



04/14/21 Morning Report with @CPSolvers



Case Presenter: Simone Vais (@SimoneVais) Case Discussants: Nilayan Sankar (@nilayansankar) and Kannu Basal (@KannuBansalMD)

<p>CC: Back pain</p> <p>HPI: 74M comes to ED with 2w middle back pain. He has lived in Saudi Arabia where prior imaging showed L4-L5 disk bulging. PE shows tenderness to palpation on spine, and labs showed high Alk-P. <u>Next months:</u> No fever. But unintentional weight loss. Imaging, no fractures and labs showed elevated Alk-P and GGT. MRI showed multilevel osteomyelitis. MRI abdomen no biliary pathology. <u>Hospital:</u> 20 kg weight loss in 2 months. No exposures. Comes to California and works as film producer</p>	<p>Vitals: T: HR: BP: RR: SpO₂:</p> <p>Exam:</p> <p>Gen:</p> <p>HEENT:</p> <p>CV:</p> <p>Pulm:</p> <p>Abd:</p> <p>Neuro:</p> <p>Extremities/Skin:</p>	<p>Problem Representation: 70M p/w chronic back pain and significant weight loss. Labs showed liver compromise. Found to have multilevel vertebral damage on imaging.</p>
<p>PMH:</p> <p>Meds:</p> <p>Fam Hx:</p> <p>Soc Hx:</p> <p>Health-Related Behaviors: No risk exposures (denies unpasteurized milk products, livestock).</p> <p>Allergies:</p>	<p>Notable Labs & Imaging:</p> <p>Hematology: WBC: 5.2 Hgb: 13.8 Plt: 234</p> <p>Chemistry: <u>Hospital day 1:</u> Na: 135 K: 4.1 Cl: 104 Ca: 9.9 CO2: 25 BUN: 26 Cr: .62 glucose: 216 TP: 7.9 Alb 4, AST: 46 ALT: 58 Alk-P:735 GGT 1282 T. Bili: .5 Hepatitis panel negative, ESR: 126 CRP: 40.9 <u>Hospital day 2:</u> Negatives (HIV, cultures, gold quant, SPEP, anti smooth muscle and antimitochondrial -ve). Total IgG 2,034 (elevated) <u>Hospital day 4:</u> + Brucella, Ab + ve Pathology -ve for carcinoma</p> <p>Final Dx: Disseminated Brucellosis</p>	<p>Teaching Points (Rafa):</p> <ul style="list-style-type: none"> ● BACK PAIN <u>Many etiologies:</u> Trauma, pathologic fracture, hernia, spinal metastasis (prostate cancer), epidural abscess, hyperthyroidism, Paget disease, osteoarthritis. Spinal stenosis, spondyloarthropathy <u>Red flags:</u> Fever? Weight loss? History of cancer? Nighttime pain interfering with sleep? Age>50? Neurologic deficits? No response to previous therapy? ● ELEVATED ALK-P: <u>What is the source?</u> Check for GGT - if high: hepatobiliary system Alk-P: bone, liver, placenta ● OSTEOMYELITIS <u>3 mechanisms:</u> Hematogenous seeding (skin/soft tissue infection), spread from contiguous focus of infection (diabetic infected wound), and direct inoculation of bone (compound fracture) <u>Infectious causes</u> S aureus, Salmonella (SCD), Pott disease (TB), Brucellosis, fungal <u>Non- infectious causes</u> Malignancy, autoimmune disease <u>Initial evaluation:</u> Blood cultures + MRI of the spine (most sensitive imaging method for diagnosing vertebral osteomyelitis) ● BRUCELOSIS Undulant fever - unpasteurized dairy (cows, goats) - initial tx: doxycycline /gentamicin/rifampin for 2 weeks