SICKLE CELL DISEASE

sources

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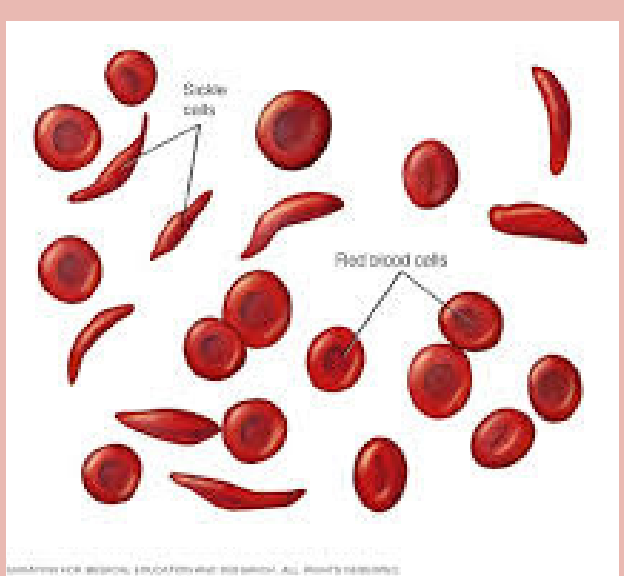
What is it?



Sickle cell disease causes a mutation in the hemoglobin molecule. This mutation causes red blood cells, which are usually in the shape of discs, to be in a crescent shape.

Sickle Cell Disease affects more than 100,000 people in America and 8 million people worldwide. 9 in 10 people with Sickle Cell Disease identify as black.

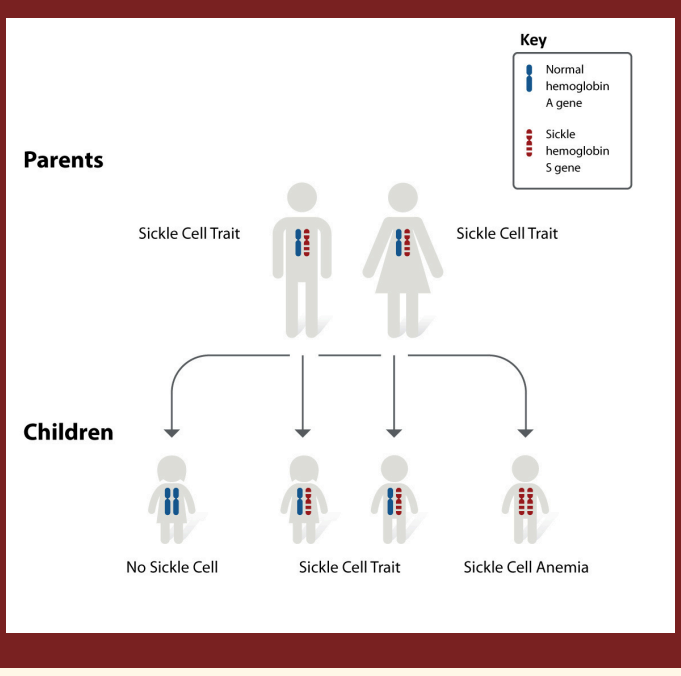
The cresent shape of the red blood cells weakens their ability to move through blood vessels, blocking bloodflow in the body.

causes

Sickle cell disease originated in Africa in order to protect people from Malaria.

It is a recessive trait, which means both parents have to be carriers in order for their child to have the trait.

When both parents carry the Sickle Cell Disease trait, it creates a one in four chance for the child to have SCD, a two in four chance for the child to be a carrier of the trait, and a one in four chance the child does not carry it at all.



symptoms

Anemia. this can make a person feel dizziness, shortness of breath, and fatigue. Anemia is caused by a shortage of red blood cells.

Jaundice. This can cause a yellowish tint to a persons skin. This happens because the red blood cells die quicker than the liver can filter them out.

Frequent pain. This is due to blocked bloodflow from the crescent shaped red blood cells.

treatment

To get diagnosed with Sickle Cell Disease a person would need to take a blood or genetics test. In many states, newborn babies are regularly screened for the disease.

Treatments include, Pain medicines, blood transfusions, which can treat Anemia, and bone marrow transplants, which can cure Sicke Cell Disease by replacing unhealthy stem cells with healthy ones. Gene therapies have also been approved to treat Sickle Cell Disease.