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Office of Integrated Health
Health & Safety Information Summary

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Sickle Cell Anemia

What is Sickle Cell Anemia?

Sickle cell disease also known as sickle cell anemia is a group of inherited red blood cell disorders. Healthy red blood cells are round, and they move through small blood vessels to carry oxygen to all parts of the body. In someone who has sickle cell anemia, the red blood cells become hard and sticky and look like a C-shaped farm tool called a "sickle". The sickle cells die early, which causes a constant shortage of red blood cells. Also, when they travel through small blood vessels, they get stuck and clog the blood flow. This can cause pain and other serious problems such infection, acute chest syndrome and stroke.

Signs and Symptoms of Sickle Cell Anemia

Pain is the most common complication of sickle cell anemia, and the number one reason that individuals with sickle cell anemia go to the emergency room or hospital. When sickle cells travel through small blood vessels, they can get stuck and block the blood flow. This causes pain that can start suddenly, be mild to severe, and can last for any length of time.

Pain in an individual with sickle cell anemia should never be ignored and can sometimes result in crisis and even a life threatening emergency!

Sickle Cell Anemia Diagnosis and Treatment

Sickle cell anemia is diagnosed with a simple blood test. It most often is found at birth during routine newborn screening tests at the hospital. Because children with sickle cell anemia are at an increased risk of infection and other health problems, early diagnosis and treatment are important.

Prevention of Sickle Cell Anemia

Sickle cell anemia is an inherited disease. This means the genes for the disease are passed down biologically from each parent. Sickle cell disease is not contagious; it cannot be shared or spread from contact.

Recommendations

Sickle cell anemia is a life-long illness. The severity of the disease varies widely from person to person. Each individual with sickle cell anemia should have a home treatment regimen that is best suited to their needs. The providers on the individual's team usually help a person develop a written, tailored care plan. If possible, the person with sickle cell anemia should carry this plan with them when they go to the emergency room.

Resources

https://www.cdc.gov/ncbddd/sicklecell/traits.html
https://www.nhlbi.nih.gov/health/health-topics/topics/sca