ITP Guidelines for Mission Pediatric Hematology Patients

Dr. Krystal Bottom, Dr. Lindsey Gouker, Dr. Douglas Scothorn

Definition: The accelerated destruction of antibody-sensitized platelets by phagocytic cells. Typically a benign, self-limited condition of young children (peak 2-6 yrs) that resolves within weeks to months; often preceeded by a viral infection or vaccination.

Diagnosis: A clinical diagnosis can be made based on history, physical exam, CBC with diff, and peripheral smear. Petechiae and ecchymosis are often found on exam, but the patient is usually otherwise healthy.

-**A consultation from pediatric hematology should be initiated on every patient with suspected ITP.**

-A diagnostic bone marrow aspiration and/or biopsy is only warranted for children with atypical laboratory or clinical features. *Atypical features may include, but are not limited to, the following: neutropenia, abnormalities of WBC differential, anemia, abnormal RBC morphology, bone pain, fever, HSM, adenopathy, weight loss, or fatigue*[1,2].

Treatment[2]**:**

A. **Uncomplicated bruising/petechiae:** There is no convincing evidence that medical therapy alters the natural history of the disease. A child's condition, rather than the platelet count, steers management.
    1. Children with bruising/petechiae, but without mucosal or other bleeding, may be treated by observation alone, irrespective of platelet count.
    2. Admission to the hospital is not indicated if observation alone is the recommended treatment. Mission hematology will see patient in clinic within 24 hours if patient is discharged home from ER or will perform inpatient consult if patient is admitted.

B. **Uncomplicated mucosal bleeding:** After appropriate review of labs and peripheral smear, therapy should be initiated. Options for treatment include:
    1. IVIg 1g/kg/day IV x 1 dose
    2. Prednisone 2mg/kg/day (max dose 60mg/day) PO x 7 days (Only used if CBC/clinical history is entirely appropriate; does not require BM aspirate prior)
    3. Admission to the hospital is not required if oral prednisone elected treatment. Admission will be required for IVIg administration. Mission hematology will see patient in clinic within 24 hours if patient is discharged home from ER or will perform inpatient consult if patient is admitted.

C. **Significant mucosal bleeding/hemorrhage/physician discretion:** With any significant/active bleeding, patients often require admission for further medical intervention.

1. **Methylprednisolone 2mg/kg IV as initial dose;** can repeat to max dose of 6mg/kg in severe bleedings and/or no response to first dose
2. **IVIg 1g/kg/day.** Dose can be repeated after 24 hours if patient tolerating.

References:

1. Nathan and Oski's Hematology of Infancy and Childhood, 7th edition

2. American Society of Hematology 2011 evidence-based practice guideline for immune thrombocytopenia. Blood, 2011: 117:4190-4207.