4/27/26 Mainstream Monday with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Ramaswamy(@)* ***Case Discussants****: Maddy() & Manaswini()*

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

Scribing (Sarah B)

CC: 94 year old female presenting with AMS from assisted living facility.

HPI:

Altered for 2-3 days prior to admission, family noted R gaze deviation. She was found to be in afib with RVR and reported to have one episode of emesis then became unresponsive. She also has had multiple falls recently.

ROS: Negative except baseline dementia and fever

PMH:

CHF, A Fib,
PAD, CKD stage III,
HTN, HLD,
DM with peripheral neuropathy,
blindness and a left subdural hematoma
ORIF of right distal fibula

Meds:

Tylenol 650 mg TID
ASA 81 mg
Lasix 20 mg Qday
Gabapentin 100 mg TID
Metoprolol 50 mg Qday
Melatonin

Family Hx noncontributory
Social Hx no smoking or drug use

Vitals: T: 101.3 F **HR**: 121 **BP**: 163/90 **RR**: **Sat**: 98% **BMI**:
Exam General: Frail, contracted, Mental status was markedly altered: AOx0 from a baseline of AOx2, not following commands. Could not comply with full neuro exam.
Eyes: right eye gaze deviation, conjunctiva clear
Neck: Due to severe contractions, assessment is limited
Heart: Tachycardic, no murmurs appreciated.
Lungs: Coarse breath Sounds b/l with fine expiratory wheezes in the bases.
Abdomen: soft, NT/ND, no masses
MSK: Mild edema of LLE

Notable Labs & Imaging:

Hematology:

WBC: 21 Hgb: 10.5 Plt: 268 MCV: 88.6

Chemistry:

Na: 139 K: 3.4 Cl: 101 HCO3: Cr: 1.03 BUN: 28 Glucose: 184 Mg 1.7 Ca nl
AST: nl ALT: nl Alk-P: 166 TBili: 1.6 DBili: 0.8 Albumin: 4.1 Total Protein: 7.8

Imaging:

Non contrast CT head/MRI brain: No acute intracranial findings. Old infarcts noted, parenchymal volume loss and small vessel disease changes. Acute pansinusitis.
CXR: normal
CT abd/pelvis: Right lower lobe airspace disease. No definitive acute intra-abdominal process detected. Distended gallbladder with gallbladder stones
CSF Studies: Appearance cloudy, WBC 20K (N 71%), protein 275, glucose 79 (low compared to serum glucose), Multiplex PCR: *Streptococcus pneumoniae*

Hospital Course: patient was worked up for acute ischemic stroke then treated empirically for acute meningitis wiht vancomycin, ceftriaxone, ampicillin. Notably after herpes labialis was found on exam, IV acyclovir was also added. Afib/RVR was controlled with diltiazem -> metoprolol.

Dx: *Streptococcus pneumoniae* meningitis

Problem Representation: 94 year old female with significant cardiac history and DM presented due to acute R gaze deviation and altered mental status, found to have fever and leukocytosis with CSF studies revealing acute Strep pneumo meningitis.

Teaching Points (Varsha)

- **AMS- MIST- Metabolic, Infection, Structural (vasuclar), Toxins**
- **Is it outside the brain (Metabolic)/ inside (Stroke/infection)**
- **AMS + fever → think meningitis**
- **Most common organism- Strep Pneumo, Listeria (elderly)**
- **Initial Labs- CBC, glucose, UA, CT brain, LP, blood cultures**
- **Emprical Antibiotics (cefrtiaxone, Ampicillin, Vanco, Acyclovir) + Iv Dexa (bacterial) → if suspicious for infection**
- **Afib with RVR is = to sinus tach in someone with past History. (focus on trigger)**