



# 05/10/24 Morning Report with @CPSolvers



"One life, so many dreams" Case Presenter: Zakariyya(@pouoverguy) Case Discussants: Reza(@DxRxEdU) and Rabih(@rabihmgeha)

**CC:** 55 Male presents to ED w/ excruciating right knee pain

**HPI:** 2 Weeks prior fallen onto right knee, pain progressed to right and left ankle and knee, his pain went to local clinical got analgesia, pain progressively worsened, he came to ED.

No Hx of chest pain, SOB, abdominal pain diarrhea, skin rash, morning stiffness, prior joint pain

**PMH:** healthy prior to this presentation

**Meds:**

**Fam Hx:** unremarkable

**Soc Hx:** security guard, monogamous relationship

**Health-Related Behaviors:**

No substances, cigarettes, alcohol

**Allergies:** none

**Vitals:** T: 39.1°C HR: 127 BP: 178/114,

**Exam:** Gen: in significant pain, BMI 35

**HEENT:** no icterus, no pallor, no LAD

**CV:** prominent pulses appreciated in neck, very sharp upstroke and collapsed pulse, no JVD, no apex impulses, no murmur

**Pulm:** nl **Abd:** nl

**Neuro:** alert and oriented x3 normal tone in UE, exam of LE non poss due to pain

**Extremities/skin:** MSK diffuse swelling knees and ankles, right>left, no rash, mild synovitis on PIP bilaterally, no DIP involvement, no gouty tophi

**Notable Labs & Imaging:**

**Hematology:**

WBC: 15k Hgb: 12.5 Plt: 320

**Chemistry:**

Na: 132 K:5 Cl: HCO3: BUN: Cr:0.98 glucose: Ca: Mag:

AST: nl ALT: 38 Alk-P: Albumin: uric acid borderline elevated,

CRP 180, HIV and syphilis neg, RF 34 (borderline elevated), anti ccp neg,

ESR 20

**Imaging:**

**Echocardiogram:** good LV function, no valvulopathy, no sign of endocarditis

Blood culture negative x2

**Arthrocentesis:** Neg crystal, culture negative, no cell count available, dense inflamm. infiltrate (PMNs) on microscopy

**On further Hx:** similar episode few years prior, self resolved, intermittent severe alcohol consumption, recovery within 24 h after admission

**Rx:** AB, colchicine, NSAIDs. AB subsequently stopped due to remarkable recovery

**Dx:** severe atypical hyperinflammatory gout

**Problem Representation:** 55y/o previously healthy male presents w/ excruciating knee pain, found to have fever, leukocytosis, hyperdynamic LV and PMNs in knee arthrocentesis.

**Teaching Points (Anmolpreet):**

**I] Right knee pain:-** → classifies as monoarthritis as of now! could be intra articular/periarticular(ligament/tendon which has ruptured)--> history of trauma/injury to knee? Examine the knee! Check for ROM! **DDx:** crystalline!

**II] involvement of >1 joints** indicate more towards joint problem.

Presence of trauma in the pt need to be understood if it has affected all the joints or are they distracting injuries?

**III] Aortic regurgitation:** water hammer pulse, Quincke's pulse

**IV] Fever, murmur, joint pain:** we think of ds affecting valve eg: Endocarditis, and aorta eg:acute aortic syndromes(aortopathy)

3 blood cultures→ followed by antibiotics, ECHO

Lupus and spondyloarthropathy can also affect aorta.

**V] Arthritis** infections are common to all types:- monoarthritis and oligoarthritis→ pyogenic bacterial ix, spirochaetes (Lyme)

Polylarthritis: viral infections (parvovirus B19, chikungunya)

**VI] Leukocytosis** makes us move towards the oligoarthritis category of pyogenic bacterial infections.

**VII] RF: a very non specific antibody!** A few diagnosis to be considered :-mixed cryoglobulinemia (complement levels will help), Sjogren's syndrome. RF is negative in 1/3rd patients of RA

**VIII] Palindromic rheumatism:** is a form of inflammatory arthritis in which joint pain and inflammation come and go.

**IX] Recovery within 24 hours lends us more towards crystalline disorders than infection!! (tachycardiac, hieprtensive, hyperdynamic)--> High output heart failure:** anemia, aortic insufficiency, thyrotoxicosis,(but no HF sx); so could be heart response due to robust infection Rx:THIAMINE for sure (because of alcohol), ANAKINRA (IL-1 blocker) **IL-1 → pathophys of gout**  
**Risk factors:** male, old age, alcohol→ presents with severe excruciating pain