

Management of Acute Pain in Sickle Cell Crisis

NICE Clinical Guideline 143 includes a full literature review and a number of recommendations, not all of which appear to flow logically from the evidence.

Principles:

Treat as a medical emergency; aim to give analgesia within 30 minutes

Personalised treatment plans are recommended

Assess pain early and periodically re-assess

Full set of observations to be taken

Remain alert to complications and alternative diagnoses

Evidence shows benefit:

- PCA is equivalent to intermittent bolus or continuous IV infusion of morphine in research setting; NICE recommend PCA if patient requires second bolus of opiate within 2 hours (PCA cheaper on economic modelling)
- Oral and IV morphine offer equivalent analgesic effect; NICE advise IV opiate for initial management
- NSAID better than placebo

Limited/no evidence:

- Use of LMWH (Single RCT with therapeutic dose Tinzaparin reduced length of stay) – no current recommendation
- Routine use of IV fluid – no current recommendation
- Transfusion/exchange transfusion – no current recommendation
- Routine paracetamol – currently recommended
- Weak opioid can be offered to patients in moderate pain – currently recommended

Evidence shows no benefit:

- Pethidine less effective than other opiates
- Routine corticosteroid use offers little benefit; risks believed to outweigh benefit
- Routine use of oxygen offers no benefit
- Inhaled nitric oxide offers no benefit

<http://www.nice.org.uk/nicemedia/live/13772/59765/59765.pdf> for the guideline

<http://guidance.nice.org.uk/CG143/Guidance> for the evidence