

8/20/24 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Dang Tri(@) Case Discussants: Sharmin(@) and Elena(@)

CC: Painless melena

HPI: 24 yo F comes to the ED mentioning rectal bleeding that started 2 months ago, black hard stools
Hospitalized before d/t similar symptoms
Management: 2 units of blood, consult for GI, admitted for medical management

ROS: fatigue for 2 month, denied hematemesis, petechiae, mucosal bleeds, fever or chills

PMH: cirrhosis, prior admission d/t gastric ulcer
->bleeding, bipolar disorder, depression, asthma, no prior surgical hx

Meds: meds given in the hospital: plasmalyte continuous PRN, protonix, hydroxyzine (anxiety)

Vitals: T: 98.4 HR: 114 BP: 135/94 RR: 17, SPO2 97% BMI: 26.63

Exam: Gen: pale, no acute distress

HEENT: PERRLA, no scleral icterus, no nasal discharge, no conjunctival pallor, no pharyngeal erythema/ exudates. Moist mucous membrane, neck: no LAD, no JVD

CV: RRR, no Murmur no Gallops

Pulm: clear to auscultation bil, no respiratory effort

Abd: abdominal tenderness to palp LUQ, bowel sounds present

Neuro: CN intact, no facial drooping, sensory & motor intact

Extremities/skin: no jaundice, no rash,

Anal exam: no sign of physical trauma to the area

Problem Representation:

Teaching Points (Vini):

- 1st - GI bleed: Hemodynamic stability, ACLS, intubation, large IV access, clinical and surgical management, vitals, shock, tachycardia, hypotension, erythrocyte concentrate, fluids. Endoscopy, variceal clamping, Sengstaken - Blakemore tube if unstable, vasopressors. Consider ATBs - ceftriaxone. Start octreotide or somatostatin.
- Hematuria present? Bleeding per rectum? First time bleeding episode vs recurrent. Variceal bleed - portal hypertension (pre, intra or post hepatic causes), cirrhosis vs non cirrhotic causes of portal hypertension, arterial bleed - ulcer, rapid vs slow bleed. NSAIDS, toxins - alcohol, meds, hepatitis (autoimmune vs viral B and C/ CMV, EBV, HIV), other exposures, malignancy (less common), MASH, alfa-1-antitrypsin, PNH - portal vein thrombosis, hypercoagulable state, Wilson, CF, PBC, Gaucher, HUS, TTP, SLE, Antiphospholipid syndrome, Banti's sd, Behcet, thalassemia - ineffective of erythropoiesis.
- Think the entire the GI tract. Upper vs Lower. Associations: Diarrhea, upper vs lower GI.
- Inflammatory nature, petechiae, mucosal bleeding, anatomic abnormalities.
- Role of age: hematologic issues, thrombophilias, familial Hx - hemophilic syndromes, genetic diseases, hemorrhoids, IBD (crohn vs UC), sexual Hx.
- Social vulnerability, undertreatment, under screening -> developed disease, natural history of dis and consider sexual abuse.
- Sinus tachycardia - chronic compensatory mechanism to low volume. BP high - catecholamines excess? Chronic signs of anemia.
- Labs - hemolysis vs cirrhosis. Haptoglobin - destruction of erythrocytes or deficient production of liver?. High Ferritin - inflamm. + iron overload. Chronic hemorrhage -> iron deficiency. Deficient clotting factors. DIC? Blood smear - poikilocytosis, anisocytosis, membrane fragility, elliptocytosis, hypo or hyperchromia, coombs (DAT), WARM vs COLD AIHA, MAHA, leukemia, lymphoma.
- Thrombocytopenia - splenic sequestration? Anti-smooth muscle Ab, ANA, Alk-Phosph role.
- Abd pain: VIPO. Obstruction, perforation, infarction, Inflam., vascular. Splenomegaly (Viral, bacterial or parasitic), ascites, POC USG.
- pancytopenia - peripheral destruction vs suppressed bone marrow? alcohol toxicity, Granulomatous, TB, Aplastic anemia
- Dx: W-AIHA -> SLE associations, lymphoproliferative disorders, infections - babesia, malignancies.

Notable Labs & Imaging:

Hematology:

WBC: 2.06 RBR 3.1 Hbg 6.0 Plt: 82 MCV 66.8 RDW 13.4 , immature reticular fraction 18.1(<13=nl), reticular count: 2.5%, haptoglobin 8 , LDH 278

Chemistry:

Na:142 K:3.5 Cl: 110 HCO3:24 BUN:10 Cr:0.74 glucose: 108 Ca: 8.5 g: 2.0 Phos 3.9, AST: 26 ALT:19 Alk-P: 122 Albumin:3.0 Bili total 3.7, protein 8.3 Iron 431 (treated w/deferoxamine), TIBC 425, %transferrin saturation 101 VitB12 431 B9 37.3

Imaging:

CT abdomen/ pelvis w contrast: splenomegaly, trace intraperitoneal ascites, not cirrhotic in morphology, cholelithiasis with no acute cholecystitis, small hiatal hernia,

Colonoscopy, endoscopy, capsal endoscopy: no evidence of internal bleeding / lesions in GI tract

Blood smear: sign. Anisocytosis and poikilocytosis, hypochromia, cigar shaped RBCs, normal platelet no clumps, WBC morphology nl w/o immature cells-> anemia (chronic iron deficiency state)

Direct antigen test: positive IgG warm autoantibody

Dx: Warm autoimmune hemolytic Anemia