Barts Health NHS
NHS Trust

(June 2017, review: June 2019)

PAEDIATRIC ACUTE SICKLE CELL PAIN PATHWAY

Child presents with severe pain to ED

What pain relief has the child had at home (eg paracetamol, ibuprofen, dihydrocodeine)
Pain score on arrival
Check CRS for individual pain pathway

OTHER SYMPTOMS AND SIGNS OF SEVERE SICKLE CELL CRISIS: (Consider discussion with RLH)

Sepsis	**Acute chest syndrome**	**Priapism**
Dehydration	**Neurological event**	**Osteomyelitis**
Severe anaemia	**Splenic sequestration**	

TIME LINE

IMMEDIATELY by ED staff

0 Hours

<12yrs OR < 35kg give **INTRANASAL DIAMORPHINE** 0.1mg/kg (max 6mg) **SINGLE DOSE**

≥12yrs AND ≥35kg give **FENTANYL LOZENGE** 400mcg (35 - 50kg), or 600mcg (>50kg) **SINGLE DOSE**

PLUS AT THE SAME TIME

MORPHINE SULPHATE I/R* 10mg/5ml liquid (Oramorph®)or tablets (Sevredol®) - 400micrograms/kg (max 25mg) **1st dose**

Prescribe: regular paracetamol 15mg/kg 6 hourly (max dose 1g)
regular ibuprofen 7.5mg/kg 6 hourly (max daily dose 1.2g)

Mandatory observations
Oxygen saturation, heart rate, respiratory rate, BP, pain score, sedation score
(hourly for 1st 6 hours, then 2 hourly)

Re-assess by paeds / paed haematology

1 hour

MORPHINE SULPHATE I/R* 10mg/5ml liquid (Oramorph®) or tablets (Sevredol®) 400micrograms/kg (max 25mg) **2nd dose**
UNLESS: Pain free / respiratory depression / sedation score 3

Re-assess by paeds / paed haematology

3 hours

MORPHINE SULPHATE I/R* 10mg/5ml liquid (Oramorph®) or tablets (Sevredol®) 400micrograms/kg (max 25mg) **3rd dose**
UNLESS: Pain free / respiratory depression / sedation score 3

6 hours

Pain Improving

MORPHINE SULPHATE I/R* 10mg/5ml liquid (Oramorph®) or tablets (Sevredol®), 400mcg/kg (max 25mg) **4th dose**

Subsequent doses 3 hourly PRN

Pain not improving

MORPHINE SULPHATE M/R (e.g. MST)** 1mg/kg 12 hourly (max dose 70mg)

PLUS

MORPHINE SULPHATE I/R* 10mg/5ml liquid (Oramorph®) or tablets (Sevredol®) 400mcg/kg (max 25mg)
Subsequent doses 3 hourly PRN

6hours +

If pain still severe and regular morphine given

12+ hours

If child is ≥12 years AND ≥ 35kg AND experiencing severe side effects (eg severe pruritis / nausea / dizziness) despite symptomatic treatment consider converting to OXYCODONE.
Oxycodone M/R** (e.g. Oxycontin®) 0.5mg/kg 12 hourly (max 25mg BD)
Oxycodone I/R* (e.g. Oxynorm®) 200mcg/kg 4 hourly (max 15mg 4 hourly)

Consider PCA if: severe pain not improving and very distressed (see PCA pathway)-if child at Newham organise transfer to RLH

EXCLUSIONS:
NBM (e.g. pancreatitis) – fentanyl PCA
Severe chest syndrome requiring PCCU / exchange transfusion – fentanyl PCA
Girdle syndrome with ileus (fentanyl PCA)
Severe intractable vomiting (fentanyl PCA)

CONTACTS:
Pain team RLH site bleep : 1109 (out of hours 1061 - anaesthetist)
Anaesthetic team WXH site bleep: 497 (out of hours 018/ 008 – anaesthetist)

NOTES:
***Do not give codeine / dihydrocodeine if child requires morphine / fentanyl / oxycodone**
Prescribe laxative (lactulose® or movicol®)
Prescribe antiemetic (ondansetron)
Prescribe naloxone for respiratory depression 4micrograms/kg IV
Prescribe antihistamine (chlorphenamine or hydroxyzine) for pruritus use low dose naloxone for IV opioids (0.5micrograms/kg)
Low dose naloxone does not affect / reverse the analgesic effect of opioid
*I/R = immediate release preparation, **M/R = modified release