

PAIN MANAGEMENT IN SICKLE CELL DISEASE

Sickle Cell Crisis


West African tribal names for sickle cell crisis:

ahututuo (from the Twi tribe);
chwecheechwe (from the Ga tribe);
nuidudui (from the Ewe tribe);
nwiwii (from the Fante tribe).

These words imitate the cries and moans of the people in crisis or translate as phrases such as "body chewing" or "body biting."



Pain Management




Erythrocytes containing normal haemoglobin remain flexible when oxygen is given up in the capillaries.

Erythrocytes containing HbS do not remain flexible when oxygen is given up in the capillaries.

Their shape distorts and they become rigid.

Pain Management



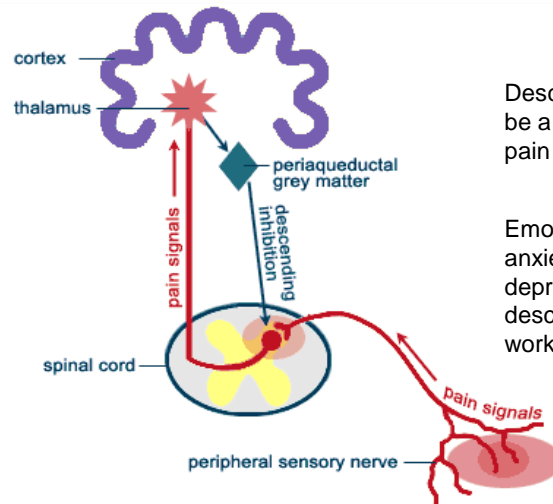
Vaso-occlusive crisis:

Impaired blood supply and infarction distal to the occlusion:

PAIN

Pain Management

The physiology of pain



Descending inhibition can be a powerful natural pain control mechanism.

Emotions such as anxiety, anger and depression can result in descending inhibition working less effectively.

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How should we manage pain in acute crisis? Any ideas?



Pain Management



Sickle cell disease: managing acute painful episodes in hospital

Published: 27 June 2012
nice.org.uk/guidance/cg143

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NICE National Institute for Health and Care Excellence

Improving health and social care through evidence-based guidance

Throughout an acute painful sickle cell episode, regard the patient (and/or their carer) as an expert in their condition, listen to their views and discuss with them:

- the planned treatment regimen for the episode
- treatment received during previous episodes
- any concerns they may have about the current episode
- any psychological and/or social support they may need

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Assess pain and use an age-appropriate pain scoring tool for all patients presenting at hospital with an acute painful sickle cell episode.

Offer analgesia within 30 minutes of presentation to all patients presenting at hospital with an acute painful sickle cell episode

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- What has the patient already taken?
- Ensure that the drug, dose and administration route are suitable for the severity of the pain and the age of the patient.
- Refer to the patient's individual care plan if available.

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Offer a bolus dose of a strong opioid by a suitable route to:

- All patients presenting with severe pain
- All patients presenting with moderate pain who have already had some analgesia before presentation.

Consider a weak opioid as an alternative to a strong opioid for patients presenting with moderate pain who have not yet had any analgesia.

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Offer a bolus dose of a strong opioid by a suitable route to:

- All patients presenting with severe pain
- All patients presenting with moderate pain who have already had some analgesia before presentation.

Reassess every 30 minutes. If the patient still has severe pain give another bolus of strong opioid.

If repeat boluses are required, consider PCA.



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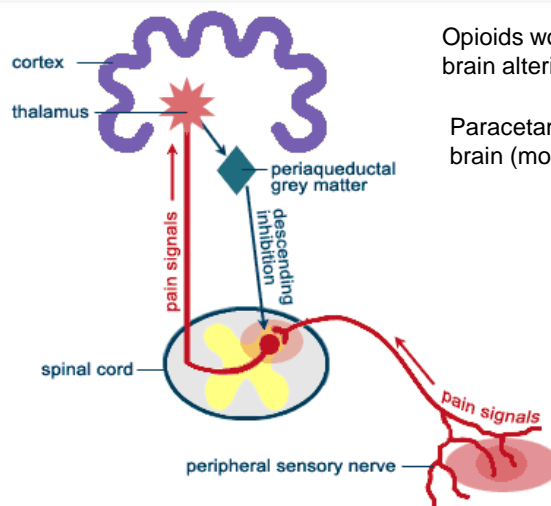
Ward admission

Offer all patients regular paracetamol and an NSAID by a suitable route, as well as an opioid, unless contraindicated.



Pain Management

Basic pharmacology



Opioids work predominantly in the brain altering the perception of pain

Paracetamol probably acts in the brain (mode of action not understood)

NSAIDs dampen down inflammation

Pain Management

Ward admission

Offer all patients regular paracetamol and an NSAID by a suitable route, as well as an opioid, unless contraindicated.

Do not offer pethidine for treating acute crisis pain.

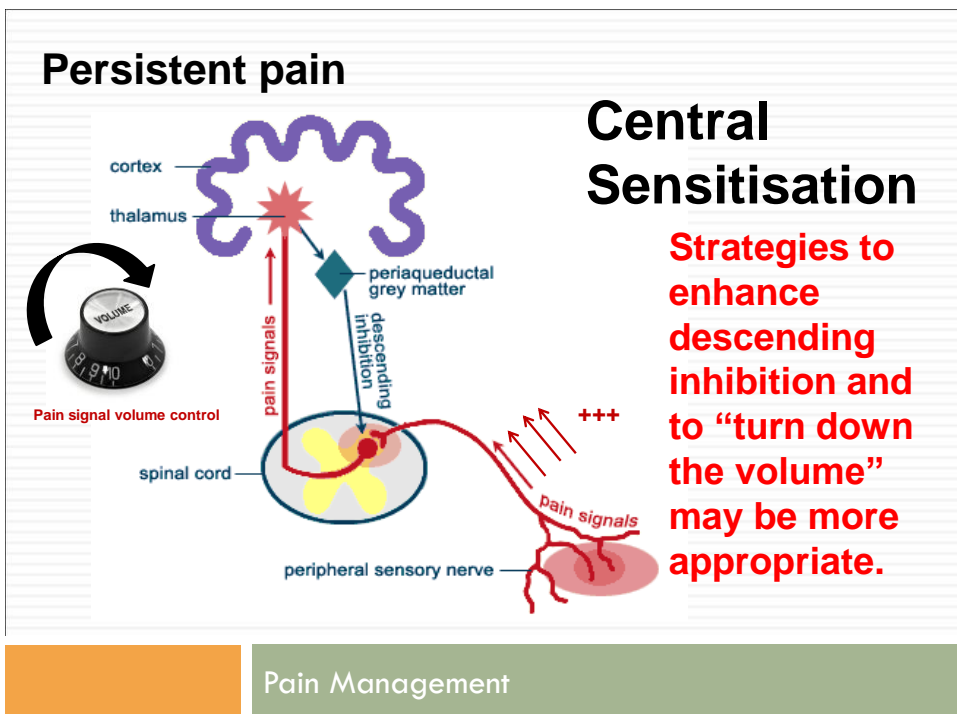
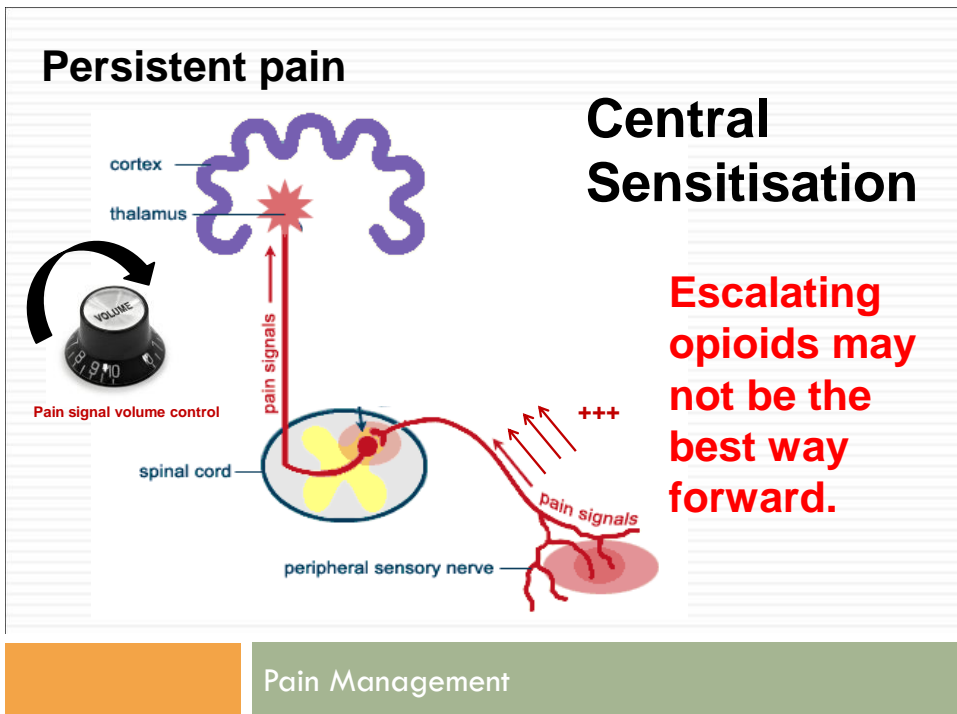
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Chronic Pain in Sickle Cell Disease

Avascular Necrosis

Sickle CVA

Pain Management



Summary

Listen to the patient and discuss plans with them

Assess pain

Prompt administration of analgesia:
strong opioid

Re-assess pain

Consider PCA

Follow the sickle care plan!



Escalation of opioids is not always the right thing to do

? Pain clinic ?Psychology

Pain Management