SCD is a blood disorder

SCD is a genetic condition that is present at birth. It is inherited when a child receives two copies of a sickle cell gene, one from each parent. Sickled cells can clog blood vessels, blocking the flow of blood to major organs. The condition affects red blood cells. Normal red blood cells are round, flexible, and travel through small blood vessels. Sickled cells cause a variety of kidney complications, including kidney disease and serious infections. Sickled cells can also cause strokes, blindness, and organ failure. The American Society of Hematology (ASH) believes it is essential to provide updated treatment guidelines that reflect the newest evidence about SCD, ensuring the medical community can better treat the disease and people with SCD can make the best decisions for their care.

WHAT CAUSES SCD?

SCD is caused by a gene mutation that results in the production of hemoglobin S, a type of hemoglobin that causes red blood cells to sickle into crescent shapes. This mutation is inherited when a child receives two copies of a sickle cell gene—one from each parent. If only one sickle cell gene is inherited, the result is sickle cell trait (SCT). People with SCT can pass on the disease when they have a child. Sickled cells often get stuck and clog blood vessels, causing pain and other health problems.

COMMON COMPLICATIONS OF SCD

Individuals living with SCD face many challenges and complications, ranging from mild to severe, throughout their lives. Common complications include:

- ANEMIA: A condition in which the body doesn’t have enough healthy red blood cells to carry oxygen to the body’s tissues. This can cause tiredness, weakness, and dizziness. Blood transfusions are sometimes needed to treat severe anemia.
- STROKE: A sudden disruption of blood flow to the brain that leads to cell death and can cause serious illness, disability, and, in some cases, death. Sickled cells can clog blood vessels to the brain, causing a stroke.
- VENOUS THROMBOEMBOLISM (VTE): The formation of blood clots in the veins of the legs, which can cause serious illness, disability, and, in some cases, death. Sickled cells can cause developing blood clots in the deep veins of the leg, and this can cause a deep-vein thrombosis (DVT) or pulmonary embolism (PE).
- STICKLE DISEASE: A chronic or episodic pain that can start and cause a range of serious health issues. Sickled cells can cause the development of kidney complications, blocking the flow of blood to major organs.
- KIDNEY DISEASE: A condition in which the kidneys can become damaged and stop working properly. Sickled cells can cause kidney deterioration, and damage to the kidneys can cause a stroke.
- ACUTE CHEST SYNDROME: A serious infection of the lungs that can cause serious illness, disability, and, in some cases, death. Sickled cells can cause developing blood clots in the lungs, which can cause pneumonia, fever, and a variety of kidney complications.
- DIZZINESS: A feeling of being unsteady or nauseous. Sickled cells can cause developing blood clots in the brain, which can cause dizziness.
- DIFFICULTY BREATHING: A feeling of shortness of breath, coughing, or chest pain. Sickled cells can cause developing blood clots in the lungs, which can cause difficulty breathing.
- PAIN: A feeling of discomfort, discomfort, and discomfort. Sickled cells can cause developing blood clots in the brain, which can cause pain.
- PNEUMONIA: A serious infection of the lungs that can cause serious illness, disability, and, in some cases, death. Sickled cells can cause developing blood clots in the lungs, which can cause pneumonia.
- FEVER: A feeling of heat, discomfort, and discomfort. Sickled cells can cause developing blood clots in the brain, which can cause fever.
- CHEST SYNDROME: A life-threatening condition like pneumonia, fever, and a variety of kidney complications.
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SCD IN THE U.S.

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