

How should I give hydroxyurea to my child?

Give it as prescribed by your child's doctor, nurse practitioner (NP), or pharmacist. It may be given as a capsule or liquid. The hydroxyurea dose may be changed over time.

For Hydroxyurea to work, you must take it every day, not just when you have pain. Please remember to call your pharmacist for a refill before you run out of your child's medicine.

- If your child misses a dose, give the missed dose as soon as you remember. But if it's almost time for their next dose, skip the missed dose and give the next one. Do not double the dose.
- Your child can take it with or without food.
- If your child throws up soon after taking this medicine, call your child's doctor or NP.
- Try to get your child to drink lots of fluids to keep the kidneys working well and stop kidney stones from forming.

What if my child is also taking other medicine?

Hydroxyurea may interact with other medicines. Check with the doctor or pharmacist before giving your child any other medicines. This includes over-the-counter medicines, herbals, and vitamins.

If your child is also taking other medicine, make sure that your child takes each one at the right time and doesn't mix them. Ask your child's doctor, NP, or pharmacist to help you plan a way to give your child's medications at the right times.

How will the healthcare team monitor the effects of hydroxyurea?

Your child will get regular blood tests to see how well the medicine is working and to check for side effects.

Your child needs to have these tests to stay on hydroxyurea.

Please avoid missing any doctor or lab appointments as these are to monitor for possible side effects and to keep your child healthy.



Hydroxyurea for Children with Sickle Cell Disease

Basic Information for patients & families



References:

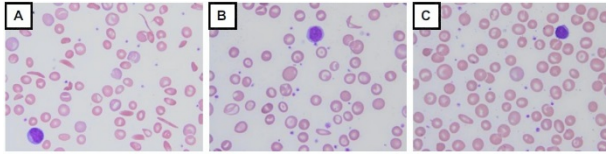
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What is hydroxyurea?

Hydroxyurea is a medicine used in children and adults with sickle cell disease. It helps the body make fetal hemoglobin (hemoglobin F). This helps to stop red blood cells from becoming sickle-shaped and blocking blood flow, so organs get enough blood. It also lowers white blood cells so they are less likely to cause a blockage.



- A. Sickle cells without Hydroxyurea
- B. Improved red blood cell shape on Hydroxyurea.
- C. More improvement of red cell shape when Hydroxyurea is adjusted by a child's medical team to maximum tolerated dose.

Figure used with permission from Ware, RE Blood 2010; 115(26):5300-11.

How can hydroxyurea help my child's sickle cell disease?

Hydroxyurea is the only medicine approved to treat sickle cell disease that can change how severe the disease is over time. While it is not a cure, taking hydroxyurea can have many benefits. They may include:

- Having less pain
- Spending less time in hospital
- Needing fewer blood transfusions
- Having a lower risk of stroke
- Improving anemia
- Helping with chest problems (fewer acute chest syndrome events)
- Living longer
- Enjoying a better quality of life

Please contact your child's hematology team if he or she is experiencing these side effects or any new health issues

Is hydroxyurea safe?

Hydroxyurea has been safely helping people with sickle cell disease for more than 20 years. It can be used in babies as young as 9 months of age to older adults.

Many people are afraid to try hydroxyurea because they think it might cause cancer. This is not true. Large studies of people with sickle cell disease taking hydroxyurea for many years show no higher risk of cancer.

What are possible side effects from taking hydroxyurea?

Like all drugs, hydroxyurea can have side effects. Your child will be asked to have regular blood tests to watch for most of these. Most side effects go away by:

- Lowering the dose
- Stopping the hydroxyurea temporarily

The benefits of hydroxyurea in keeping your child healthier with sickle cell disease outweigh the risk of serious side effects. Your child's hydroxyurea should only be changed/stopped by your child's hematology team.

Hydroxyurea can lower some of your blood cell counts:

- **Low white blood cell counts:** Your white blood cells fight infections. Hydroxyurea is supposed to lower your white blood cell count. But sometimes it goes too low. This makes it harder for your body to fight infection. Handwashing is the best way to prevent infections from developing.
- **Low platelet counts:** Your platelet cells help prevent bleeding. If your platelet counts are too low you may have more bleeding and bruise easily.

Other possible side effects:

- Nausea, vomiting, and diarrhea
- Abnormal liver tests
- Skin rash
- Darkening of nails and skin
- Loss of appetite

Can hydroxyurea affect my child's fertility?

Boys

- Men with severe sickle cell disease may have lower sperm counts. Taking hydroxyurea may lower the sperm count even further. This may not reverse after hydroxyurea is stopped. But many young men with sickle cell disease are still able to have children.
- It is important to remember that hydroxyurea can help your child feel better, be healthier, and live longer.

Girls

- Hydroxyurea won't affect women's fertility but may cause problems with the fetus if a woman takes hydroxyurea while she is pregnant.

What should the doctor know before my child starts taking hydroxyurea?

Tell your child's doctor if your child:

- Is pregnant or is sexually active
- Has liver disease

How do I handle the medicine safely?

Hydroxyurea is safe for patients to take if they need it. But, it may cause side effects as listed below and may cause problems with the fetus in women who are pregnant. So, the following instructions can help with safe handling of hydroxyurea.

- Wash your hands before and after touching the bottle or capsules.
- Your child can take their own pills without any special precautions.
- For parents and caregivers, consider wearing disposable gloves when touching the capsules or bottle of hydroxyurea, especially if you or someone in your home is pregnant.
- If the medication (liquid or powder from the capsule) is spilled, wipe it up right away with a damp paper towel, put it in a plastic bag, and throw it away.
- Keep the medicine away from other children and pets.
- Keep hydroxyurea in a cool, dry place away from sunlight, so it doesn't break down.
- Ask your pharmacist how to get rid of the medicine safely.