

## What to do if splenic sequestration happens to you...

1. Measure your child's spleen using a "spleen stick".
2. Determine if your child has symptoms, such as stomach pain or swelling, tiredness, or looks pale to you.
3. Take your child to see your primary MD, or to the ER if it is after office hours for blood counts and to measure the size of the spleen.
4. Notify, or have the doctors notify, your sickle cell nurses if this occurs. We can help determine the best treatment for your child.

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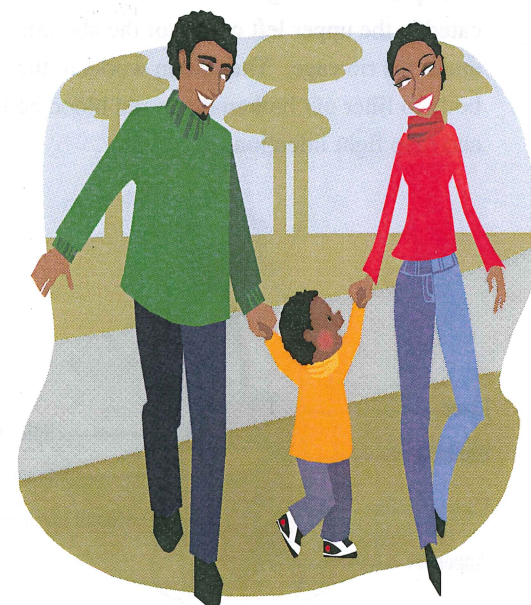
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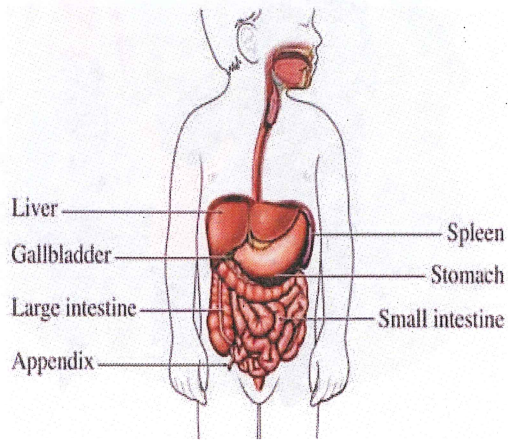
## Spleen Function and Acute Splenic Sequestration Crisis



UAB Division of  
Pediatric  
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## Spleen

The spleen is an organ in the body that is located in the upper left corner of the abdomen, under the rib cage. The spleen works in the body to filter out broken down red blood cells and help fight infection.



In people who don't have sickle cell, the spleen does a great job filtering out "encapsulated" bacteria. Encapsulated simply means that the bacteria is surrounded by a tight shell on the outside. The bacteria that is most dangerous to sickle cell patients is called a pneumococcal bacteria. It can make sickle cell patients very sick, very quickly.

## The spleen in a child with sickle cell disease

Different types of sickle cell disease affect the spleen differently. In many patients with sickle cell disease, over time "sickled" cells get caught in the spleen and "clog it up". This makes the spleen not work like a filter anymore. It is not as good at helping to fight infection, so children with sickle cell disorders are more at risk for infection; specifically pneumococcal infections.

One way to help prevent a pneumococcal infection is by taking penicillin every day. Penicillin should be started as soon as your child is diagnosed with any sickle cell disorder. Most children should remain on penicillin until about 5 or 6 years of age. If a child has to have the spleen removed, if they ever have a blood infection, or if they have frequent problems with pneumonia, he or she will likely remain on penicillin past that age.

It is also very important to get your child's immunizations on time. All children receive Prevnar as a part of their routine immunizations. Prevnar has an important role in preventing pneumococcal infections. In addition, after the age of 2 years, children will receive Pneumovax. This is an additional way we try to prevent pneumococcal blood infections in children with sickle cell disease.

## Splenic Sequestration

Sometimes, in children with sickle cell

disease, the spleen gets overloaded and gets very large, very fast. This causes the patient's red blood cell counts to drop very quickly. You might be able to see swelling of the stomach or your child might say that his or her stomach hurts. The child may also feel very tired, look very pale and will often have fever.

If this occurs, you should immediately take your child to see his or her medical provider to measure the size of the spleen and check blood counts. If your child experiences a splenic sequestration crisis he or she will most likely require a blood transfusion to increase the blood counts. Sometimes we recommend that the child have the spleen removed through a surgical procedure called a splenectomy. Once a child has had a splenectomy, they are required to stay on penicillin indefinitely to protect them from infection.

