Princess Margaret Hospital for Children Emergency Department Guideline

PAEDIATRIC ACUTE CARE GUIDELINE		
Analgesia		
Scope (Staff):	All Emergency Department Clinicians	
Scope (Area):	Emergency Department	

This document should be read in conjunction with this DISCLAIMER http://kidshealthwa.com/about/disclaimer/

Analgesia

Background

- Painful medical conditions and injuries in children are a common presentation to emergency
- Pain is often undertreated in children

Assessment

- Older children can use visual analogue scales to self report pain
- Physiological and behavioural parameters can be used in patients of all ages to assess pain
- Reassessment of pain is important after providing analgesia

Management

- Non pharmacological strategies are an important adjunct to medications
- Analgesics should be prescribed according to pain intensity
- Local anaesthetic and nerve blocks provide effective analgesia in suitable patients

Further management

- Distraction techniques such as blowing bubbles, singing and story telling are a useful adjunct to analgesic medications especially during painful procedures
- Sucrose may used in infants for procedural pain
- Painful lacerations may be managed with topical local anaesthetic preparations such as Laceraine and ALA or local anaesthetic infiltration
- Femoral fractures and hand or foot injuries may be adequately analgesed by a <u>nerve</u> <u>block</u>

Medications

Doses for Commonly Used Analgesics for Children in the ED

Mild to Moderate Pain

Sucrose

- For babies aged < 3 months
- Dose: Start with 1ml of 25% sucrose 2 minutes prior to procedure. Continue giving small volumes of sucrose until procedure is completed or **2 ml MAX dose** is reached
- Onset: 2 minutes
- Peak effect: 3-5 minutes

Paracetamol

- Dose: Oral: 15mg/kg every 4-6 hours (max dose 60 mg/kg daily)

 Rectal: 15-20 mg/kg (up to 1 g) every 6 hours (round doses to appropriate suppository strength available)
- Severe pain: Dose may be increased to 90 mg/kg/day (not to exceed 4g daily) for a maximum of 48 hours
- Adult dose: 500 1000 mg/dose to a maximum of 4 g/day
- Onset: 20-40 minutes
- Peak effect: 2 hours
- Generally well tolerated
- Intravenous preparation is available for patients who are unable to have oral or PR route

Ibuprofen

- Age: 3 months 18 years
- Dose: 10 mg/kg/dose 6-8 hourly (adult 400 mg/dose) orally
- Max daily dose: 30 mg/kg to max of 2.4g
- Onset: 30 minutes
- Peak effect: 60-90 minutes
- May cause GI upset give with or soon after food if possible

Painstop Day-time

*A recent TGA review has recommended avoiding codeine in children < 12 years and in children <18 post adenotonsillectomy for obstructive sleep apnoea. PMH pharmacy is currently reviewing codeine use ay PMH and this guideline will be updated accordingly [December 2015]

- Paracetamol 120mg per 5mL
- Codeine Phosphate- 5mg per 5mL
- Dose: 0.8 mL/kg/dose, 4-6 hourly
- Maximum Dose: 30ml, to a maximum of 4 doses per 24 hours orally
- Be aware of potentiation when combined with other sedative agents
- PMH does not advocate the use of Painstop Night

Moderate to Severe Pain

Oxycodone (oral)

- Age: >12 months age
- Dose: 0.05 0.1mg/kg/dose every 4 hours (Adult dose 5-15mg) orally
- Onset: 15-30 minutesPeak effect: 1 hour
- Monitor respiratory depression

Intra Nasal Fentanyl

- Age: 1-18 years
- Dose: 1.5 micrograms / kg intranasally
- Onset: 2 minutes
- Peak effect: 5-10 minutes
- Preferred potent analgesic in patients without IV access

Morphine (intravenous)

- Dose:
- Age: Less than 12 months 0.05mg/kg to max dose equivalent to 0.1 mg/kg every 2-4 hours
- Age: Over 12 months 0.05mg/kg to max dose equivalent to 0.2 mg/kg every 2-4 hours
- Onset: 5-10minutes
- Peak effect: 15-30minutes
- Monitor for respiratory depression, hypotension

Opioids should rarely be given without a simple analgesic such as paracetamol which provides adjunctive pain relief

Nursing

- Pre and ongoing post analgesia pain scores
- Analgesia administered to a patient for moderate to severe pain will require baseline observations of HR, Resp, oxygen sats and BP
- Refer to specific drug administration guidelines for Intra-nasal Fentanyl and Morphine nursing considerations
- PMH staff can refer to <u>Nurse Initiated Analgesia</u> Guidelines

Tags

abdominal pain, anaesthesia, analgesia, codeine, ear ache, earache, fentanyl, fracture, ibuprofen, injury, morphine, neurofen, nurofen, opiate, opiod, oxycodone, pain, pain relief, painkillers, panadol, paracetamol, procedural, procedure, sedation, toothache

References

PMH ED Guideline: Analgesia – Last Updated: July 2014

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Ltd; 2014 July. Available from: https://childrens.amh.net.au

Codeine use in children after tonsillectomy and/or adenoidectomy: Retrieved from

http://www.australianprescriber.com/magazine/37/2/61/3, 6 August 2014

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