



12/7/20 Morning Report with @CPSolvers



Case Presenter: Ibrahim Radi(@) Case Discussants: Norma Dyer (@MedicalChef1) and Thiago Mendes (@mendesthiagob)

CC: Back pain x 1 month

HPI: 30-year-old male truck driver presented to the ED with interscapular 5/10 back pain, no radiation, worse when leaning forward. Worse over the last week. APAP x 1 week without relief.

Denies SOB, night sweats. + subjective fevers. Lost 5lbs the last month unintentional.

Cough productive yellow x 2 months

PMH: None

Fam Hx: None

Soc Hx: Drives truck b/t Mexico, El Salvador, and Guatemala

Meds: APAP

Health-Related Behaviors:

Tobacco 1 ppd for 10 years, quit a year ago.

6 sexual partners the last yr (all female)

Allergies: None

Vitals: T: 39.9 C (103.2 F) HR: 125/min BP: 110/75 RR: 16/min SpO₂: 98 RA

Exam:

Gen: Cachectic

HEENT: Nml

CV: Tachy

Pulm: No tachypnea, fine crackles in upper 1/3 of right hemithorax

Abd: Nml

Neuro: Nml

Extremities/Skin: Nml. Local tenderness at T6/7 with a mild kyphosis

Notable Labs & Imaging:

Hematology:

WBC: 5.1 k/mcL Hgb: 12.2 g/dL HCT: 37% Plt: 130 k/mcL

ESR 25: CRP: 36

Chemistry:

Na: 140 K: 4.0 Cl: 100 CO₂: BUN: 16 Cr: 0.8 glucose: 77 Ca: 12 mg/dL AST, ALT, Alk-P: Nml

Tuberculin test: Neg Sputum: acid fast + Quantiferon: Positive

HIV: positive CD4 180 cells viral load: 2 million/ml

Imaging:

EKG: Sinus tachycardia

CXR: Cavitory lesion in R apex, anterior wedging in vertebral body and opacity in paravertebral body

MRI T-spine: Crush fx at T7, No medullary compression

Culture for TB +

Hep B/C, VDRL, EBV, CMV, Toxo: Negative

Started on isoniazid, ethambutol, rifampin, pyrazinamide

Problem Representation: 30M w/ no PMH from Guatemala p/w 5lb weight loss, 2 mo productive cough, & new onset back pain found be cachectic, febrile with focal t-spine pain and crackles in the RUL. Imaging showed a wedge deformity, cavitory lesion with labs showing him to have newly diagnosed HIV and active TB with spinal involvement.

Teaching Points (Kiara):

- **Truck driver:** Vascular pathology (Ao dissection, PE if-acute presentation), musculoskeletal (spasm/strength, osteolytic lesion)
- **Back pain:** When do I need to image? Fever, weight loss, acute are red flags
- **Fever in returning traveller:** Bacterial (longer ago-Typhoid, Leptospira), Virus (HIV-lymphoma if immunocompromised), Fungi (Histo, Blasto, Coddii), Parasites (Malaria), TB
- **Why TB?** Fever + tachycardia + crackles + kyphosis + cachexia + chronic cough. 1ry lower lobes, 2ry upper lobe involvement (Ghon complex). Cervical Pott's disease can present with a "Gibbus" kyphotic deformation.
- **Cachexia:** Epidural abscess, TB (reactivation), HIV, immunocompromised state (Fungal-PJP, TB), undiagnosed malignancy with bone involvement.
- 1.25 (kidney): Produced in granulomatous disease this is why there's hypercalcemia.
- HIV false negative in Tuberculin test because of the low immune system. Quantiferon does not depend on immune system.
- Sputum x3 negative confirms negative test.
- PPD and IGRA can be negative during active TB