04/9/24 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Yazmin (@minheredia) Case Discussants: Rabih (@rabihmgeha)

CC: 57 y/o female AMS

HPI: Come from another clinic with AMS, she didn't remember how she ended in the hospital.
3 days ago fever, malaise, cough, night sweats, anorexia, nausea, vomiting.
And diarrhea for weeks.

PMH:
None

Meds:
None

Fam Hx:
None

Soc Hx: Lives in the street

Health-Related Behaviors:
Inject heroin 1-2 times a week

Allergies: Denied

Vitals: T: 37.9 **HR:**120 **BP:**130/80 **RR:** 30 4 liters of NC
Exam:
Gen: Chronic ill appear, can't answer questions, look tired
HEENT: Oral cavity white plaques can be scraped off
CV: Tachycardic, no murmurs
Pulm: Bilateral crackles (right side more than the left)
Abd: Soft non tender, non distended, no splenomegaly
Neuro: Oriented, no focal deficits
Extremities/skin: Dry skin

Notable Labs & Imaging:
Hematology: WBC: 1.83 (N71% L22%) Hgb: 9.7 Plt: 377
Chemistry:
BUN: 40 Cr:1.08 glucose: nl AST: 87 ALT: 27 Alk-P:124 lactate 1.7
ABG: 7.6 PCO2 20 PO2 75 HCO3 19 (on 4 liters of NC)
Anion gap 18 UA: negative Sputum: Pseudomonas positive

Imaging:
CT head w/ contrast: No intracranial hemorrhage
Echocardiogram: No valvular disease
CT lung: Consolidations, no bronchogram, no embolism.
Treatment Vancomycin + cefepime
Legionella, Toxi, CMV, Hep C, B negative
Blood culture: Gram positive cocci pairs, Cryptococcus positive
HIV: positive VIRAL load 6000 CD4: 3
Treated with cryptococcosis → added fluconazole and bactrim, ceftriaxone
AST 271 ALT 200 Day 9 AST was non resolved. It was associated w/ ceftriaxone.
After 2 weeks fevers, the patient presented w/ chest discomfort
CT: Pseudomonas exacerbation
Dx: Acute retroviral syndrome, cryptococcemia, ceftriaxone induced lung injury, Pseudomonas infection

Problem Representation: 57 y/o female with AMS and constitutional symptoms. Present with positive tests for HIV, pseudomonas and cryptococcus.

Teaching Points (Parisa):
AMS→ MIST; metabolic, infection, structural, toxins.
We need to address acute syndrome first (AMS) then address other subacute symptoms.
Most **life threatening** causes of AMS are 4Ss, considering her PMH she is in risk for all categories: seizure; stroke; sugar(hypoglycemia); substance intoxication => sugar(nutritional hypoglycemia), naloxone(heroine), hemorrhagic stroke over ischemic, seizure(traumatic brain injury).
Steps → 1) Finger stick glucose 2) Opioid intoxication pupil examination & respiratory rates (naloxone) 3) Stroke & Seizure(if 1&2 are not present) 3)IV access (ultrasound guided blood access considering her IV drug abuse) 4) 3 Blood culture is needed (infective endocarditis) 5) chronic viral needs to be tested (HIV; HCV)
Opioid use disorders → If she has another cause of AMS it is not best decision to give her naloxone; withdrawal as she is not using while hospitalized.
Symptoms raise concern for HIV Infection→ **weight loss**; prior STD; **thrush**; kaposi sarcoma; LAD; leukopenia (**lymphopenia**); proteinuria; GGO (bibasilar crackles).
Organs => **Lung** → CAP(strep) & PJP testing, **Brain** → cryptococcal meningitis, **Liver** → Hepatitis in patients with HIV (MAC avium; syphilis)
Routine blood tests in HIV→ STI; blood culture(bacteremia); MAC(AFB blood culture); cryptococcal meningitis; LDH; beta D glucan (PJP)
Treatment→ ceftriaxone and doxycycline + hydration
Common infection in HIV → strep pneumonia
Rate of bacteremia in HIV in 10 times higher than normal population.
In strep pneumonia rate of endocarditis is low.
Vast majority of patients with HIV usually have **invasive bacterial diseases** more than fungal diseases.