HYDROXYUREA
Clinical Practice Guidelines

Starting dose

- 15mg/kg daily for adult patients with normal kidney function.
- 5-10mg/kg daily for adult patients with creatinine clearance (CrCl) <60 mL/min.
- 20mg/kg daily for infants (>9 months) and children*.

Baseline laboratory values

- Complete blood count (CBC) with differential.
- Reticulocyte count.
- Comprehensive metabolic panel (CMP).
- Pregnancy test for females. Provide contraceptive counseling for both males and females.
- Fetal hemoglobin.

Acceptable ranges for therapy initiation

- Neutrophils > 2500/mm^3.
- Platelets ≥ 95,000/mm^3.
- Hemoglobin > 5.3g/dL.
- Reticulocytes ≥ 95,000/mm^3.
- Any fetal hemoglobin level is acceptable.

Monitor CBC with differential and reticulocyte count every 4 weeks when adjusting dosage.

Target blood counts include:

- Neutrophils ≥ 2000/mm^3.
- Platelets > 80,000/mm^3.
- Reticulocytes > 80,000/mm^3.

**Hydroxyurea is not approved by the FDA for use in children with sickle cell disease. Use of this medication in children with sickle cell disease is recommended by the NHLBI guidelines published in JAMA cited in reference 1 (on the reverse side).*

Maintenance therapy

- If there is toxicity:
  - Stop hydroxyurea.
  - Monitor CBC with differential weekly until counts recovers.
    - Then restart at a dose of 5mg/kg/day lower than the dose given before toxicity occurred.
- Increase dose by 5mg/kg/day every 8 weeks to a maximum dose of 35mg/kg/day.
- Once stable dosing is achieved, monitor CBC with differential and reticulocyte count every 2–3 months.
- Do not double doses for missed doses.
- A 6-month trial on the maximum tolerated dose is required prior to discontinuation for treatment failure.
- Discontinue hydroxyurea therapy if the patient is pregnant or breastfeeding.
- Continue therapy during hospitalizations or illness.
- Prescribe folic acid concurrently.

Select Health of South Carolina

Healthy Connections

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