

Fever Management:
Adult patients with SCD are functionally asplenic and can devolve into severe sepsis very quickly

1. Obtain infectious work-up, including CXR, BCx, UCx, and careful MSK exam given risk for AVN in atypical locations
2. Start empiric abx within 60min:
 - Preferred: ceftriaxone
 - Add macrolide if concern for ACS
 - Add vancomycin if concern for meningitis and/or SSTI
3. Continued pain management

Causes for VOE:
- Infection, cold, stress, extreme exercise, dehydration, alcohol, menses, pregnancy, exacerbation of other medical issues, idiopathic

Anemia Mgmt in SCD:
- If anemia below baseline, consult hematology before considering transfusion
- If anemic and retic count inappropriately low/normal, consult hematology for aplastic crisis

Suspected Vaso-Occlusive Episode (VOE)

Yes
Fever >38.5 or 101.5?

No

Headache/Neuro findings or Chest Pain?

No

Pain "typical" for VOE

Yes

Other Diagnostics:
1. Eval for precipitant/cause of VOE
2. Obtain CBC with diff, retic, T&S

Management:
Fluids: consider if concern for dehydration
Analgesia: inquire if pt has patient-directed plan
Recommend up-front PO/IV NSAID with PO/IV opioid

Assess Severity of Pain

Mild

Mod/Severe

If mild pain
4/10 or lower:
PO NSAID + PO opioid

If moderate/severe pain
5/10 or higher:
IV NSAID + IV opioid

Reassess in 30-60min
Pain managed?

No

Yes

Discharge Criteria/Process:
- Pain well-managed 1-2h after stopping analgesic
- Patient/family comfortable managing further pain at home
- Document/confirm phone contact info for patient/family
- Please alert hematology fellow to help arrange outpatient follow-up
- Encourage pt to call about follow up appt
- Follow up appt date/time before DC from ED preferred if possible

Consider de-escalation to PO, per provide discretion
If remains stable on PO opioids, consider discharge (see left)
If not, continue to re-assess pain severity and treat accordingly

Reassess in 15-30min
Pain managed?

Mild

Mod/Severe

If persistent mod/severe pain:
- Provide additional dose of IV opioid
- Recommend dose increase by 30-50%

If persistent mod/severe pain after 2-3 doses of IV opioid:
- Start admission process
- Start PCA (can be initiated in ED obs if admit delays)
- Consult hematology
- Consider acute pain service consult if complicated pain or issues with opioid-related side effects

Reasons for admission:

- Uncontrolled pain despite best efforts analgesia management either due to severity of acute pain episode, and/or persistent issues with opioid-related side effects
- Any additional signs/symptoms beyond a "typical" vaso-occlusive episodes that raise concern for other complications (such as above - fever/infection, acute chest syndrome, CVA, other evidence of ischemic organ damage from acute vaso-occlusion)
- We encourage use of "Adult Sickle Cell Disease Admission" Order Set if admitted or admit to ED obs

Evaluate for other process than VOC

Headache: careful neurologic exam, alert neuro and hematology ASAP if possible CVA. CVA due to VOE requires emergent RBC apheresis

Chest Pain: chest pain due to splinting from pain can lead to atelectasis and vasoocclusive damage in lung parenchyma causing ACS

ACS (acute chest syndrome):

- If suspected, obtain CXR PA & lat
- Diagnostic Criteria:
 - new pulmonary infiltrate
 - plus*
 - ANY of the following:
 - cough, tachypnea, fever, hypoxia
- IF concern for ACS:
 - Encourage incentive spirometry
 - Supplemental O2 (if SpO2 <92%)
 - Empiric broad-spectrum abx
 - Consult hematology

Fluid Management in SCD:

- Consider IVF if dehydration/hypovolemia
- Do not over-resuscitate:
 - Risk of hemodilution if aplastic crisis
 - ACS with associated pulmonary edema or effusions or risk of 3rd-spacing
 - Cerebral edema risk if presenting w/ CVA