



# 11/28/24 Morning Report with @CPSolvers



"One life, so many dreams" Case Presenter: Sadiqua Case Discussants: Rabih(@rabihmgeha), Anmolpreet(@anugrewal19)

**CC:** 60 yo male who p/w to the ED with 5 days of knee pain

**HPI:**

3d prior treated for a gout flare up w/ NSAIDs  
Now: Worsening symptoms, inability to angulate, subjected **fever and chills**, no trauma

**ROS:** unremarkable

Linezolid + Augmentin -> discharged on 3rd day  
HIV pos

**PMH:** left wrist abscess, 4 month prior, decompression, acicid vancomycin, augmentin, 14 d asthma  
Gout, osteoarthritis both knees,

**Meds:** albuterol, ibuprofen  
Symbicort

**Fam Hx:** nil

**Soc Hx:** married, sexuell inactive

**Health-Related Behaviors:**

**poly substance use disorder** alcohol 5 drinks a week, smoking, marihuana, crack cocaine use, no travel history

**Allergies:** no

**Vitals:** T: 97.5 BP: 130/70 RR: 20 Sat: 99 HR 98

**Exam:** Gen: sweating, warm tenderness R knee,

**HEENT:**

**CV:** black discoloration of toenails

**Pulm:**

**Abd:**

**Neuro:**

**MSK:**

**Notable Labs & Imaging:**

**Hematology:**

WBC: 7.71 RBC 9 Hgb: 13.4 Plt: 269

**Chemistry** Na 137 Cl 105

**CRP >12 ; ESR 56 ; LDH ; Bili normal; ALP normal Cr 1.05**

**Imaging:**

X ray knee: osteoarthritis,

Echo: nil

Incision drainage knee: Vanco + Ceftriaxone, then Cefazolin Tobra + Vanco during procedure  
Purulent, cultured were sent, **Ceftriax+Vanc** (MRSA)

STIs: HIV, HepB, Hcv, blood culture remain neg. TB culture neg

Fluid analysis arthrocentesis: cloudy, WBC >100,000, 90% polymorphonucleocytes, no crystals, gram stain neg. RBCs >20K

**Dx Cutibacterium acne septic arthritis**

**Problem Representation:** A 60 y/o male p/w 5 days of unilateral knee swelling and pain associated with fever and chills for 5 days. He had a prior episode of a wrist abscess 4 month ago. The PMH is notable for a substance use disorder (crack, cigarettes & alcohol). Labs revealed an elevated Crp and ESR. Further work-up for monoarticular arthritis showed a WBC > 100,000 on arthrocentesis, other results including WBC, blood cultures and gram stain as well as STD testing came back unremarkable. Empiric treatment w/ Ceftriaxone + Vancomycin was started.

**Teaching Points (Parisa):**

**Joint pain** → monoarticular (is likely periarticular issue); oligoarticular; polyarticular → Diffuse swelling → intra articular; Instability → (ACL; MCL tear) periarticular; Mono articular → infectious: crystalline

Systemic response (fever) plus joint complaint → having intra-articular involvement (deep structure) OR septic bursitis

**infectious RF** → endovascular: portal entry skin (trauma); hematogenous dissemination (injection; AV fistula prosthetic Valve; ICD valve)

**Upper extremity cellulitis** d/t prior lymphadenectomy; bite; injection → any spontaneous raises concern for needle injection

We need a thorough exam looking for other resources → **endocarditis**; spine tenderness; skin rash; murmur

**Septic arthritis** is not systemic inflammatory; contained infection like abscess; no fever no chills no WBC → Tap; **treat empirically** → vancomycin (staph; strep); ceftriaxone (gram neg rod; gonococcal)

Usually imaging is not diagnostic method in septic arthritis → Pocus confirms there is fluid in knee; confirms myositis; abscess if there is direct injection; valuable in small joints like wrist. Test → arthrocentesis; blood culture; mucosal swab mouth genital **disseminated gonococcal infection (DGI)**

Do not exclude infection → as gram negative sensitivity for septic arthritis is about 50%; there is 25% positivity rate of bacteremia in septic arthritis; synovial fluid culture has 70% positivity rate; drops gonococcal 50%

**Culture neg inflammatory arthritis:** culture neg septic arthritis; crystalline dx with neg crystals (CPPD) (anti inflammatory); looking for adjacent inflammatory effusion (osteomyelitis trigger tibia/femoral) → evidence of chondrocalcinosis x ray; MRI (knee; thigh)

Cutibacterium acne → Gram positive rod on skin → can be challenging to diagnosis