



A Brief Note on Sickle Cell Anemia

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DESCRIPTION

Sickle cell anemia belongs to a group of hereditary disorders known as sickle cell anemia. It affects the shape of red blood cells, which carry oxygen to all parts of the body. Red blood cells are usually round and flexible and can easily move within blood vessels. In sickle cell anemia, some red blood cells are shaped like a sickle or a crescent moon. These sickle cells also become hard and sticky, which can slow or block blood flow.

SICKLE CELL ANEMIA

Sickle cell anemia is caused by a change in the gene because to make the iron rich compound in red blood cells called hemoglobin. Hemoglobin enables red blood cells to carry oxygen from the lungs to the entire body. Sickle cell anemia causes red blood cells to become rigid, sticky the hemoglobin associated with Treatment can reduce pain and prevent illness-related complications. With one typical hemoglobin gene and an altered form of that gene, with sickle cell traits make both typical hemoglobin and sickle cell hemoglobin. Blood may contain sickle cells, but it is usually asymptomatic. However, they are carriers of the disease, which means they can pass genes to their children.

Blood transfusions are used to treat severe anemia. Sudden exacerbations of anemia due to infection or enlargement of the

spleen are common reasons for blood transfusions. However, multiple transfusions can cause health problems due to iron levels in the blood. Iron overload, called hemosiderosis, can damage the liver, heart, pancreas, and other organs, causing illnesses such as diabetes. Iron chelation therapy should be started in patients with SCD who receive regular blood transfusions to reduce excess iron levels.

Red blood cell disorders are a group of hereditary Sickle Cell Disease (SCD). Hemoglobin is a protein present in red blood cells that carries oxygen around the body. In SCD, hemoglobin in red blood cells becomes a hard rod and also changes the shape of the red blood cells. The cell should be disk-shaped, but this will turn it into a crescent moon.

CONCLUSION

Crescent-shaped cells are inflexible and cannot be easily reshaped. The Crescent shaped cells may burst as they move through the blood vessels. Your body may struggle to make enough new cells to replace the lost cells. For this reason, there may be a shortage of red blood cells. This is a condition called anemia, and you may feel tired. The sickle-shaped cells attach to the walls of blood vessels and can also cause obstructions that slow or stop blood flow.

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