

# 9/13/23 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Anmolpreet Kaur Grewal (@anugrewal19) Case Discussants: (@Sharminzi) and (@JackPenner)

**CC:** 94 y/o female, altered mental status (AMS), new onset right gaze deviation

#### HPI:

She had been altered for the past 3 days, she had baseline dementia. Earlier in the day she also referred having coffee ground emesis, family members say she was febrile.

**PMH:** CHF, AF, PAD, CKD 3, HTA, DM2 with peripheral neuropathy, subdural hematoma.

**Meds:**  
Tylenol  
Aspirin, Lasix,  
Gabapentin,  
Metoprolol,  
Melatonin

**Fam Hx:**  
NL

**Soc Hx:**  
multiple falls recently

**Allergies:**  
NL

**Vitals:** T: 38.5 HR: 121 BP: 163/90 O2sat: 98%

#### Exam:

**Gen:** fragile, not oriented, not following commands

**CV:** tachycardic, no murmurs

**Pulm:** coarse breath sounds

**Abd:** soft, non tender non distended

**Neuro:** right eye gaze deviation

**Extremities/skin:** left lower extremity edema

#### Notable Labs & Imaging:

##### Hematology:

WBC: 21k Hgb: 10.5 Plt: 268000

##### Chemistry:

Na: 139 K: 3.4 Cl: 101 BUN: 28 Cr: 1.03 Glucose: 184  
AST: 28 ALT: 19 Alk-P: 166 T.bilirubin: 1.60  
eGFR: 50

##### Imaging:

CXR: RLL airspace disease/consolidation  
CT head: No acute intracranial process, old lesions noted. Sinusitis.  
CT abdomen: Distended gallbladder with stones  
LP: yellow and cloudy, protein: 275, glucose: 79,  
WBC:20K, PMNL predominance  
PCR: Streptococcus pneumoniae

**Final Dx:** Acute bacterial meningitis

**Problem Representation:** A 94 y/o female patient with a past medical history of CHF, AFib w/ RVR, Stage 3 CKD, T2DM, presenting with altered mental status for the past 3 days, coffee ground emesis, new onset right gaze deviation.

#### Teaching Points (Tansu):

AMS, new onset R-gaze dev. → more things make you altered as an older person. "MIST" but in an older pt. prioritize imaging to r/o subdural hemorrhage, intracranial bleeding.

Both eyes or single eye? Disconjugate gaze? CN 3,6 palsies?

Higher probability for intracranial processes than systemic causes bc there's eye finding.

Not only AMS, but also baseline dementia, coffee ground emesis, febrile. A-fib w/ RVR.

Given the medical history → Many possibilities:

- Prior stroke → Residual deficit → Antiplatelet use → GI bleed → Acute on chronic → Global hypoperfusion
- Pt not on anticoag. → A-fib w/ RVR → Could this be emboli?
- CKD Stage 3 → uremia
- Cerebral amyloid angiopathy

Which problem are we going to address first?

1. Hemodynamic stability first.

2. Figure out bleeding in the brain

3. Investigate Coagulopathy, infectious routes.

Vital signs will help us prioritize what to address first!!!

Fever is the cause or the complication?: Infection (pneumonitis due to AMS, other inf) vs. complication of AMS. Labs (High WBC) & Pulmonary exam (coarse breath sounds) → Support INFECTIOUS w/u; investigate the 5 causes: UTI, CAP, skin-soft tissue inf., GI, blood stream.

4. Call CODE STROKE.

5. Imaging ASAP. LP to r/o meningococcal meningitis, seizure evaluation, start Abx, treat for inf!!!

CT scan r/o bleed in the CNS. But MRI is still needed, for non-hemorrhagic stroke?

CXR (-) Pneumonia. → CT can be (+). Here we have a high index of suspicion w/ lung sounds, RL opacity.

Distended gallbladder w/ stones → Cholecystitis (Murphy is hard to assess in AMS).

Eye deviation + sinusitis on imaging → Orbital apex syndrome w/ invasive fungal inf (e.g. Mucor). Get MRI to see what's happening in an around the eye. LP!!! S.pneumonia (steroids before, vanc+ceftriaxone)