6/21/23 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Marino (@) Case Discussants: Dr. Jack Penner (@JackPenner) and Sharmin (@Sharminzi)

CC: 96 year old male presents to the ED with bilateral leg swelling.

HPI: Aid noticed bruising in the legs a few days ago. Unaware of trauma.
For the past 3 days, worsening leg edema. Tried compression stockings, with no success. Patient complaints of dry cough for the past two days.
No SOB, chest pain, palpitations.

PMH:
Afib
Severe AoS
CAD (PCx 2 vessel)
OSA
Hypothyroidism
CKD III

Meds:
Aspirin,
Atorvastatin,
L-Thyroxine,
Vitamin D3

Fam Hx:
Cardiac hx

Soc Hx: No smoking, alcohol, drugs.

Allergies:
NKDA

Vitals: T: afebrile **HR:** 94 **BP:** 123/73 **RR:** 18 **SpO2** 96% RA
Exam:
Gen: elderly man in no acute distress **HEENT:** nl
CV: holosystolic ejection murmur 3/6 best heard in upper L sternal border **Pulm:** bibasilar crackles
Extremities/skin: LUE large hematoma in antecubital fossa (previous IV). 3+ pitting edema, and bilateral leg discoloration, with petechial rash. Left leg slightly warmer and bigger. Large ecchymosis on the lateral aspect distal to the left fibular head. Pulses normal.

Notable Labs & Imaging:
Hematology:
WBC: 13.6 (diff normal) Hgb: 10.8 MCV 101 (bl) Plt: 187k
Chemistry:
Normal electrolytes
Cr: 1.35 (bl) Troponin mildly elevated BNP 1001 TSH 4.23
UA: 3-9 WBC, 20 RBC D dimer 3090 INR 1.1 PTT 93
Imaging:
EKG: AV block I° CXR: Left lower lobe opacity
US: no evidence of DVT
Echo: EF 75%, severe AoS with moderate MR
Hospital course:
Diagnosed with PNA. Repeat coags showed the same results. Lupus anticoag was negative. Factor 7, factor 8 and 11 low. Von Willebrand levels were normal.
Mixing study did not correct. Factor 8 inhibitor high. Treated with high dose prednisone. Developed acute anemia. Given rituximab and discharged. Completed treatment with improvement.

Final dx: Acquired factor 8 inhibitor.

Problem Representation: Nonagenarian with significant cardiac hx, including AoS, on aspirin, presenting with acute, progressive LE edema and cough, found to have multiple extremity hematomas on exam with normal JVP.

Teaching Points (Ayesha):
CC: Bilateral Leg swelling: Older age more prone to pathology. Think about: kidneys, liver, and the heart involvement - look for JVD, check for the state of the heart, nephrotic syndrome, vascular pathologies.
- Can bilateral lower extremity edema also lead to bruising? - increased hydrostatic pressure in vessels and due to extravasation of blood vessels.
- Is there bruising in other parts of the body - is it something to put emphasis on? - (gingival bleeding, petechiae, atraumatic bleeding elsewhere) - coagulopathy in addition to LE swelling.

PMH: Look for any cardiac pathologies that may have lead to edema: structural disease, valvular heart disease etc.
- Look for certain agents that can predispose patients to bruising - Anticoagulants (eg. Aspirin)

Vitals/PE: Skin integrity, especially with age, predisposes to bruising especially with meds.
- Spontaneous hematoma - can cause coagulopathy
- Look for traumatic causes - bumping distal vs proximal extremities that might increase risk - Compare where the bruises are located and if could be due to trauma?

Labs & Imaging: If taking Aspirin (look at platelets if affected). Check BNP - indicates heart failure causing edema.
- PTT: look for potential causes - inherited (deficiencies in factors, 8, 9, 11, 12, VWD) vs acquired (in elderly most likely) - Meds (heparin, DOACs) lymphomas, leukemias, acquired vW syndrome - (look at echo findings for **Heyde's syndrome** due to the high shear stress from the severe aortic stenosis).