9/24/24 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Erin Avers (@) Case Discussants: Kirtan (@) and Youssef (@)

CC: AMS and jaundice

HPI: 60 yo male pw to the ED via EMS due to near-syncope and a fall. Per the patient's daughter woke up today with altered mental status (confusion), slurred speech, nausea and weakness. For the past week he has not been feeling well, w/ symptoms of fatigue, lightheadedness and multiple episodes of non-bloody emesis. For the past 2 days these symptoms have worsened and he has become increasingly confused, weak and became jaundiced.
ROS +: Malaise, fatigue, weakness, diaphoresis, n/v, memory loss, confusion.
ROS -: Headache, dizziness, abdominal pain, chest pain, dyspnea, abnormal movements, bowel changes, hematemesis.

PMH:
HTN, nonischemic cardiomyopathy, anxiety, depression.

Meds: Lorazepam, Amlodipine, metoprolol, aspirin, entresto (sacubitril/valsartan) olanzapine (added 2 months ago), venlafaxine.

Fam Hx: adopted, unknown family hx.

Soc Hx: No EtOH, no smoking or drug use.

Health-Related Behaviors:

Allergies: None

Vitals: T:97.9 **HR:** 83 **BP:** 151/87 **RR:**25 SaO2 99% BMI:33.2
Exam:
Gen: Alert and oriented to person only, awake, but confused, responding slowly to questions with 1 word answer. Pale, diaphoretic.
HEENT: Bruising and swelling of the L upper lip. Scleral icterus bilaterally. EOMI, PERRLA. **CV, Pulm and Abd exams normal.**
Neuro: Awake and alert. Speech is slow but no dysarthria. No focal deficits.

Notable Labs & Imaging:
Hematology:
WBC: 8.1 Hgb: 9.3 RBC 3.1 MCV 85, MCHC 35.5, RDW 14.6 Plt: 13 (baseline 161)
Chemistry:
Na: 132 K: 2.9 Cl: 98 HCO3:28 AG 6 BUN: 24 Cr: 1.5 (nl 0.6) Ca 9.3, Alb 4, TP 7.1, BT 5.33, BD 0.62, BI 4.71, AST 46, ALT 50, AlkP 59, PT 13.8, PTT 29.3, INR 1.22, Haptoglobin <8, Troponin I: 73.
UA: + for blood, glucose, protein, hyaline and granular casts. Hemoccult: +
Ammonia: normal. **ANA** positive (1/40), **Coombs:** neg.
Peripheral smear: reduced plt, + schystocytes.
ADAMTS13 activity <0.03 and inhibitor: 3 (nl <0.4)
Imaging:
EKG: Sinus rhythm with frequent PVCs
CXR, CT brain, CT cervical spine, CT abd-pelvis: normal.

Dx: Thrombotic Thrombocytopenic Purpura (TTP)

Problem Representation: 60yoM w/ PMH of nonischemic cardiomyopathy and use of anxiolytics and antidepressants, p/w AMS, near-syncope and jaundice. Labs reveal anemia, thrombocytopenia, indirect hyperbilirubinemia, AKI, negative Coombs and prolonged PT/INR.

Teaching Points (Vini)
- Confusion is the center of case? In or outside CNS? Acute superimposed on subacute.
- Associated symp. vomiting and jaundice - high intracranial pressure, sepsis. Look for other signs TTP, pneumonia, pyelonephritis, infections, possibility toxic exposures, microangiopathic hemolytic anemia -related to jaundice, thyroid diseases, lupus, autoimmune diseases, stroke - reverse ASAP.
- Look at electrolytes, basic chemistry, steroid - meds, hypoglycemia -> multi organ failure? Meningoencephalitis signs.
- Imaging is priority. Evaluate necessity for LP.
- Value the hx of depres. and possible associat. meds, inhibition or induction of CYP 450
- Olanzapine: extrapyramidal side effects, neuroleptic malignant sd, serotonin syndrome. Acute liver injury w/ other meds and reactions such as DRESS - facial swelling. Eosinophilia, leukocytosis.
- Value PMHx: Tongue bite is very specific for seizure.
- Global cognitive dysfunction? Broca signs, Wernicke's, look for focal deficits. If in CNS= diffuse symptoms. Outside of CNS - more focal symptoms.
- Anemia + thrombocytopenia - DIC, thrombotic microangiopathy (causes: medication, malignancy, heparin), HUS, TTP - encephalopathy, fever, renal dysfunction,hemolytic anemia, thrombocytopenia.
- Plasmic score: probability of TTP. Evidence of MAHA and thrombocytop.
- Evans sd: bicytopenias. Low platelets and low Hb. AIHA, Immune-mediated thrombocytopenia. Positive DAT, signs of hemolysis.
- Hemolysis or bone marrow failure? MDS, leukemia, mimickers of TTP.
- Uncommon presentation of common disease is more common than the reverse.
- TTP above 50 years: Primary or secondary (bacterial, viral) 50/ 50 chance. ADAMTS13 vs autoantibody of malignant hematologic and solid origin, test for immunofixation, ferritin, ANA, blood smear. Autoantibody against vWF - monoclonal agent tx.
- Tx: glucocorticoids, rituximab, eculizumab, plasma exchange.