

Sickle level. scientist
have had a little

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Sickle cell is hereditary, cures are difficult to discover. By the time a person is diagnosed with the disease it's too late, the harm has already been done. The complicated task at hand required even more depth research described in this paper. The ideal solution after testing has the potential to relieve pain and bring oxygen levels back to a healthy level.

Scientists have had a little success in using genetic expertise to get the appropriate copies of Beta Globin gene into people with sickle cell disease. If they can do well in this endeavor, people with the disease may be cured. Unfortunately they will still pass the sickle cell genes into their children.

I selected the Sickle Cell Disease because two of my close relatives died from this disease. Each year on holidays and their birthdays I am saddened that they're no longer here. This is hereditary in my family which has educated me to get sickle cell screening each year to detect any signs of this disease.

History Of Sickle Cell Disease This dreadful disease that affects many ages of African American descent, Sickle cell disease is hereditary, to inherit the disease both parents of a child must have the sickle cell trait. When both parents have the trait. They have a 1 in 4 chance of having a child with the sickle cell disease.

The Description Of Sickle Cell Sickle cell disease is an inherited form of anemia a condition in which there aren't enough healthy red blood cells to carry enough oxygen throughout your body. Where the blood cells change from the healthy round shaped to a long pointed stiff and sticky shape like a banana.

When the unhealthy blood cells pass through the veins the sickle shape causes pain and low oxygen levels, making basic activities difficult. Which

can slow or block of oxygen to parts of the body. Once the body recognizes the unhealthy red blood cells as abnormal, the body destroys them faster than usual causing anemia. Signs & Symptoms Of Sickle Cell Disease The pain crisis are a major symptoms of sickle cell anemia, can vary from person to person and change overtime. While sickle cells are abnormal and the body destroy them fast. Red blood cells are flexible and last 120 days. Wherea's body destroys the stiff and sticky sickle cells in 10 to 20 days.

Sickle cell disease is a disorder of the red blood cells the entire body can be affected. Without enough red blood cells, your body can't get the oxygen It needs to feel energized, causing fatigue.

Pain A pain crisis can be brought on by, illness, temperature changes, stress, dehydration. Pain comes when the sickled red blood cells get trapped In blood vessels, blood cannot flow to an area of the chest, abdomen and joints. This results in a lack of oxygen to this area and episodes of pain starts. The pain varies and can last for a few hours to a few weeks.

Infections People with sickle cell anemia are at a high risk of getting an infection, a fever can be the first sign of an infection. Sickle cells can damage an organ that fights infection the spleen , leaving the body vulnerable to infections. People with sickle cell anemia should get vaccinations and take antibiotics to prevent potentially life threatening infections. Sickle Cell Disease Can Lead To A Host Of Complications, Including; Delayed growth: Red blood cells provide your body with oxygen and nutrients you need for growth. A stroke: Can occur if sickle cells block blood flow to an area of your brain. Acute chest syndrome: Causes chest pain, fever and difficulty breathing.

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Acute chest syndrome can be caused by lung infection or by sickle cells blocking blood vessels in your lungs. Pulmonary hypertension: People with sickle cell anemia can develop high blood pressure. Organ damage: Sickle cells that block blood flow through vessels immediately describe the affected organ of blood and oxygen. Blindness: Sickle cells can block tiny blood vessels in your eyes.

Leg Ulcers: Sickle cell anemia can cause open sores on the legs. Gallstones: The breakdown of red blood cells produces a substance called bilirubin. A high level of bilirubin in your body can lead to gallstones. Priapism: Men with sickle cell anemia can have painful, long lasting erections, a condition called priapism. Diagnosis For people who do not know if they carry an abnormal hemoglobin gene can ask their doctor to have their blood tested. Couples who are planning to have children and know that, they are at risk of having a child with sickle cell should see a genetics doctor.

Testing before birth can be done as early as 8-10 weeks into the pregnancy. Sampling of amniotic fluid from the mother womb. Tissue is taken from the placenta of the organ that attaches the umbilical cord to the mother's womb. This type of test looks for the sickle cell hemoglobin gene instead of an abnormal hemoglobin.

Treatment Babies born with sickle cell disease should be see a hematologist doctor. The first sickle cell visit should take place before 8 weeks age, also see their sickle cell care providers regularly. To prevent problems by taking medicines getting immunizations, performing tests, getting education on the disease so they will know what to watch out for to prevent infections. In

sickle cell disease, the spleen does not work properly or does not work at all.

This issue makes people with sickle cell disease more vulnerable to get infections. Penicillin is started shortly after diagnosed usually before 2 months of age. Taking penicillin twice daily until the age of 5 has been proven to decrease the risk of serious bacterial infections. Blood transfusions can be used to treat specific complications of sickle cell disease like severe anemia or acute chest syndrome, a lung complication.

Bone marrow transplantation is the only cure for sickle cell disease. To have a success for this treatment is to have a matched sibling to donate stem cells. Bone marrow is a soft, fatty tissue inside the center of the bones where blood cells are made.

Bone marrow or stem cell transplant is a procedure that take healthy cells from one person to the donor and puts them into someone whose bone marrow is not working properly. Bone marrow transplants are very risky, and can have serious side effects, including death. Bone marrow or stem cell transplants are only used in severe sickle cell disease cases for children who have organ damage from the disease. If you or your child has sickle cell disease, you should learn as much as you can about the disease to maintain a healthy lifestyle. Take the time out to rest and drink plenty of fluids. Take your medicines as your doctor prescribes.

Get any medical and lab test or immunizations that your doctor orders. See a doctor right away if you have any of the following danger signs, fever, stroke symptoms, problems breathing, symptoms of spleen enlargement,
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sudden loss of vision or symptoms of severe anemia. Children that attends daycare or school. Parents of a child should speak to his or her teacher about the disease. Teachers need to know what to watch out for and how to accommodate your child. Coping with pain every person with sickle cell disease experiences pain. Look for other methods that help your pain such as. A heating pad, a warm bath, a message, physical therapy or acupuncture.

Living with sickle cell disease can be very stressful. At times you may feel sad or depressed. Some people find that speaking to a counselor or psychiatrist or participating in a support group.

EPIDEMIOLOGYThe graph on the poster board shows the average of life expectancy for people with sickle cell disease starting early 1900's to the the early 2000's. In 1970 life expectancy begins an increase. In 1973, the average life expectancy was 14 years for people with sickle cell disease in the United States. Today, the average lifespan for sickle cell disease is around 40 to 60 years, with the use penicillin, hydroxyurea and blood transfusions that are proven to be safe and effective. Sickle cell is a hereditary disease that affects african americans the United States 1 out of 500 African americans births have sickle cell disease. About 1 in 12 African American babies with sickle cell trait. There are also many people with different ethnicities that inherit sickle cell. 1 out of 36, 000 Hispanic americans births have sickle cell disease, southern European, Middle Eastern, or Asian Indian backgrounds.

Approximately 100, 000 Americans have sickle cell disease. References:
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