8/26/22 Morning Report with @CPSolvers

Case Presenter: *Ravi Singh (@ravi7ks)* ***Case Discussants:*** *Rabih(@rabihmgeha) and Reza (@DrRxEdu)*

CC: 50 y/o M w/shoulder and chest pain for a week

HPI:
-Hx of DM, HTN, HLD, hypothyroidism. Recently admitted post MVA, discharged 1wk ago.
-P/w R shoulder pain, chest pain since discharge.
-During past hospitalization, had several rib fractures & hemothorax d/t bleeding intercostal artery. Chest tube placed.
-Prior to discharge, developed pain in R shoulder & chest. Pain progressively worsened over last 1wk, associated with limitation of upward movement in shoulder (20/10 pain)
-Prior to discharge, reported shakes & profuse sweating

PMH:
DM, HLD
Hypothyroidism
Obesity

Meds:
Medrol dose pack rx'd by PCP - temporary improvement in symptoms
Alprazolam
Amlodipine
Atorvastatin
Clonazepam
Glipizide
Insulin
Levothyroxine

Fam Hx:

Soc Hx:
Increase in alcohol consumption

Health-Related Behaviors:

Allergies:

Vitals: **T**: 37.7 **HR**: 88 **BP**: 148/82 **RR**: 18 **SpO_2**:

Exam:
Gen: Uncomfortable appearing, shoulder pain radiating to chest
Rest of exam unremarkable.
Extremities/Skin: Slight erythema & warmth over R shoulder, swelling w/limited ROM and tenderness to palpation

Notable Labs & Imaging:

Hematology:
WBC: 19.77 (PMN predominant) Hgb: 10.7 Plt: 599

Chemistry:
Na: 130 K: 4.8 CO2: 27.5 BUN: 21 Cr: 1.23 (baseline ~1) glucose: 207
AST: ALT: Alk-P: normal
Troponin: nl

Imaging:
CT with contrast: No fracture.
MRI: subdeltoid bursitis with abscess formation resulting in moderate distention and myositis. Microabscesses under fibers communicating w/bursa. Reactive edema. Moderate osteoarthritis of AC joint. Possible evidence of septic arthritis.
Blood cultures: MSSA bacteremia.

Problem Representation: 50 y/o M w/PMH of recent MVA, DM, and hypothyroidism p/w "20/10" worsening R shoulder & chest pain for 1wk. MRI reveals subdeltoid bursitis w/abscess, blood cultures come back positive for MSSA bacteremia.

Teaching Points (Yazmin):
- First of all: Rule out fx, dissections or organ rupture.
- 4 + 2 + 2 → EKG and Troponins!
- Determine if shoulder pain is due to sepsis, gout, tumor.
- Can sympathetic toxicity lead to sweats and shakes? Yes → Alcohol withdrawal, cocaine, bath salts, MDMA
- Joint pain approach: arthralgia or arthritis and rule out first fx or infectious process→ imaging (REMEMBER: 5% of X-rays may miss fx!)
- Monoarticular arthritis → swelling, erythema
- Make a ddxx between sepsis and crystalline dx. In every px with effusion
- In hemorrhagic effusions + inflammation: you can think Basic Calcium Phosphate (BCP) OR CPP (**crystal deposition** diseases)
  - CPP: Acute attack of pain and swelling, monoarthritis, can be triggered by trauma, surgery or acute illness.
- Septic arthritis → **Time is joint function,** risk factors are DM, traumatic injury, hospitalization.
- Synovial fluid sample approach: On the synovial fluid sample, a **polymorphonuclear cell count** of at least 90% suggests septic arthritis with an LR of 3.4 (95% CI, 2.8-4.2)
  - Staph aureus is the most common in adults
  - Classic triad: fever + joint pain + decreased range of motion
  - Treat with nafcillin or cefazolin for MSSA
  - Look at all IV sites, look for **thrombophlebitis**.