

Sickle cell disease

This is a genetic condition in which the quality of hemoglobin is defective. This condition can cause abnormal hemoglobin which, in turn, can result in abnormally shaped (sickled) red blood cells. These abnormal red blood cells cannot easily pass through small blood vessels and, therefore, could deprive the body organs of adequate oxygen.

Sickle cells also have a shorter life span than normal red blood cells (10-20 days compared to 120 days). This rapid turn over may result in inadequate time to replace the red blood cells and may result in anemia.

In order for a person to have sickle cell anemia, one defective hemoglobin gene must be inherited from each parent. If only one gene is inherited from one parent, then the conditions are much milder and it is referred to as sickle cell trait.

Red Blood Cells

