5/13/2026 Morning Report with @CPSolvers

"One life, so many dreams" **Case Presenter**: Pavandeep (@) **Case Discussants**: Kirtan (@KirtanPatolia) & Sharmin (@)

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

Scribing (Youssef Wafa)

CC: 76F previously independent, acute presentation of SOB, headache, fever and confusion since 2 days

HPI:

Imaging showed pleural effusion, nodularity and necrotic areas as well as nodules, Rt lung lesion (middle lobe) and low grade uptake in the cecum. Two lung biopsies showed no evidence of malignancy or granulomatous disease but revealed acute inflammation with dense fibrosis adjacent to an unsampled 4.7mm lesion in the anterior basal segment of the RLL

PMH:
Hiatal Hernia
Prediabetes
Hip OA

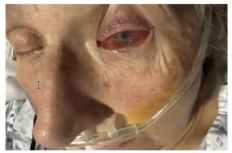
Allergies:
-

Fam Hx:
-

Social Hx:
-

Health-Related Behaviors:
No alcohol; vegetarian

Vitals: T: **HR**: 72 **BP**: 145/67 **RR**: 19 **Sat**: 96% on RA
Exam: Gen: fluctuating consciousness, speech issue, GCS 11
HEENT: L pupil 2+ R pupil 3+ **Extremities/skin**: nl
CV: nl **Pulm**: reduced AE on Rt side with basal crepitations **Abd**: nl
Neuro: R side facial droop, Left upper limb pronator drift and strength ⅘ preserved strength in rest of the extremities.



Notable Labs & Imaging:

Hematology and Chemistry:
WBC: Fluctuating leukocytosis (neutrophilia→neutropenia) |Hgb: Normocytic anemia| PLT:high
Cr: Stage 1 AKI PT: mildly elevated LFTs: Normal CRP: 181 Fibrinogen: mildly high ,Viral Panel: Neg

Imaging:
EKG: NSR | Echo: : no endocarditis evidence| **CXR**: **White lower zone consolidation** |**CT guided lung biopsy**: inflammation plus fibrosis in lungs | **FDG PET scan**: R lung lesion and uptake in caecum

CT/CTA head: Scattered sulcal subarachnoid haemorrhage, including involvement of the right Sylvian fissure, with intraventricular haemorrhage. There was also concern for a small hemorrhagic infarct in the right subinsular region. Irregularity of a branch of the right MCA raised suspicion of a ?possible vessel dissection with associated subarachnoid haemorrhage.

CT chest: A right apical pneumothorax and posterior pleural effusion were also noted.

MRI/MRA Brain: multiple scattered peripheral ring enhancing regions with central diffusion restriction predominantly at gray white junction with microhemorrhages and leptomeningeal enhancement

MRI Spine: well defined lesions in right T1 extending to right L3. No cord compression.

Started on Abx -> ceftriaxone, metronidazole, amoxicillin, ampho b

Repeat MRI brain: lesions were more consistent with infection (because the marked diffusion restriction with ADC drop was atypical for metastatic disease). In the context of this patient, the findings were considered highly suspicious for septic embolic

LP: 10k WBCs (Lymphocyte predominant)Protein 0.88. Glucose 2.9, no organisms, viral studies neg,

Infection panel : no lyme no pneumococcus, no Haemophilus, Negative Blood Cultures

MRI Orbit: Abn thickening of Left globe, left lateral orbital wall lesion |**CTPA:** bilateral effusions +PE

Thoracentesis : Transudative in nature |**Vitreous Biopsy** : lentiginous junctional nevus , margins clear

Large-volume cerebrospinal fluid (CSF) sampling

TLC: low, Low absolute CD4 (normal %), mildly low CD56 (normal %), Low Neutrophil count (0.5-1.0). Normal SPEP. Anti–GM-CSF and anti–interferon gamma antibodies negative

Dx: Disseminated Nocardia

Problem Representation: 76y old FM with PMH of prediabetes presented with SOB, fever, headache and confusion for 2 days. Labs showed anemia, neutropenia and thrombocytosis.MRI brain and orbit showed ring enhancing lesions and orbital wall lesion.

Teaching Points (Hans and Preethi):

Approach to AMS: MIST (metabolic, infectious, structural, Toxin) mnemonic
- **20% of cases- CNS origin. Are they altered because they are sick/there is an underlying cause?**
- **Headaches + Fever - CNS parenchyma. Must not miss! Meningoencephalitis**
- **Think about space occupying lesions - imaging positive/imaging negative categories.**
- **PET CT: can be malignancy/any inflammation (anything that has increased metabolic activity)**

Acute or chronic neurologic manifestations? If acute→ call a CODE STROKE. Immediate workup- CT non con head (to look for ischemic or hemorrhagic stroke etc..)
- **VBG/ABG for confusion.**
- **If hypoxia + AMS → low threshold to intubate**
- **Keep an eye on the vitals!**

Involvement of which part of the brain? brainstem/b/l thalamus/cortex?
- **R>L pupillary dilation→ increased R parasympathetic/increased L sympathetic?can be increased ICP. nerves involved: CN 3 and CN 7. UMN/LMN**
- **Pronator drift + → cortical involvement**
- **Imaging with MRI/MRA/MRV**

Hemorrhages in brain: HTN, vessels (vasculitis, aneurysm, dissection, AVMs), brain tumour, blood thinners (PPP)
- **Location: subarachnoid near cortex, multiple thrombi**

Labs: significant for inflammation, thrombocytosis neutropenia (fungal infection vs autoimmune, vs paraneoplastic)

Ring enhancing lesions at gray white margin: hematogenous spread -metastases (lymphoma, breast, melanoma)
-vs infarcts, emboli (marantic, infectious endocarditis)
-vs abscesses (infection pyogenic, granuloma from fungi, Tb)

Infections will also affect spinal cord (seen in our patient)
- **If TTE and TEE are non conclusive for an endovascular infection, reasonable to get a cardiac PET in a sick pt in addition to full body PET.**
- **Disseminated nocardia in immunocompromised patients: common sites CNS Dx through imaging and biopsy.**
- **Nocardia has a good response to Ceftriaxone.**