What is sickle cell disease?

Sickle cell disease causes the body to make abnormal red blood cells. This health problem is passed down through the genes from parent to child. Normal red blood cells are soft and round. They can easily pass through tiny tubes (vessels) that carry blood around the body.

Sickle cell disease causes red blood cells to be hard, pointed, and sticky—and shaped like a farm tool called a “sickle.” These cells have a hard time passing through tiny blood vessels and may get stuck.

What health problems can sickle cell disease cause?

When these sickle-shaped cells block blood vessels, less blood can reach that part of the body. This can cause health problems, such as:

- Higher chance of serious infection
- Organ damage
- Attacks of severe pain
- Leg ulcers
- Stroke

Are there different types of sickle cell disease?

Sickle cell disease SS (SCD-SS) is the most common type of sickle cell disease. Some other common types are:

- SCD-SC
- SCD-S/beta-plus thalassemia
- SCD-S/beta-zero thalassemia
What should people with sickle cell disease do to stay healthy?

People with sickle cell disease should be under a doctor’s care. They should drink plenty of water or juice, eat healthy food, stay active, get enough rest, and avoid getting too hot or too cold. Sickle cell patients should see the doctor right away if they get a fever or other signs of health problems.

How is sickle cell disease treated?

Children should take penicillin twice a day to prevent dangerous infections. Pain medications, other antibiotics, blood transfusions, and surgery may all be part of the treatment of sickle cell disease as needed.

Are there any new treatments in progress?

A medicine called hydroxyurea can help reduce pain attacks and other serious complications of sickle cell disease.

Is there a cure for sickle cell disease?

Right now, there is no cure that works for everyone who has sickle cell disease. Blood (or bone marrow) stem cells transplanted from a matched healthy donor has cured some patients. The procedure carries some risk and may not be right for every patient. Gene therapy is also being studied.

What is sickle cell trait?

Sickle cell trait (AS) is a condition in which a generally healthy person carries both the normal (A) and sickle cell (S) genes. Two people who have sickle cell trait could have a baby with sickle cell disease. That’s why it’s important to know if you have AS.

How can I learn more about sickle cell disease and sickle cell trait?

Contact the SCDAA (Sickle Cell Disease Association of America) at 800-421-8453. Or, go to our website: www.sicklecelldisease.org