kg/dose	Not below one month old

DRUG	ROUTE	FREQUENCY	DOSE	COMMENT
Diclofenac	Oral/PR	ONCE - Loading dose	2 mg/kg/dose	Not below 6 months old
		3 times daily MAX. Maintenance	1 mg/kg/dose	

MODERATE TO SEVERE PAIN ABOVE ANALGESIA PLUS ...

DRUG	ROUTE	FREQUENCY	DOSE	COMMENT
Morphine Oral Solution	oral	6 times daily MAX	80 microgrammes/kg/dose	MONITOR Resp Rate MEASURE Saturation GIVE oxygen
Morphine sulphate	IV	6 times daily MAX	0.1mg/kg/dose up to 0.2mg/kg/dos	
		Dilute to 1 mg/ml in 0.9% Sodium Chloride and give slowly to required effect.		
Morphine sulphate	SC IM	6 times daily MAX	0.2 mg/kg/dose	

- Check frequency with anaesthetist/doctor.
- If pain is not relieved by two doses of opiate the drug dosage may need to be increased.

See Morphine Administration Guidelines

NALOXONE

Respiratory Depression Antagonist

Respiratory depression can be a major concern with opioid analgesics and may be reversed by the analgesic antagonist **Naloxone**.

Following administration of an opiate if:

- a) the respiratory rate falls below recommended rate for age
- b) the sedation score is 2 or more

Naloxone may be required.

Prescription

400 microgram vial Naloxone made up to 10 mls with 0.9% normal saline.

ROUTE	AGE	DOSE	ADMIN.	NO RESPONSE?
IV	1 month - 12 years	10 micrograms/kg /dose	Give slowly titrating to respiratory response.	Subsequent dose - 100 micrograms/kg
IV	12 - 18 yrs	1.5 - 3 micrograms/kg /dose	Give slowly titrating to respiratory response.	Increments of 100 micrograms every 2 minutes.

Initial doses of Naloxone may need to be repeated because its duration of action is shorter than the analgesia.

Naloxone also antagonises the analgesic effect and the patient may experience pain again so, dilute the ampoule into 10 mls of 0.9% Sodium Chloride and give the smallest dose first and repeat as necessary.

See Naloxone Administration Guidelines



Date:

Patient Name:

Consultant:

FACES / NUMBERS

Pain Assessment Scale and Chart



0

Does
not hurt

1

Hurts a
little

2

Hurts
more

3

Hurts
a lot

4

Hurts as
much as
you can
imagine

Ask child to choose the face or number which best describes their pain.

APPENDIX G

FLACC(Faces, Legs, Activity, Cry, Consolability)

Indicator	Score		
	0	1	2
Face	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested	Frequent to constant quivering chin, clenched jaw
Legs	Normal position or relaxed	Uneasy, restless, tense	Kicking, or legs drawn up
Activity	Lying quietly, normal position, moves quietly	Squirming, shifting back and forth, tense	Arched, rigid or jerking
Cry	No cry (awake or asleep)	Moans or whimpers, occasional complaint	Crying steadily, screams or sobs, frequent complaints
Consolability	Content, relaxed	Reassured by occasional touching, hugging or being talked to, distractible	Difficult to console or comfort
Each of the five categories is scored from 0 to 2 to give a total score of 0 to 10			

Pain level

0-2 No pain to Mild

3-5 Moderate pain

>5 Severe pain

Patient Information

from Queen's Hospital - www.burtonhospitals.nhs.uk

telephone: 01283 566333

Directorate of Surgery Women and Children's Services

Information for Patients and Carers: Pain management after Paediatric day surgery

This advice is for parents and carers of child who may suffer pain or discomfort at home following day surgery.

It tells you about:

- What will happen about pain relief at home?
- Can I give my child more than one pain killer at the same time?
- Who to contact for further information

What will happen about pain relief at home?

It is a good idea to ensure that there is sufficient of the child's/young persons preferred pain relieving medications at home for use after discharge. However after most operations the ward staff will give you a take home pack of pain medicine. This will contain enough medicine to last for 3-5 days. This could include Paracetamol (Calpol) and/or Ibuprofen (Nurofen). Instructions on the **dosage** to be given will also be provided.

The child/young person should be given pain relieving medication **regularly with appropriate dose** as directed on the accompanying instructions for the first 48 hours **even if they do not appear to be in pain**. The lack of pain indicates that the medicine is doing its job and keeping the child/young person comfortable after their operation.

Most children/young people will need to have pain medicine for few more days , however it is a good idea to assess their level of pain on the following days before giving further medicine.

Can I give my child more than one pain killer at the same time?

It is alright to give **combinations of painkillers** at the same time, for instance paracetamol and ibuprofen can be given together. But it is very important not to give your child **different brands of the same medicine at the same time**. If you are not sure about a medicine or have any questions, please contact your local pharmacist or the hospital.

Who to contact for further information

If pain continues to be present for a long time, or it starts to increase instead of getting better, or if there are any concerns about the level of pain a child/young person is feeling at home after the operation, the Children's Wards at Queens should be contacted as below.

Burton Hospital: 01283-566333 manual operator
01283-511511 automated operator
Children's Ward 1: EXT 4608 Ward 2: EXT 4635

If you need to know more, NHS direct is a reliable and comprehensive source of advice and information.

Telephone: 0845 4647

Email: www.nhsdirect.nhs.uk