1.0 Policy statement

Patients admitted on hydroxyurea shall not be given hydroxyurea prescription on discharge. Haematology is to prescribe in order to monitor blood work.

2.0 Definitions

- **Hydroxyurea (HU)** is a chemotherapy medicine that has been used to treat many disorders, including sickle cell disease (SCD). Research has shown that patients with sickle cell disease who take hydroxyurea are admitted to hospital because of painful events only half as often as patients who do not take hydroxyurea, have fewer acute chest crises and have less need for blood transfusions if they are admitted to hospital. Please see www.aboutkidshealth.ca.

- **Maximum Therapeutic Dose (MTD)** is maximum dose or clinical efficacy achieved.

- **Transcranial Doppler (TCD)** is a non-invasive ultrasound used to screen for strokes measuring the rate of blood flow through the large vessels on both sides of the brain.

- **Vaso-Occlusive Crises (VOC)** are blockages of the blood vessels anywhere in the body by deformed red blood cells. This causes a lack of oxygen in the affected area of the body. Symptoms depend on where the blood vessels are blocked.
3.0 Guideline

Pain assessment and consult completed of child with Sickle Cell Disease (SCD)

Does child meet indications to start hydroxyurea?

- NO
- YES

Discuss and decide on alternative therapy with child and caregivers

Hematology team to obtain agreement from child and caregivers

Does child and/or caregivers agree to initiate hydroxyurea?

- NO
- YES

Prior to initiating hydroxyurea please ensure the following is completed:

- Refer to tip sheet on Hydroxyurea Education
- Develop a treatment plan
- Write prescription
- Initial dose at home

Ongoing monitoring of bloodwork

In the bloodwork before threshold?

- NO
- YES

HMTD or clinical target achieved?

- NO
- YES

Consider dose escalation. Refer to tip sheet

Reduce and/or hold dose

Continue with same dose

4.0 Related Documents

Dissolve and Dose Drug Administration

Chemotherapy At Home: Safely Handling and Giving Medicines

Chemotherapy At Home: Safely Giving Your Child Capsules

Hydroxyurea Education and Discussions Tip Sheet

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5.0 References


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9. Ware, RE. How I use hydroxyurea to treat sickle cell disease. Blood 1 July 2010.Vol 115, Number 26

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Attachments:

Hydroxyurea Education and Discussions Tip Sheet.pdf

Revision History.docx

scd_hydroxyurea_v4_2021.pdf