South London Sickle Protocol – Management of Priapism 5.2.09

Acute Management of Priapism in Adults with Sickle Cell Disease

DISCLAIMER: This guideline is for information purposes only and is not intended to inform any individual clinical decisions. STSTN and its members do not accept any responsibility for outcome of clinical decisions made as a result of reading these guidelines. All guidelines have been peer-reviewed and agreed to be published by the relevant lead consultants in the network.

DO NOT PACK THE PRIAPISM IN ICE

Priapism (painful persistent erection) is a well-described complication, occurring most commonly in young men with Sickle Cell Disease (SCD). It can be stuttering (lasting <2 hours) or fulminant (lasting >2 hours).

Any case lasting >1 hour should be treated as a medical emergency.

In A+E

Examination
- Confirm priapism
- If bladder palpable – encourage passing urine, catheterize if attempts fail

Initial management (1-4 hours duration)
- Discuss with Haematology SpR (Sickle SpR working hours, or SpR on call) who will advise:
  - Analgesia (this will often be opiates, as per the patients usual pain protocol)
  - Oral hydration, or if unable to tolerate this, give iv hydration
  - Encourage patient to take moderate exercise, for example going up and down stairs, to create steal syndrome
  - Encourage ejaculation
  - Give oral etilefrine: adult stat dose 50mg, followed by 50mg 12hrly
  - Check routine blood tests (fbc, U+E, LFTs, G+S, CRP. Also sickle screen if a new patient).

Haematology SpR should discuss with Urology SpR and inform them that patient may need an aspiration if there is no initial relief.

Arrangements for transport of the patient should be made if necessary.

If the initial measures relieve the priapism:
Admit for observation
Ensure regular prescription of etilefrine
Monitor Bp
Check routine blood tests (fbc, U+E, LFTs, G+S, CRP. Also sickle screen if a new patient).

4-6 hours of duration if no resolution
By 4 hours of total duration, the Haematology SpR should inform Urology SpR that the priapism has not settled and needs urgent aspiration.

Urology SpR should urgently review the patient

History
A history of previous shunting procedures and a long history of semi-erect priapism may imply High Flow priapism.
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Aspiration
One aspiration should be performed and phenylephrine should be
An initial sample should be taken for ABGs to distinguish high flow from low flow
Consider a penile block before aspiration especially if it is the patient’s first episode or if they are very anxious

I have info on aspiration and picture from initial protocol, which I could include…
Intracavernosal blood aspiration
  o  Clean penis with antiseptic liquid (chlorhexidine or povidone iodine)
  o  Hold penis by glans and insert a 19G (green) butterfly needle into the corpora of the penis (at 10 o'clock or 2 o'clock, at the midshaft of the penis); do not enter in the midline (avoiding the dorsal vein or the urethra anteriorly). Lignocaine bleb
  o  Aspirate blood with heparinised syringe – this should be processed through a blood gas machine
  o  Aspirate 50-100mls with a 20ml syringe, and flush through with saline
  o  Inject phenylephrine in aliquots of 200-500mcg per 5 minutes, with cardiovascular monitoring, as this can cause hypertension.

Admit for observation overnight

6 hours + duration
Admit under urology
Book onto the first CEPOD theatre list of the date
Top up transfusion if Hb <6.5g/dl

In theatre
Doppler to exclude high flow
1x aspiration and simple shunt procedure
Biopsy to look for necrosis

Non responsive priapism after initial surgery
Consider exchange blood transfusion
Definitive urology surgery

Senior Urology input
Mr Nick Watkins

Or

Mr David Ralph

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