CLINICAL ALGORITHM FOR INITIAL MANAGEMENT OF SICKLE CELL PATIENTS WITH FEVER

This pathway should be used for patients > 2 months of age with SS, SC, or Sβ-thalassemia type sickle cell disease who have a temperature ≥ 38.5°C or history of temperature ≥ 38.5°C within 48 hours of presentation. Please direct questions to Maine Children’s Cancer Program (207-396-7565)

Fever ≥ 38.5°C in pediatric sickle cell patient

Triage level 2

*Immediate evaluation with history, physical and diagnostic workup including:
  - CBC with differential
  - Reticulocyte count
  - Comprehensive metabolic panel
  - Blood culture
  - Consider type and Screen
  - Consider urinalysis and urine culture if urinary tract infection suspected
  - Consider RSV, flu testing, respiratory viral culture (If influenza positive, treat with Oseltamivir)
  - Consider chest xray for respiratory findings

Fever accompanied by shortness of breath, cough, tachypnea, chest pain and/or rales?

Suspect Acute Chest Syndrome
Obtain chest x-ray
Ceftriaxone 50mg/kg IV/IM
Azithromycin 10mg/kg IV/PO (max 500mg)
Discontinue home penicillin
Call heme/onc and consider PICU for admission

Toxic appearing or history of:
Bacteremia
Sepsis
Splenic sequestration within past 4 weeks
Multiple visits for same febrile illness
Temp >40°C?

Ceftriaxone 50 mg/kg (max 2,000 mg)
Call heme/onc and IPU for admission
Discontinue home penicillin

Outpatient management criteria:
Non toxic appearing, greater than 1 yr old, T<40°C, no h/o sepsis, no infiltrate on CXR, no hypoxia, lab work at baseline, no significant drop in Hg, WBC >5,000 and < 20,000, no social concerns (i.e. reliable follow up, access to transportation, at least 1 functioning phone)

Eligible for outpatient management?

YES

CEFTRIAXONE 50mg/kg (max 2,000 mg)
Admit

Discharge after discussion with heme/onc

NO

CEFTRIAXONE 50mg/kg (max 2,000 mg)

Rapidly administer antibiotics, do not wait for lab results

*1 Hour


Algorithms are not intended to replace provider’s clinical judgment or to establish a single protocol. Some clinical problems may not be adequately addressed in this guideline. As always, clinicians are urged to document management strategies.