06/25/21 Morning Report with @CPSolvers

Case Presenter: *Usha George (@allthingslung)* ***Case Discussants***: *Rabih Geha (@rabihmgeha) and Reza Manesh (@DxRxEdu)*

CC: Altered Mental Status

HPI: 34 female p/w history of altered mental status for 2 weeks associated w/ right arm and lower limb weakness and bluish discoloration in toes. No headache or blurry vision, no bladder disturbances, no fever.

Vitals: **T**: Afebrile **HR**: 76 **BP**:120/80 **SpO_2**: 96% on room air.
Exam:
Gen: Comfortable. No pallor or jaundice.
HEENT: No oral ulcers.
CV: No murmurs, regular rhythm.
Abd: No visceromegaly.
Neuro: Disoriented to time and place, slow responses. Lower limb strength +4, predominantly in the right side.
Extremities/Skin: Peripheral pulses present, toes were warm. Bluish discoloration in toes and small ulcers.

PMH: Recent COVID vaccine 1 week prior.

Meds: None

Fam Hx: Youngest sibling.

Soc Hx: Single.

Health-Related Behaviors: Works in fishing industry. Smokes 10 cigarettes a day.

Allergies: None

Notable Labs & Imaging:
Hematology:
WBC: 9.2 (Normal differential) Hgb: 12.2 Plt: 90 000
Chemistry:
Renal function and electrolytes were normal. Albumin, CRP, Ferritin and CK-MB normal. UA: No protein, RBCs or casts. HIV Negative.
Blood studies:
Peripheral smear: no schistocytes.
Direct coombs test: Positive. C3 0.71 C4 0.4 (low) ANA: 1/1280 DNAds negative, Anti-centromere ENA positive.
PT: normal, PTT: 45 (prolonged).
Mixing studies did not correct. Anti lupic ab: positives.
Imaging:
Brain MRI: Multiple focal areas of infarction in both hemispheres in cortical and subcortical areas.
Angiography: Complete occlusion of section of Middle Cerebral Artery.
LP: 8 WBCs, elevated protein, normal glucose. PCR CSF negative.
EEG: Left temporal slow waves.
Cardiac echocardiogram: No vegetation or thrombus.
Final Dx: Autoimmune vasculitis with scleroderma overlap 2ry to APLS.

Problem Representation: 34F p/w progressive AMS, R arm and lower extremity weakness and blue discoloration of toes. Found to have thrombocytopenia, low C3, C4, positive anti-centromere ENA and MCA occlusion.

Teaching Points (Kirtan):

- **AMS and Bluish discoloration of toes** - Always a concern in young and well patients. Presence of *focal findings* points to sinister pathology. ***Stroke*** always high on differential with unilateral weakness. Bluish discoloration could mean possibility of *Raynaud, **Cyanosis (due to lung/cardiac/toxic causes) or embolic** phenomenon.*
- **Clues from history and examination-** Vaccine related adverse events always to be considered. Smoking can point to atherosclerosis. Marine environment may lead to V. vulnificus, NTM infections. Arterial blockage - *Bland thrombus vs Septic emboli (**IE vs Myxoma vs Malignancy vs Cholesterol/Calcium**). **Vasculopathy/Vasculitis** always on radar.*
- **Integrating the lab findings**- Isolated thrombocytopenia means consumption process. *Hypercoagulability despite low platelets zeroes down the possibility to **APLA, VITT, MAHA,** and some infections.*
- **Putting the pieces together**- Elevated aPTT despite clots points to APLA. Positive ANA, low complements, and age corroborates that suspicion. ***LA can explain isolated aPTT.*** APLA can even cause neurologic findings like Transverse myelitis, Meningoencephalitis