

Management of adult acute sickle painful episodes

Key Points

- **Sickle related pain is a medical emergency to be addressed within 30 minutes**
- Please check for an **individualised pain plan**: Each patient may have a copy. If the patient is known to Frimley Health, this can be found by hovering the mouse cursor over the 'Sickle pain plan' bar on the Storyboard, in the latest haematology clinic letter or in 'Overview' of the diagnosis list.

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Key words: Sickle cell, haemoglobinopathy, painful crisis, HbSS, HbSC, acute chest syndrome

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Abbreviations

ABG	Arterial blood gas
IV	Intravenous
NSAID	Non-steroidal anti inflammatory drugs
PCA	Patient Controlled Analgesia

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Immediate assessment

- Document pain score and initiate **urgent analgesia** (below)
- If sats on air less than 94%, or 3% below documented normal baseline, the patient is high risk for acute chest syndrome. Consider ABG and see regional protocol
- If febrile, start co-amoxiclav oral/iv due to hyposplenism

Immediate analgesia	
Pain score	Action
0-3 (mild)	• Regular paracetamol and NSAID (Ibuprofen or Naproxen) if no contraindication • Consider weak opioid - 30-60mg codeine phosphate regularly 6-hourly OR tramadol 50-100mg 6-hourly
Moderate to Severe (3+) This will be the majority of patients, as most will have taken analgesia at home	• Paracetamol and NSAIDs if no contraindication • Bolus of strong opioid (~ 0.1 mg/kg subcutaneous morphine if not on regular opioids. If on strong opioids, titrate according to clinical judgement) • Entonox for 60 minutes only • Re-assess every 30 minutes and give further boluses at same dose until pain controlled

Subcutaneous analgesia is preferred for most situations. Oxycodone is an acceptable alternative to morphine if the patient has history of adverse effects to morphine.

Follow on analgesia if admission required

- Regular paracetamol and ibuprofen
- Maintenance opioids: – 50% of dose of initial boluses subcutaneously 2-4 hourly. Alternative is 100% of dose orally 2-4 hourly
- Re-assess pain at least every 4 hours
- If repeated doses of strong opioid needed within 2 hours of initial pain control, consider infusion of opioid (see below)
- Attempt to de-escalate from parenteral to oral analgesia at 48 hours.

Opioid infusions

An IV PCA is the preferred option for patients with high ongoing analgesia requirements (multiple doses in 1st 2 hours). The standard starting dose is a 1 mg bolus with a 5-minute lockout, with no background infusion (as per Epic order default). However, this is only possible on certain wards due to staff accreditation. If background doses are required, please **consult the pain team**.

On Eden Ward, a subcutaneous syringe driver of morphine may be used as a partial alternative because the nursing team here are experienced with them for cancer patients. This may also be considered in other higher monitored environments, but not general medical or surgical wards. The starting dose should be calculated for the opioid use over the previous 24 hours.

Additional medical management for admissions

- **Acute sickle admissions bloods panel** – search under ‘during visit orders’ in Epic
- **Inform haematology** of admissions – Epic inpatient consult in hours or on call haematologist if concerned out of hours
- **Hydration** – ensure euvolaemia with a low threshold for IV fluid. Do not aim for hyperhydration.
- **Warmth**
- **Incentive spirometry (every 2 hours whilst awake)** – under Orders, obtain from physio or Eden ward
- **VTE prophylaxis**
- Do not transfuse without discussion with haematology team

Presentations of particular concern

Please check specific regional protocols below and in all instances contact on call haematologist

Acute chest syndrome (if hypoxic): Consider exchange transfusion

<http://nssg.oxford-haematology.org.uk/red-cell/documents/acute-management-sickle-cell-disease/S10-acute-chest-syndrome-in-scd.pdf>

Priapism – contact urology urgently

<http://nssg.oxford-haematology.org.uk/red-cell/documents/acute-management-sickle-cell-disease/S14-priapism-in-scd.pdf>

Stroke: Consider exchange transfusion

<http://nssg.oxford-haematology.org.uk/red-cell/documents/acute-management-sickle-cell-disease/S13-acute-neurological-complications-in-scd.pdf>

Emergency surgery: Consider exchange transfusion

<http://nssg.oxford-haematology.org.uk/red-cell/documents/acute-management-sickle-cell-disease/S23-1-perioperative-care-of-patients-with-scd.pdf>

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Full version control record

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This guideline has been registered with the trust. However, clinical guidelines are guidelines only. The interpretation and application of clinical guidelines will remain the responsibility of the individual clinician. If in doubt contact a senior colleague or expert. Caution is advised when using guidelines after the review date. This guideline is for use in Frimley Health Trust hospitals only. Any use outside this location will not be supported by the Trust and will be at the risk of the individual using it.

Version Control Sheet

Version	Date	Guideline Lead(s)	Status	Comment
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Related Documents

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