Thrombocytopenia
3/11/2018

Low platelets are commonly found with or without symptoms on CBCs
S/S: petechiae/purpura and mucosal bleeding (epistaxis, gingival, GI, bladder, vaginal)

5 Big Causes of Thrombocytopenia

1) Thrombotic Thrombocytopenia Purpura (TTP)
   a. Low ADAMTS13 -> impaired vWF breakdown and widespread “platelet plugs”
   b. Pentad = low plt, fever, microangiopathic hemolytic anemia, neuro abnormalities, and renal abnormalities
   c. Tx = plasma exchange

2) Hemolytic Uremic Syndrome (HUS)
   a. Story: Kiddo. Recent bloody diarrhea. Renal and CBC abnormalities
   b. Like TTP except more renal and no neuro findings
   c. Tx = supportive care

3) Heparin Induced Thrombocytopenia (HIT)
   a. Story: patient recently got heparin and now has Plt < 150 or 50% reduction
   b. Tx: stop heparin and anticoagulate (direct thrombin inhibitor)

4) Disseminated Intravascular Coagulation (DIC)
   a. Response to systemic illness (like sepsis) -> Disseminated coagulation
   b. High PT/PTT, D-Dimer, and FDPs (fibrinogen degradation products)
   c. Treat underlying cause, may need platelet transfusion

5) Immune Thrombocytopenic Purpura (ITP)
   a. Common condition
   b. Tx: steroids and maybe platelet transfusion

6!!?!?!? Idiopathic Thrombocytopenic Purpura
   a. Causes: HIV, hepatitis, viral infection, drugs (aspirin, antibiotics, digoxin), EtOH, immunizations...
   b. Most get better on their own. Try to find the trigger and remove it.

Quick Facts
- Microangiopathic hemolytic anemia occurs when red blood cells are mechanically damaged intravascularly often by small platelet aggregates stuck to the blood vessel wall. Your buzzword is “schistocytes.”
- Pregnancy induced thrombocytopenia looks a lot like eclampsia (low platelet, hemolysis, seizure), but the latter is uncommon in 1st and 2nd trimester – so keep both on your differential.
- HIT patents are pro-coagulant and need to be anticoagulated with something other than heparin.