6/29/23 Morning Report with @CPSolvers

***"One life, so many dreams" Case Presenter**: Dr. Mengyu Zhou **Case Discussants**: Dr. Rabih (@Rabihmgeha) and Noah (@Noah_Nakajima)*

CC: 47-year-old male patient transferred overnight to the ED from an outside hospital for further workup for AKI and suspected PE.

HPI: Presented with 1-2 week of fatigue, dyspnea, chest discomfort. At ED patient had elevated D-dimer >3, creatinine 2.44 Patient arrived to the ED - sleeping. He reports active and high energy at baseline, but for the past week had progressive fatigue and couldn't walk from the bed to bathroom. Notes epigastric pain and tenderness new from baseline. Poor oral intake, continues to take fluids, doesn't take OTCs for pain.

On day of admission, the BP was 90s systolic, chest discomfort but denied chest pain, noticed weight loss of 30 pounds compared to 3 months ago.

PMH: Sleeve gastrectomy 6 years ago, ongoing GERD (CS -ve), HTN Depression

Meds: Famotidine, losartan, metoprolol, bupropion

Fam Hx: Notable for father with pancreatic cancer, father's siblings with thyroid cancer.

Soc Hx: None

Health-Related Behaviors: Works as a manager at restaurant, no history of clots, or any recent trips

Allergies: None

Vitals: T: 36.7 **HR:** 102 **BP:** 107/73 **RR:** 18 **SpO2** 99% on Room air
Exam:
Gen: In no acute distress, no lymphadenopathy present
CV: No murmurs
Pulm: Clear
Abd: Left upper quadrant and epigastric tenderness, limited by body habitus, no rebound
Neuro: No neuro deficits
Extremities/skin: No peripheral edema

Notable Labs & Imaging:
Hematology: WBC: 7.1 Hgb: 13.7 Plt: 151
Chemistry: Na: 131 K: 3.9 BUN: 42 Cr: 2.44 before transfer (at ED 1.92 & 0.95 year ago), AST: 48 ALT: 66 T. Bili: Normal, Troponin -ve, HCO3-: 21 (at ED: 19), normal TSH
D-dimer: 3 (before transfer), INR 1.26, normal aPTT, D-Dimer 4.2 at ED (<0.5), UA showed few ketones, COVID negative. Given fluids at ED - with improvement in Cr to 1.89.
Imaging: **EKG**: Normal **CXR**: Normal
<u>Next morning</u> - morning labs showed WBC differential of atypical lymphocytes 60%.
CTA chest & abdomen: To rule out PE & cancer (due to weight loss). Showed splenomegaly measuring 17.5 cm, gastric lap band present without evidence of complications, no suspicious masses, lesions, or metastasis.
Radiology - Septal 2 cm wedge shaped area of hypoperfusion at the superior aspect of spleen indicating splenic infarction.
HIV, EBV/mono panel showed high IgA but negative IgM, VCA IgM negative, Acute hepatitis: negative. On <u>day 3</u>, Cr continued to improve towards baseline, mild LFT levels normalized, platelets: 148.
Duplex US: No DVT, superficial venous thrombosis of greater saphenous vein. Called hematology and sent for hypercoagulation workup. Pt discharged and Lupus anticoagulant was positive, anticardiolipin IgM elevated, IgG negative. Anti-beta glycoprotein negative.
Repeat labs: Pt continued to feel fatigued (same level as before), epigastric pain resolved, flow cytometry: polyclonal B, T cells, with no significant blast population, neutropenia and normocytic anemia. Pt plans to follow up with repeat lupus anticoag labs, will monitor CBC, hematologist might consider spleen or bone marrow biopsy if symptoms continue to persist.
Final Dx: Unknown (so far)

Problem Representation: 47y/o male p/w elevated D-Dimer, AKI and recent weight loss. Exams revealed splenomegaly, splenic infarcts and atypical lymphocytosis. AKI was fluid responsive. Flow cytometry showed polyclonal Lymphocytes, no blasts.

Teaching Points (Lea):
AKI: pre-intra-post-Renal. 1) Rule out the "2Ps", 2) check intrinsic
D-Dimer: low specificity
<u>CT w/ contrast + Kidney dz</u>
>Venous induced contrast nephropathy=RARE. Risk-benefit.
Ability to fall asleep - index of severity?
<u>Chest Pain, Dyspnea, AKI + unclear picture</u>
>Start here: EKG, CXR, Fluids
Sleeve gastrectomy: bariatric surgery; Complications: <u>anatomical</u>: hernia, <u>nutritional deficiency</u>(B12, copper, zink), <u>hyperabsorption sd</u> (C2 Intoxication, oxalate (not chelated by Ca, fatmalabs chelates Ca))

<u>Subacute kidney dysfunction?</u>: balanced electrolytes, slight improvement to fluids, HTN
<u>CKD = INTRA</u>renal, "Pre/Post" only contributors
5Ps of Intrarenal AKI: Platelets, Pigment, Paraprotein, Pharmacy, Pointy crystals

<u>**Splenomegaly:**</u>
+Infarct: A) acute ischemic arterial, B) autoinfarction (Splenomegaly)
+ LZosis: EBV, CMV, Lymphoma, DRESS
+atypical lymphocytes: lymphoma? Mono?
>Mono: EBV young adult, transient.
>CMV more likely with age. More systemic Sx. Hypercoagulable virus.
>Lymphoma older age, progressive, urate-> AKI. Paraneoplastic lymphocytosis.

Close follow up.
Sensit. of flow cytometry ~function of number of cells