

Will my child always need treatment to prevent a stroke?

Yes. If your child had a stroke or the TCD exam shows a risk for having one, treatment will be needed.

Currently, monthly blood transfusions are the only treatment that can help prevent a stroke. Each month the St. Jude staff can give your child some blood with no sickle cells. Your doctor can talk to you about this treatment.

If you have questions, ask your child's doctor or nurse case manager. To learn more about blood transfusions, ask for the booklet *Red Blood Cell Transfusions for Sickle Cell Disease*.

This document is not intended to take the place of the care and attention of your personal doctor. Our aim is to promote active participation in your care and treatment by providing information and education. Questions about individual health concerns or specific treatment options should be discussed with your doctor. For more general information on sickle cell disease, please visit our Web site at www.stjude.org/sicklecell.

Funds for reproduction of this document were provided by St. Jude Children's Research Hospital, ALSAC, and a grant from the Plough Foundation. Copyright © 2009 St. Jude Children's Research Hospital

St. Jude complies with health care-related federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex.

ATTENTION: If you speak another language, assistance services, free of charge, are available to you. Call 1-866-278-5833 (TTY: 1-901-595-1040).

ATENCIÓN: si habla español, tiene a su disposición servicios gratuitos de asistencia lingüística. Llame al 1-866-278-5833 (TTY: 1-901-595-1040).

تنبيه: إذا كنت تتحدث باللغة العربية فيمكنك الاستعانة بخدمات المساعدة اللغوية المتوفرة لك مجاناً. يرجى الاتصال بالرقم 1-866-278-5833 (الهاتف النصي: 1-901-595-1040).



To order more fact sheets:
St. Jude Department of Hematology
262 Danny Thomas Place, Mail Stop 800
Memphis, TN 38105-3678
www.stjude.org/sicklecell

Produced by Biomedical Communications X76000 03/18



Strokes in Children with Sickle Cell Disease

What is a stroke?

A stroke is an injury to the brain that happens when a blood vessel is blocked. This slows down or stops the flow of blood and oxygen into the brain, causing part of the brain to die. When this happens, a part of the brain is damaged and does not work as well.

Because of sickle cell disease, your child has more risk of having a stroke than a child who does not have sickle cell disease. A blocked blood vessel could cause a stroke. One (1) in every 10 children with certain types of sickle cell disease will have a stroke. The main types are hemoglobin SS (also called sickle cell anemia) and sickle beta zero thalassemia (S β ⁰).

How do I know if my child is having a stroke?

If your child is having a stroke or already had one, look for the following symptoms:

- Weakness in an arm, a leg, or entire body with no pain
- Trouble walking or picking up things
- Trouble speaking normally
- Severe headaches
- Dizziness
- Twisted mouth or abnormal smile
- Seizures
- Your child might also have these symptoms:
- Sleepiness (more than usual)
- Changes in behavior
- Changes in school work or having more trouble doing school work

What if I think my child is having a stroke?

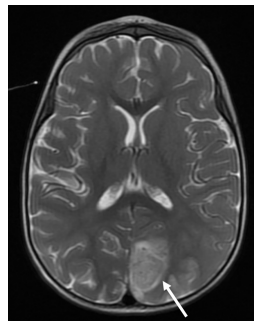
CALL 911 if you think your child is having a stroke or already had one. A stroke can kill your child. Get medical help right away.

Can the doctor tell if my child had a stroke?

- Yes. The doctor will use a CT scan (also called a CAT scan) or an MRI to take pictures of your child's brain. The pictures will show any brain damage. Because strokes cause brain damage, the doctor will know if your child had a stroke.

Can my child get treatment for a stroke?

- Yes. The St. Jude Hematology staff will give your child some blood with no sickle cells. This is called a blood transfusion.
- If your child has a stroke, there is a 70 percent chance of having another stroke unless blood transfusions are given every month.
- If your child has a stroke, a blood transfusion will be needed every month to help prevent future strokes.



A picture of a damaged part of the brain as seen on an MRI.

How will a stroke affect my child?

If your child has a stroke, the brain will be damaged. Your child might have trouble walking, talking, balancing, or learning. One side of the body might be weak. With physical therapy and occupational therapy, your child's problems may improve.

Can the doctor tell if my child might have a stroke?

Yes. If your child has hemoglobin SS or S β ⁰ sickle cell disease, your child is more likely to have a stroke than someone without the disease.



A patient having a TCD exam.

The St. Jude staff also can do a certain test, called a TCD (transcranial Doppler) ultrasound exam, to see if your child is at high risk for having a stroke. The test measures blood flow in your child's brain. It does not hurt. If the test shows your child has more risk than other children with sickle cell disease, treatment can be given to prevent a stroke.