Prevention: Hydroxyurea (HU)

What is Hydroxyurea?

Hydroxyurea (HU) is a medicine that can help children with sickle cell disease (SCD). **Several studies have shown that this drug is safe to use in children with SCD.**

What does it do?

HU increases the body's ability to make red blood cells that contain fetal hemoglobin. Fetal hemoglobin helps your red blood cells keep their normal, round shape. **This decreases the number of sickled cells in the blood stream.** By reducing the number sickled cells in the blood stream, HU may reduce the number of sickle cell related complications a patient may have. Benefits of HU may include:

- Decrease in the number of sickle pain episodes and hospitalizations for pain.
- Decrease in the number of episodes of Acute Chest Syndrome (see **"Complications: Acute Chest Syndrome"** for more information).
- Improvement in anemia.
- Prevent damage to the spleen, kidneys, lungs, and brain.

Who should consider taking HU?

If your child has frequent episodes of pain, dactylitis, or Acute Chest Syndrome, HU may be beneficial if your child has frequent school abscences due to sickle cell related problems.

If your child is prescribed HU, it is very important that it is taken every day and that doses are not missed. **Not taking HU everyday is the number one reason that it does not work.**

What are some possible complications from HU?

HU can be prescribed in both a pill form or a liquid form. **It should be taken at the same time everyday.** HU can cause some temporary side effects including:

- Upset stomach
- Increased appetite
- Weight gain
- Decreased white blood cell count
- Decrease in hemoglobin
- Decrease in platelet count

If your child is prescribed HU, frequent clinic visits are required to monitor any potential side effects. **In general, your child may expect to have blood work done every 1 to 3 months while taking HU.** If side effects occur, the dose may need to be changed.

Is HU safe?

HU is an effective medicine that has been used in SCD and other conditions for many years. There have not been serious side effects seen in children or adults with SCD on HU. However, close supervision is required and long term side effects are not yet known. The decision to start HU is one that should be made carefully with the help of your doctor.

Is HU the only treatment available for SCD?

HU is not the only treatment available for SCD. **It is important to talk to your child's hematologist to discuss which treatment is best.** If you have questions about HU or any of the other available treatments for SCD, you can call and speak to the sickle cell nurse: **312-227-4813 (M-F 9am to 5pm)**

For questions about your child's SCD medication or other treatment options available, call your sickle cell care team:

312-227-4813 (M-F 9am to 5pm)

312-227-4000 (After hours, ask for hematologist on call)

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