Vaso-Occlusive Crisis
- Caused by anemia, dehydration
- These patients typically have higher resting Hgb
- Management:
  - Fluids: PO vs D5 1/2 NS at maintenance rate vs NS bolus if hypotensive
  - Opioid
  - Acetaminophen
  - Avoid NSAIDs or O2 (unless hypoxic)
- Rule out: osteomyelitis, avascular necrosis, gallstones, septic arthritis, acute chest syndrome

Cardiopulmonary Symptoms → Evaluate for Acute Chest Syndrome
- Leading cause of death
- Diagnosis: Infiltrate on XR chest plus...
  - Hypoxia
  - Fever
  - Chest pain
  - Respiratory signs/symptoms
- Management: antibiotics, fluid resuscitation as needed, exchange transfusion, hematology consult, consider ICU admission

Anemic Crisis
- Presents with less pain
- Patients may have pulmonary HTN, leg ulcers, increased risk of sudden death
- Obtain a hemoglobin, reticulocyte count, perform rectal exam

Causes:
- Transient Red Cell Aplasia
  - Low reticulocyte count
  - Management: isolation and call hematologist
- Splenic Sequestration
  - Typically seen pediatric patients
  - Large spleen, LUQ pain, rapid drop in hemoglobin, high reticulocyte count
  - Management: transfusion, volume resuscitation
- Hemolytic Crisis
  - Elevated LDH, elevated reticulocyte count, elevated LFTs/bilirubin

Special Circumstances
- Hyphema, priapism, CVA (even in peds), gallstones, osteomyelitis, sepsis/fever

Always Evaluate:
- Cardiopulmonary S/Sx
- Hemoglobin Level
- Reticulocyte Count

Foundations Frameworks
Approach to the Sickle Cell Crisis
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