01/18/25 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: *Cleveland Clinic(@clevelandclinic)* ***Case Discussants:****Ravi(@rav7ks), Johann(@johannedjimbimd), Sawsan(@sawsan_Hs)*

CC: 53 F presented to Methadone Clinic with **generalised weakness and AMS** for unknown duration.

HPI: Oriented only to person. Brought to ED, then desaturated to 80s.

ROS: No chest pain, abdominal pain, nausea, vomiting, shortness of breath or dizziness.

PMH:
Hepatitis C (treated), Minimal change disease (in remission). Drug-induced lupus (levamisole). HTN. DM. **Chronic opioid dependence.**

Meds:
Methadone
Valsartan, Metformin with poor compliance.

Fam Hx: none

Soc Hx:
unemployed, lives w/ mother.

Health-Related Behaviors:
denies drugs other than methadone

Allergies: none

Vitals: T: N **BP:** 98/53 mmHg **RR:** 8 **HR**: 95 bpm **Sat:** 80s
Exam: Gen: fatigued, not in acute distress, **AOx1**
CV: RRR, radial and dorsal pedal pulses 1+ bilaterally. **Pulm:** clear
Abd: obese, non tender, mildly decreased bowel sounds
Neuro: generalised weakness, ⅘ strength in all extremities with N reflexes. Gait was not possible for assessing, **constricted pupils.**
MSK: skin warm, no rashes, pale mucosa

Notable Labs & Imaging:
Hematology:
WBC: 7.5 Hgb: **2.2** Plt: **19** MCV: **106**
reticulocytes 5.7 with reticulocyte index 0.39 **(low)**
-> Empiric Naloxone. Transferred to MICU, 4U of blood ordered

Chemistry
Na: wnl K: wnl **Cr: 1.89** (0.9 baseline) **Haptoglobin < 10**. Coombs negative.
LDH: 2500 PT 1.3 PTT 24.5 Fibrinogen 340 Albumin 3.5
AST: wnl ALT: wnl ALP: wnl Bili: 2.2 (1.7 direct)
UTox negative. Flat troponins. UA unremarkable.

Imaging:
EKG: normal. CXR: clear, no infiltrates. CT head, chest, abdomen: normal.

Smear anisopoikilocytosis with **teardrop cells and nucleated RBCs,** no schistocytes.
PLASMIC score 6 (high risk for TTP). ADAMTS13 54% (mildly low).
ANA positive. Anti-dsDNA, RNP, SSA/SSB, centromere, Scl, Jo1 negative.

B12 levels undetectable, MMA high, homocysteine 48.5 (high)
-> started on B12 IM w/ improvement of cytopenias, and normalization of Creatinine.

Gastric parietal cell and intrinsic factor positive antibodies.

Dx: pseudo-TMA induced by B12 deficiency in the setting of pernicious anemia.

Problem Representation: Middle-age woman w/ history of chronic opioid dependence presented w/ generalised weakness and AMS for unknown duration. Found to have severe macrocytic anemia w/ signs of hemolysis.

Teaching Points(Minahil):

-**Generalized weakness & AMS**: *Causes*:metabolic ,infectious, toxic, structural , *Approach*:is pt stable?protecting airway? quick evaluation-is there sth to rapidly correct, lab work ,rapid response

-**Hypoxia**: *Causes:* substance use disorder(opioid),lung pathology , neurologic pathology *Approach:*glucose levels? ABG?chest imaging?antidote?

-**Anemia & thrombocytopenia**:*Causes:* vit deficiency ,intrinsic/ extrinsic hemolysis,DIC,TTP,HUS,solid organ transplant,infections, *Approach:* peripheral smear? EPO?plasmic score? ADAMTS13? , imaging?

-**Anisopoikilocytosis**(bone marrow infiltration) : cancer , fibrosis , granulomas, histiocytosis, (TTP smear many times does not show schistocytes initially)

-**Vitamin B12 deficiency:** *Causes:* nutritional status, medication history(metformin) ,malabsorption syndrome,intestinal disorders, *Approach*: neurologic manifestation? folate level? homocysteine levels? MMA?