10/29/21 Morning Report with @CPSolvers

***Case Presenter**: Vijay Balaji (@vijaybramhan) **Case Discussants**: Rabih Geha (@rabihmgeha) and Reza Manesh (@DxRxEdu)*

CC: Weakness, colored urine and emesis

HPI: 28 year old woman p/w a week of generalized weakness. 5 days ago presented dark-colored urine. 2 days ago started vomiting. 2 days later post hospitalization developed involuntary movements in 4 limbs. No abdominal pain or fever. No history of rashes.

PMH: None

Meds: None

Fam Hx: None

Soc Hx: None

Health-Related Behaviors: Sexually active.

Allergies: None

Vitals: **T**: Afebrile **HR**: 115 **BP**: 120/82 **RR**: 30 **SpO_2**: 95%
Exam:
Gen: Marked pallor
HEENT: Mild icterus. Right lateral tongue bite.
CV:
Pulm:
Abd: Mild splenomegaly
Neuro:
Extremities/Skin: Petechiae

Notable Labs & Imaging:
Hematology:
WBC:15 000 Neutrophils 20% Lymphocytes 10% Hgb:5.2 MCV 78 Plt: 10 000
Peripheral smear: Neg schistocytes, Neg Malaria.
Repeat peripheral smear: Plenty of schistocytes.

Chemistry:
Na: K: Cl: CO2: BUN: 10 Cr: 0.68 glucose: Ca: Phos: Mag:
AST: 80 ALT: 42 Alk-P: Normal T. Bili: 4.08 Indirect Bili 3.6 Albumin: Normal
LDH 2.08 Haptoglobin: low.
Hepatitis C, HbsAg, HIV neg. Leptospirosis, Dengue and malaria panel were neg.
Coombs indirect and direct neg. INR 1.2.
ANA profile neg.
PLASMIC score 6
Imaging:
MRI head: Normal

Final Dx: Thrombotic thrombocytopenic purpura (TTP)

Problem Representation: 28F p/w weakness, dark-colored urine and emesis. While hospitalized developed generalized involuntary movements. Exam showed R lateral tongue bite, splenomegaly and icterus.

Teaching Points (Gabriel):

- **Approaching generalized weakness + colored urine**
  - True weakness vs asthenia. Although those are not exclusive!
  - Dynamic *weakness* → asthenia. If *weakness* at rest, then think of true weakness
  - How dark urine help us?
    - *Concentrated urine first cause.* If it´s one of the patient complains often points toward alternative causes.
    - Neuro symptoms + dark colored urine → AIP. Fluorescence in wood lamp helps!
- **Classical clinical presentation of AIP:** unexplained abdominal pain and new onset neuropsychiatric symptoms
- **Completing the puzzle:**
  - Lateral tongue bite → seizure
  - **Hemolytic anemia picture + low MCV** → could be explained by 2 different mechanisms
    - + Thrombocytopenia: Splenomegaly, MAHA, Evans syndrome, infections. Perform Coombs test and peripheral smear for narrow ddx.
    - If negative but still suspicious → **repeat testing** 🚩 and move on different hypothesis
- **Finishing the puzzle:**
  - 💎**Thrombocytopenia + anemia + neuro + MAHA → TTP. Pentad rarely present!**
  - **Triad: Elevated LDH, Schistocytes, Thrombocytopenia**