
Sickle Cell Disease

Description: Sickle cell disease is an inherited blood disorder that affects a part of the red blood cell called hemoglobin. Hemoglobin is the part of the red blood cell that carries oxygen to different parts of the body. A person with sickle cell disease makes a different kind of hemoglobin called “sickle” hemoglobin. Instead of being round and smooth, cells with sickle hemoglobin become hard and sticky and look like a banana or sickle. These cells have trouble moving through small blood vessels.

Sometimes they clog up these blood vessels preventing the blood from bringing oxygen to the tissues. This can cause pain or damage to the areas that are not getting oxygen.

Although children are born with the disease, the symptoms usually do not appear until after 6 months of age. Sickle cell disease can cause many kinds of problems.

Some of the most common problems are infections, pain and anemia. Every child who has sickle cell disease is at risk for these problems, but not everyone who has sickle cell disease will actually have all of these problems.

Life-threatening infections are one of the most serious problems children with sickle cell disease can have. These infections occur because the spleen does not work well in children with sickle cell disease. The spleen is an organ in the body that works to help the body kill germs. The sickle cells clog and damage the spleen so that it can't do its job. Parents should be informed immediately if their child has a temperature of 100°F (axillary) or if their child appears ill.

Pain is caused by the sickle cells getting stuck and blocking blood vessels. This cuts off the blood supply to nearby tissues. When this happens, the cells can't get through to bring oxygen and the area starts to hurt. Most pain is mild enough that it can be treated at home with increased fluids, heat or massage to the area and oral medicines such as Tylenol, Ibuprofen or Tylenol with codeine. Sometimes sickle cell pain may be very bad and will need to be treated in the hospital with stronger medicines. Parents should be informed if the child shows any signs of pain.

Sickle cells do not live as long as normal red blood cells because of their abnormal shape. This decreases the number of red blood cells and the amount of hemoglobin in the body. This low blood count is called “anemia.” Most children adjust to this anemia and it usually does not need to be treated. You may notice that children with sickle cell disease become tired more easily than other children do. Children with sickle cell disease should be encouraged to drink plenty of fluids and to take rest breaks when tired, but otherwise should not be treated differently than other children. Parents should be informed of any increase in fatigue.

Responsibilities of Parents and Caregivers: Parents should be informed immediately if:* Child has a temperature of 100°F (axillary) or if their child appears ill.

- * Child shows any signs of pain.
- * Child has any increase in fatigue.
- * Child care setting should have a Medical/Physical Care Plan for the child which describes the responsibilities of the center as well as the parent.

