



Hydroxyurea (hy-drox-e-you-RE-a) treatment for sickle cell disease

“Our 11-year-old son, Berto, is part of a research study and is taking hydroxyurea. For this medicine to work, he takes one dose by mouth, once a day. It took a few months for the medicine to build up to the right amount to start working. Now, our child has fewer pain attacks.

The specialist explained that this medicine helps Berto’s red blood cells stay round and flexible—so they travel easier through his blood vessels. Round cells cause less blockage of blood flow to his organs and tissues—and that is a good thing. While this treatment won’t cure sickle cell disease, Berto is feeling so much better!”

How hydroxyurea can help sickle cell patients

Hydroxyurea is a medicine that can help children and adults with sickle cell disease. It is not a cure for sickle cell disease. But it can greatly ease some of the health problems caused by sickle cell.

Hydroxyurea has been shown to lower:

- Pain attacks
- Acute chest syndrome (ACS) attacks
- Hospital stays
- Need for red blood cell transfusions

This drug may also prevent damage to the spleen, kidneys, lungs, and brain. It is not a pain medicine and cannot stop a pain attack once it has started.

Hydroxyurea treatment helps red blood cells stay round and flexible

Round, smooth cells travel more easily through blood vessels than sticky, sickle-shaped cells. The round cells can mean fewer complications from sickle cell disease.



Blood cells BEFORE taking hydroxyurea. The blood cells are shaped like a farm tool called a “sickle.”.



Blood cells after taking hydroxyurea. There are more round blood cells.





Who can take hydroxyurea

Adults and children can take this drug. In most cases, children who take this drug are part of a research study.

Hydroxyurea can be helpful to children who have:

- Many pain attacks
- Attacks of acute chest syndrome
- Severe anemia

How patients take this medicine

This drug is taken by mouth one time each day. It comes in liquid and capsule form. If used the right way, it usually starts working after a few months.

The need for follow-up care

Hydroxyurea is a strong medicine that needs to be taken carefully. Your child will need to get blood tests often to make sure he or she is making enough blood cells. Talk to your child's doctor about the side effects and possible health risks from this drug.

How can I learn more about hydroxyurea?

- Talk to your doctor.
- Contact the SCDA (Sickle Cell Disease Association of America) at 800-421-8453. Or, go to our website: www.sicklecelldisease.org

