

# Hydroxyurea



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## Information for Patients

### UHN Red Blood Cell Disorders Program

#### What is Hydroxyurea and how is it used to treat sickle cell disease (SCD)?

Hydroxyurea [hahy-DROK-see-yoor-EE-uh] is a medication that has been shown to decrease the frequency of painful crises and Acute Chest Syndrome (ACS) in patients with sickle cell disease.

Hydroxyurea will be offered to you if you have had one or more of the following:

- More than three painful SCD crises in a year that needed an emergency room visit or admission to the hospital
- More than one acute chest syndrome ever
- Organ damage from sickle cell disease
- Recurrent painful crises that have upset your daily life or, have made it difficult for you to get to work or school

**Right now, Hydroxyurea is the only licensed medication available for patients with sickle cell disease**

**Hydroxyurea increases the chance of living a longer life.**

#### Before starting Hydroxyurea, please let your doctor or nurse practitioner know if you:

- Are pregnant
- Have liver disease
- Have taken this medicine before
- Have had any reactions to this medicine

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**Created: 12/2010**

**Form: D-5738**



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## **What should I know about Hydroxyurea?**

- Hydroxyurea is a capsule medication that you take by mouth. It can be taken with food or, without food.
- Hydroxyurea should be taken once a day, at about the same time everyday. If you forget or miss a dose, please do not take a “make-up” dose. Take your regular dose on the following day.
- Hydroxyurea should be taken every day, not just during a painful crisis or when the crisis starts. Hydroxyurea will not take away the pain during an active crisis. It works by making changes to your blood cells that will prevent crises from happening.
- This medication reduces “sickling” or curving of your red blood cells, decreases red cell breakdown, and increases your level of protective fetal haemoglobin.
- After taking Hydroxyurea for 6 months, you should have fewer painful crises than in the 6 months before starting treatment.
- Treatment with Hydroxyurea should be ongoing. Please talk with your doctor or nurse practitioner to find out more about your treatment plan.
- The cost of Hydroxyurea is covered by all private insurances, the Ontario Disability Support Program (ODSP) and Ontario Drug Benefits: Trillium Drug Program (ODP).

## **What are the possible side effects from using Hydroxyurea?**

Like any other medication, Hydroxyurea can have side effects. Sometimes, patients taking this medication may have:

- Lowered white blood cell count
  - While you are on Hydroxyurea, you will need to have regular blood work, usually every month.
  - If your white blood count is very low, you may be asked to stop taking the medication for 4 to 5 days, and then have your blood work taken again.
  - If your repeated blood work shows that your white blood cell count has returned to normal, you will be asked to re-start the medication.
  - Your dose of Hydroxyurea may be lowered if the blood count is low.
- Increased liver enzymes
  - In rare cases, Hydroxyurea may also increase your liver enzymes

- Leg ulcers
  - Hydroxyurea could cause or contribute to the development of leg ulcers. Ongoing follow up with your doctor or nurse practitioner is important for monitoring of this side effect.
- Nausea & vomiting
  - Hydroxyurea can cause nausea and vomiting. Do not take Hydroxyurea on an empty stomach.
- Skin rash
  - This rash might go away even when you continue taking the Hydroxyurea. Please let your doctor or nurse practitioner know if you develop a skin rash while taking Hydroxyurea.
- Hair loss
  - Some patients might find that their hair starts to thin while on Hydroxyurea. The hair loss does not usually result in bald spots. If this happens to you, your doctor or nurse practitioner will talk to you about the risks and benefits of taking Hydroxyurea.
- Skin and nail darkening
  - Some patients may develop darkening of the finger nails and skin over creases. This will go away once you stop taking the drug.
- Symptoms of infection
  - If you get a fever, cough, or urinary tract infection while taking Hydroxyurea, you will need to tell your doctor or nurse practitioner right away.

**It is important for you to know that  
Hydroxyurea has been used safely  
in patients with sickle cell disease for over 20 years.  
Hydroxyurea has not been reported to cause cancer.**

## **How can I stay healthy while taking Hydroxyurea?**

Hydroxyurea can lower your white blood cell count (infection fighting cells). This may increase your chances of getting an infection. Here are some things you can do to prevent infections:

- Try to stay away from people with infections, such as those who have a cold or influenza (“the flu”).

- Wash your hands often with hand sanitizer, or with soap and water for at least 15-20 seconds.
- Try to eat a healthy diet and take part in regular exercise.
- Before you have surgery or dental work, tell the doctor or dentist that you are taking Hydroxyurea.

### **Can I take Hydroxyurea if I am pregnant or if I am thinking of getting pregnant?**

There is a very small chance that Hydroxyurea may cause birth defects if it is taken at the time of conception or, if it is taken during pregnancy. You should use birth control while taking Hydroxyurea. If you get pregnant while taking Hydroxyurea, stop taking it right away and let your doctor or nurse practitioner know.

Hydroxyurea does not decrease fertility in men with sickle cell disease.

*Disclaimer: The information in this brochure is accurate at the time of printing. It does not contain all possible information and side effects. Please talk to your healthcare provider if you have any questions.*