7/10/26 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Ravi* ***Case Discussants****: Rabih & Anmolpreet*

https://clinicalproblemsolving.com/present-a-case/

Scribing (Lukas)

CC: 79 yo female p/w AMS and fever

HPI: she got symptomatic on the morning of presentation. Significantly changed from baseline according to her family. Experienced slurred speed, not able to turn over. The night before she was feeling cold with chills. The day before in the evening she was out with family having dinner at a restaurant.

PMH:
Breast cancer on the left (chemo, resection) 8 years ago

Meds:
-Anastrazole
-Losartan 100 mg PO daily
-Zucor 20 mg PO bedtime

Fam Hx:
Father had Diabetes

Social Hx:
No sick contact
No camping/hiking
Lives in south carolina with her husband

Health-Related Behaviors:
Smoked many years ago as a teenager
No alcohol
No substance use

Usually high baseline, highly functional, drives car, performe routine ADLs

Vitals: T: 41,1 **HR**: 106 **BP**: 88/54 **RR**: 30 **Sat**: 90% on 6L **BMI**:

Exam: Gen: somnolent, not oriented, slurred speech, tries to talk but its garbled

HEENT: no conjuntival pallor, mucosa dry

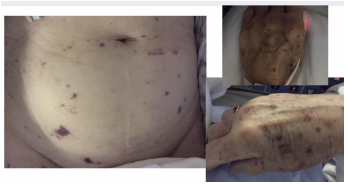
CV: no murmurs

Pulm: right lower lobe crackles

Abd:

Neuro: tone symmetrical both sides, reflexes normal

Extremities/skin: small petechie noted on the abdomen and upper extremities



Notable Labs & Imaging:

Hematology:

WBC: 25 Hgb: 6,9 Plt: 8k MCV:

Chemistry:

Na: 129 K: 3,3 HCO3: 18 Cr: 3,7 BUN: 41 Glucose: normal AST: 305 ALT: 92: directBili: 0,4 Bili: 1,5 Aniongap: 19 LDH: 557 Lactate: 10,8 HSTp: 34,4 CPK: 4941 PT: elevated INR: 1,7 PTT: elevated: ddimer: very high fibrinogen activity: 147

Peripheral smear: no schistocytes

Hapto: normal **CXR**: right lower lobe infiltrate

Serology: HIV, Hep, Lyme, West nile etc. negative

UA: negative

cCT: no intracranial findings

Renal US: no obstruction

LP: platelets too low for LP

Blood cultures: positive N. meningitidis Type C

Rx: Atbx started but the patient remained hypotensive

Cortisol: low

CT: bilateral adrenal enlargement with soft tissue enlargement

Dx: Waterhouse Friedrichsen Syndrome in the setting of N. meningitidis infection

Problem Representation: 79 yo female with hyperacute onset of AMS, fever and shock with petechiae in the upper extremities and abdomen with imaging showing pneumonia on CXR and leucocytosis with bicytopenia and DIC features in the labs. While blood cultures came back positive for N. meningitidis the persistent hypotension raised concern for Waterhouse-Friedrichsen Syndrome with low cortisol and bilateral adrenal findings on CT confirming the diagnosis

Teaching Points (Mitch)

- MIST mnemonic for AMS (metabolic, Infectious, Structural, and Toxic)

- Patient presenting with a fever -> could this be infectious, (being at risk with prior cancer + chemo)
- Types of Cancer Treatment: Cytotoxic (decreased immune system), immunotherapy (increased immune system, targeted, and hormone therapy -> this patient not on cytotoxic, less concerned about profound immunosuppression

- Brain vs. Blood Framework:

- Brain: Metastatic cancer? Bleed? Structural disease?
- Blood: Acute onset encephalopathy -> substance TAKING over MAKING (taking: medication/toxin vs. making: CO2, NH3) or infection
- Acute onset increases likelihood of intrinsic BRAIN disease

- High pre-test probability for FEVER over hyperthermia (hypotension, tachycardia, pulmonary findings + hypoxemia)

- Empiric treatment before diagnosis for suspected rapidly progressing CNS infection (Bcx -> Steroids -> Abx -> Imaging)
- CT prior to LP given localizing CNS symptoms + coagulopathy