12/06/21 Morning Report with @CPSolvers

Case Presenter: *Madellena Conte (@ MadellenaC)* ***Case Discussants***: *Dr. Laila Woc-Colburn (@DocWoc71)*

CC: My left hip hurts

HPI: 21yoM w/no PMH w/ acute L hip pain started 2d prior. He was in his normal state of health until 2d ago when he noticed a throbbing pain in his L hip. He initially thought it was a sprained muscle bc it felt similar to R groin pain. He took tylenol without relief. Describes pain as constant, non-radiating, throbbing, and exacerbated by movement.

Denies trauma, joint swelling, fatigue, rash, or bug/tick bites.
ROS: no cough, palpitations, headache, constipation, abdominal pain, dysuria, heat intolerance Refers b/l wrist pain.

PMH: acute otitis media, gastro enteritis, no PSH

Meds:
No meds

Fam Hx:young brother w/ JIA. father w/ joint pain (doesn't remember details)

Soc Hx: Visited his uncle in Eastern Long Island NY 3 months , computer science major

Health-Related Behaviors: Sexually active - only one partner - consistent condom use. Drinks socially. No drug use.

Vitals: **T**: 36.7-38.4 **HR**: 76-113 **BP**: 124/66 **RR**: **18** **SpO_2**: 97%
Exam:
Gen: young man w/ moderate distress
HEENT: conjunctive clear, MM membrane, neck supple
CV, Pulm, Abd: normal
Neuro: alert and oriented 3x, full and equal 5/5 strength
Extremities/Skin: arthralgia of the L hip w/ moderate tenderness to palpation. No swelling, limited ROM, edema, rashes, or petechiae

ED tx: morphine, tylenol, ibuprofen, vancomycin, and ceftriaxone. Developed itching + diffuse rash w/vanco. Vitals normal.
Notable Labs & Imaging:
Hematology: WBC: 8.08 Hgb:15.2 Plt:148
Chemistry:Na:136 K: 3.9 Cl: 101 CO2: BUN: 16Cr:1.01 glucose: 119
AST: 14 ALT: 14 Alk-P: 57 CRP: 42.

Imaging:CXR pelvis normal.
CT abdomen and pelvis with L hip fluid collection. No evidence of psoas abscess or extra articular extension.

Synovial fluid analysis w/ cloudy fluid appearance, total nucleated cell count of 135000, total RBC count 11900, fluid N 92%, no synovial crystals

Infectious Tests:
Blood culture: no growth or organisms seen on gram, PMN seen.
Lyme IgG/IgM neg, Gonorrhea/Chlamydia NAAT neg, Parvo IgM/IgG neg

Rheumatological tests: ANA neg, RF neg, CCP ab neg,

OR notes: no psoas abscess, infection hasn't extended beyond joint.

Tx changed to levofloxacin - ATB remained empiric as no clear infectious organism was found. Discharged with ortho and rheum follow up. Today, pain improved and Tx continued.

Final Dx: Acute septic arthritis

Problem Representation: 21 y-o male, previously healthy p/w acute septic left hip.

Teaching Points (Kiara):

- **Left hip pain:**
  - **Infectious:** STD, specially joint infection by gonococo. Epidemiology (Lyme, fungal, parasitic).
  - **Non-Infectious:** Traumatic, avascular necrosis if sickle cell.
- Recurrence of otitis media or sinusitis could mean immunodeficiency.
- Limited range of motion joint should be evaluated w/ arthrocentesis.
- **Septic joint:** *How to move forward?* Initial labs WBC, CRP, ESR, arthrocentesis before starting antibiotics (to avoid mask the Dx +/- X-Ray.
- **Empiric treatment:** Vancomycin, Ceftriaxone
- "Red Man Sd" → *Vancomycin flushing Sd* or *Infusion related rash*
- **Infectious etiology:** > 100000 nucleated cells, purulent appearance , gram + or - positive.
- HIV, GC, Chlamydia, Mycoplasma can cause recurrent joint infections. Propionibacterium acnes can also be found, but is covered by Vancomycin.
- **Additional tests:** Rapid test available for blood fluid PCR for 10 diff organisms. Alpha-defensin elevated in joint infections, specially in prosthetic joints.
- **OR notes gives you more information and detailed!**