

PATIENT INFORMATION: Infection

Why is it important to be concerned and how can you help prevent it?

Infection is the major cause of death in children with sickle cell disease. Infections cause more deaths, spread more rapidly, and are more difficult to get rid of in patients with sickle cell disease than in persons without sickle cell disease.

An especially serious germ is the pneumococcal bacteria. It causes pneumonia, meningitis (infection of the brain) and septicemia (blood infection). This germ is responsible for most of the deaths in children with sickle cell disease under 5 years of age. It is estimated that children with sickle cell disease are 600 times more likely to get a pneumococcal infection than those without sickle cell disease. Ninety percent of infections occur before the age of 3 years.

Your child's risk for pneumococcal infection

The spleen in a normal person has two functions to help fight infection. It filters or removes germs from the bloodstream and makes antibodies that help fight infection outside of the spleen. In a child with sickle cell disease, the sickle cells block blood vessels in the spleen so blood can't move through to be filtered. It also can't make the antibodies that fight infection. This is why bacteria can grow in the bloodstream and cause blood poisoning (septicemia).

Signs of infection:

- Fever of 101°F or higher (or 100.4°F or higher if your child is less than 1 year old)
- Crankiness

- Unusual sleepiness
- Vomiting
- Diarrhea
- Rapid breathing or trouble breathing
- Cough
- Pale color

If your child has any of these symptoms, he or she needs to be evaluated by a doctor right away. Please call the Sickle Cell Anemia Center.

Your child will be examined and will have tests done to find the cause of the fever. Your child will be given an IV antibiotic and may be sent home on a strong antibiotic to take by mouth. Depending on your child's symptoms, he or she may be admitted to the hospital.

Prevention

Beginning at 3 months of age, your child will be started on an antibiotic which he or she will take twice daily. This medication is usually amoxicillin but may be different if your child has allergies. It must be taken every 12 hours. If a dose is missed, the body may not be protected against the pneumococcal bacteria and your child can get sick very rapidly. It is important to get your child's amoxicillin refilled before it runs out.

It is also important to remember that your child can still get a blood infection while taking amoxicillin. If your child develops a fever of 101°F or higher or shows any other signs of infection, he or she needs to be evaluated by a doctor.

Rainbow Sickle Cell Anemia Center

If your child has signs or symptoms of illness, please call 216-844-3345 and follow the prompts.

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Have a question? Ask a Rainbow doctor. **216-UH4-KIDS** | **216-844-5437** | Rainbow.org/AngiesInstitute

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