

FEVER MANAGEMENT

for Infants and Children with Sickle Cell Disease

Prophylactic Medications:

Penicillin: 125 mg. b.i.d. . . . 2 months to 3 years
250 mg. b.i.d. . . . 3 years and over

Penicillin allergy: Erythromycin Ethyl Succinate
20 mg/kg/day divided b.i.d

Folic Acid: 0.1 mg. qd . . . 2 to 6 months
0.2 mg. qd . . . 6 to 12 months
0.5 mg. qd . . . 1 to 5 years
1.0 mg. qd . . . over 5 years
(Folic acid is available as an oral solution at the pharmacy at Strong)

General Guidelines:

1. Reinforce the importance of prophylactic penicillin with the family at each visit.
2. Provide the family with guidelines concerning when to take an infant or child's temperature. Teach the family how to take the temperature, reinforce the importance of having a thermometer in the home, and instruct the family to promptly notify the pediatrician if the fever is greater than 101⁰ F.

Fever Specific Guidelines:

Children with sickle cell anemia, as a result of splenic dysfunction, have an increased incidence of overwhelming sepsis. **Therefore, children with sickle cell disease of any age who present with a fever greater than 101⁰ F must receive a medical evaluation and antibiotics in a timely fashion.**

A complete history and thorough physical examination should be performed. CBC with retic count, blood, urine, and throat cultures, as well as a chest x-ray if indicated, should be obtained. A parenteral antibiotic effective against *S. pneumoniae* and *H. influenzae* should be promptly administered.

Hospital admission is indicated for any child with sickle cell disease who presents with any one of the following:

- Temperature greater than 40⁰ C (104⁰ F)
- Seriously ill appearance
- Hypotension
- Poor perfusion, dehydration
- Pulmonary infiltrate
- Corrected WBC greater than 30,000 or less than 5,000/mm³
- Platelet count less than 100,000/mm³
- Hemoglobin less than 5 g/dL
- History of *S. pneumoniae* sepsis

Febrile children who do not need hospital admission should be given Ceftriaxone 50-75 mg/kg (IV or IM) and an appointment to return for evaluation in 24 hours. Children should return sooner if ill appearing. A second dose of Ceftriaxone should be administered after 24 hours. If blood culture and urine culture are negative after 48 hours, antibiotics may be discontinued.

If cultures are negative for 48 hrs. but an identifiable source of infection (such as otitis media) has been found, a course of oral antibiotics should be prescribed. **Departure from the time honored in-patient approach to therapy should only be pursued when the practitioner and family are able to provide excellent follow-up.** Furthermore, endemic flora should be sensitive to the prescribed antibiotic.

References:

1. "Sickle Cell Disease: Screening, Diagnosis, Management and Counseling in Newborns and Infants" in *Clinical Practice Guideline (Number 6)* by U.S. Dept. of Health and Human Services AHCPH Publication No. 93-0562, April 1993
2. "Management and Therapy of Sickle Cell Disease", edited by Charache S, Lubin B, Reid, C.D. U.S. Dept. of Health and Human Services, NIH Publication No. 96-2117, 1995. (www.nhlbi.nih.gov/nhlbi/blood/sickle/prof/sickmt.pdf)

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Strong Sickle Program
Offers Help

Regarding treatment contact:

Dr. Norma Lerner or Pat Lamarche R.N., P.N.P. Department of Pediatrics 275-2981
Dr. Karen Kaplan, Department of Medicine 275-3761

Regarding newborn screening and genetic counseling, contact:

Dr. Peter Rowley, Sandra LaBella or Starlene Loader, Division of Genetics 275-4602

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