12/04/24 Morning Report with @CPSolvers

***"One life, so many dreams" Case Presenter**: Razan () **Case Discussants**: Steph (@), Zaveen (@sargsyanz)*

CC: Single 24-year-old female patient who's a known case of SLE was referred to our hospital as a case of chest infection.

HPI: The patient was in her usual state of health until 3/9/2024 when the patient presented to with a complaint of headache, recurrent vomiting and blurry vision. She was admitted for pain management and further diagnostic imaging evaluation. The patient underwent brain and whole spine MRI, which revealed "new brain SLE lesion"2 weeks later, the patient was supposed to be discharged, but she developed shortness of breath, with new onset dry cough. The patient's SOB was brought on at rest, and lying supine(+ orthopnea). She also complained of PND. The SOB was associated with an intermittent central chest pain, that Was described as "clenching". The pain did not radiate anywhere and was exacerbated by lying supine. There are no relieving factors. The patient has also developed spikes of fever over the past week, documented at 38 degrees. The fever was occasionally associated with bouts of chills. The fever was relieved by paracetamol according to the patient.The patient's history is positive for gradual inability to walk over the past 4 months.
ROS: The patient denied any abdominal pain, nausea, vomiting, diarrhea, constipation, joint pain, joint swelling, flank pain, dysuria, frequency, skin rash, pruritus, headache, blurry vision, paresthesia, numbness, palpitations

PMH: SLE
APLS
Lupus nephritis
Kidney biopsy in 2016- membranous nephropathy

Meds:
Hydroxychloroquine 200 mg/d
Prednisolone 20mg/daily
Calcium carbonate
Aspirin, Clexane

Fam Hx:

Soc Hx:

Health-Related Behaviors:
Non smoker

Allergies:

Vitals: T: 37.3 BP:137/74 RR: 17 **Sat:** 97% on O2 mask **HR:** 109
Exam: Gen: conscious alert oriented, sitting upward in bed
HEENT: bilateral icteric eyes
CV: normal S1 S2
Pulm: decrease air entry, more over the left lung
Abd: soft lax
Neuro: left sided weakness , foleys placed, bedridden
MSK: bilateral pitting edema +1, bilateral ecchymosis on her arms and legs

Notable Labs & Imaging:
Hematology: WBC: 13.1 (neutro 92.9) Hgb: 9.5 Plt: 267
Chemistry CRP 277 ; ESR 105; LDH ; Bili 2.7 D-bil 1.5; ALP 116 ggt 84 AST 26 ALT 32 PT, PTT nl **Urinalysis:** proteinuria +3 baseline , + RBC, 628 WBC

Imaging: **CT Chest:** Large left sided Pneumothorax with collapse
Chest x-ray: Bilateral chest infiltrates, more on the right with bilateral cavitary lesions. Suspicion for left sided pneumothorax. Collapse consolidation of the left lung. Mild right sided pneumothorax. Multiple variable sized solid and cavitary lesions associated with surrounding parenchyma ground glass opacities are seen scattered in both lung fields with feeding vessel sign , the largest seen in the anterior segment of the right upper lobe measuring about 2.9 X 2.2 cm concerning for septic pulmonary emboli , differentials include fungal infection.
→ Thoracic surgery team consulted and left sided chest tube was placed
Brain CT: Left side stroke, no abnormalities.
Started on : Meropenem/ Teicoplanin /Hydrocortisone /Hydroxychloroquine
Blood cultures, urine cultures: Negative. No sputum
New CT : Low attenuation area in the right kidney, subcapsular collection suspicious for abscess
More cultures were done and came negative
→ Add: Meropenem, Tazocin and Voriconazole. The patient had no more fever
ECG: Sinus tachycardia **Echo:** Normal **TTE:** Couldn't not be done
Left sided Pneumothorax is expanded, left sided emphysema. R sided expanded too.
→ The patient improved in the pneumothorax, the cavitation didn't improve.
Suspicious septic emboli or fungal infection.
Stopped all antibiotics, patient is only on Voriconazole. The patient is well, no longer complain chest pain.
Next step: Biopsy
Dx: Unknown (so far)

Problem Representation: Young women with SLE and APLS presents with chest pain, fever and SOB. On imaging presented with Pneumothorax and kidney abscess. Cultures were negative. The patient improved with antibiotics and antifungal therapy.

Teaching Points: (Masah)
Young women, PMH SLE, developed HA : Inflammatory, Secondary complications (bleeding, thrombosis), recent treatments, complications of treatments.

Chest pain → r/o life threatening causes: 4+2+2 (Cardiac: ACS, Aortic dissection, Tamponade, Takotsubo Cardiomyopathy, Pulmonary: Pulm Embolism, pneumothorax, Esophageal: Rupture, Impaction) → CXR, EKG, Troponin

Positional Chest pain → pericarditis, serositis

Signs of bleeding, Hyperacute Resp failure cause → alveolar hemorrhage.

Cavitating organisms with septic emboli: MRSA, Pseudomonas, Klebsiella, PJP, Aspergillus, Histoplasma, Cryptococcus

Kidney abscess that's culture negative: Tb, Melioidosis, mycoplasma, aspergillosis, infarct, hemorrhage.
Melioidosis: can mimic granulomatous disease & cause intra abdominal abscesses.