11/19/21 Morning Report with @CPSolvers

Case Presenter: *Rafael Medina (@RafaMeed)* ***Case Discussants***: *Rabih Geha (@rabihmgeha) and Reza Manesh (@DxRxEdu)*

CC: Chest pain and syncopal episode

HPI: 33yo M presenting w/ generalized illness w/ malaise 1 week prior to admission.
- Rash on the face and abdomen - petechial in nature, confined largely to the face and abdomen.
- Prior ep of possible hematochezia - unsure if there was blood. Left-sided chest pain just recently started ("as someone sitting on him").
- On the day before presentation to ED, syncopal episode in the shower.

PMH: **HTN**
Type 2 Diabetes
Morbid obesity
Subclinical hypothyroidism
Prior Fournier's gangrene

Meds: HCTZ
Lisinopril
Glimepiride
Metformin

Fam Hx:
None

Soc Hx:
None

Health Related Behaviors:
None

Allergies:
None

Vitals: **T**: 36.7C **HR**: 102 **BP**: 102/55 **RR**: 20 **SpO_2**: 97%
Exam:
Gen: BMI 60.6, poorly responsive to voice. Dry mucous membranes, icteric conjunctiva.
HEENT: thyroid not palpable, no JVD. Large neck, w/ acantosis nigricans.
CV, Pulm, Abd: unremarkable
Neuro: awake and alert w/o gross abnormalities. He was confused and hx slightly limited.
Psych: seems displaced affect w/ alteration in overall mentation, fleeting focus and worsening AMS.
Extremities/Skin: warm and well perfused; no edema, no joint swelling/erythema. Petechial rash noted on face and abd.

Notable Labs & Imaging:
Hematology: WBC: 9.7 Hgb: 7.4 MCV 84.5 Hct: 21.2% Plt: < 5000
Smear: 4-5 schistocytes, 1-2 spherocytes, no nucleated RBC w/ plts diminished in quantity and normal appearing PMNs
PT: 13.4 PTT: 33.9 Retic count 235

Chemistry: Na: 137 K: 4.4 Cl: 99 BUN: 22 Cr: 1.19
AST: 77 ALT: 29 Alk-P: 98 T. Bili: 4.1 direct bili 0.5 Albumin: 4.2
UA: dark yellow, cloudy, glucose (neg) blood trace (neg) bil - small urobilinogen 4.0 (neg)
Hep B sAb (+) Hep B sAg (-) Hep B cAb (+) Hep C non reactive HIV (-)
DAT IgG positive (Coombs) ANA 1:320 (neg) LDH 1331
Haptoglobin <5 mg/dL Fibrinogen 251
ADAMTS13 activity <1% ADAMTS13 Ab 25
Imaging:
CXR: hypoinflated lungs.
Head and abd CT: no acute intracranial or abd abnormalities.
Final diagnosis: TTP

Problem Representation: 33yM p/w chest pain and syncope, later found to have acute onset thrombocytopenia and anemia.

Teaching Points (Maria):
- **2 CCs - *where to start?*** One symptom can act as a barometer for severity. Ie: LOC increases probability of emergent causes of chest pain. Tachycardia increases severity of hemoptysis.
- **Incidental Event - *when to consider?*** Always consider common events as possible triggers with the caveat most people don't have any complications ie: viral diseases are mostly nonconsequential, holiday heart - a lot of people consume alcohol, few get Afib.
- **Chest Pain:** 4+2+2
  - Young patients: You cannot rule out any emergent causes, but have to include a wider range of possibilities.
- **Syncope → Reshape to Transient Loss of Consciousness.**
  - 4S: Syncope, Seizure, Sugar, Strategic strokes (RAS)
  - CORE: Cardiogenic, Orthostatic, Reflex Mediated. Only cardiogenic causes chest pain - AS (SAD triad), HCM (murmur maneuvers), ARVD, PHTN, PE.
- **Petechial Rash:**
  - Always anchor in symptoms that are unexpected, we don't expect chest pain + petechial rash.
  - With petechial rash + systemic signs: consider vasculopathy.
- **Thrombocytopenia** - explains petechial rash; **Anemia -** explains chest pain and syncope. Always consider: ITP, Evan's syndrome, MAHA.
  - Reflexively look at hemolysis labs + smear. 1 schistocytes is one too many!!
  - MC MAHA: DIC (coagulopathy + trigger); 2nd MC TTP.
  - For MAHA - look for drugs, valvular dz, transplant, Ca, pregnancy even before labs come.
  - For TTP: Initially calculate PLASMIC score to evaluate for the possibility. When confirmed always look for common associations (infections, autoimmune, malignancies).