



Sickle Cell Anemia and Sickle Cell Crisis

*For more
information, ask
your pharmacist!*

What is sickle cell anemia?

Hemoglobin is found in red blood cells and is responsible for carrying oxygen in the blood. Sickle cell anemia is an inherited condition that causes abnormally formed hemoglobin in red blood cells, resulting in the sickle shape cells. The sickled shape causes the cells to easily get stuck in small blood vessels, causing less oxygen to travel to these areas. Sickled red blood cells also die sooner than regular red blood cells.

What is sickle cell crisis?

Sickle cell crisis occurs when sickled red blood cells block blood vessels leading to joints, muscles, bones or organs. This is very painful and will often last hours to days. Patients often complain of pain in knees, legs, arms, stomach, chest and back.

How is sickle cell crisis treated?

It is possible to treat a sickle cell crisis at home with oral pain relievers. Examples of over-the-counter medications include acetaminophen (Tylenol®), ibuprofen (Motrin® or Advil®) and naproxen (Aleve®). Hospitalization is necessary for severe pain that cannot be controlled with over-the-counter medications. Hospitalization is also necessary when patients have nausea and/or vomiting along with the pain.

What causes sickle cell crisis?

The exact cause of a sickle cell crisis is often unknown and involves multiple factors. Risk factors for sickle cell crisis include excessive alcohol consumption, smoking, dehydration, stress, being too hot or too cold, sleep apnea (breathing problem during sleep), infections, strenuous exercise and certain medical conditions like diabetes.

How can sickle cell crisis be prevented?

- Don't smoke.
- Get regular exercise, but try to avoid extremely strenuous exercise.
- Limit alcohol consumption.
- Drink plenty of fluids (at least eight glasses of water a day).
- Reduce or avoid stress or tension.
- Don't swim in cold water and always wear warm clothes in cold weather.
- Identify and treat potential infections early.
- Notify your doctor if you have sleep problems like snoring or sleep apnea.

This information provided by the Michigan Pharmacists Association and:

