# 04/25/24 Morning Report with @CPSolvers

*"One life, so many dreams" Case Presenter:* Erin Yang*(@)* ***Case Discussants:*** *Dr. Ravi (@rav7ks) and Jasdeep (@JasBajwa18)*

**CC**: not feeling right

**HPI**: 74 y/o M with HIV history, last CD4 392, on ART.
In the last 2-3 weeks, feeling tired, fatigued, week all the time, no specific focal weakness, trouble to getting normal activities, 2 days ago woke up with acute bl side pain, having difficulty getting out of bed,
**ROS**: subjective fevers, never took T, malaise, no headaches, no N/V, disuria, no recent sick contacts.
**Day 1.5:** LBA worse on side-side, movements.
Posterior days: Worsening labs and back pain even after starting antibiotics.
**Day 4:** b/l lower extremity weakness.

**PMH**:
- HIV, DM, HLP, HTN
- Chronic lower back pain, Kidney stones(?procedure)
- Remote shoulder injury, Lung surgery

**Meds**:
ART compliant (TLE)
CD4 392(last noted) (new awaited)
Losartan, HCTZ, Atorva, glargine

**Fam Hx**:
Parents died young
**Soc Hx**:
Completes ADL by himself.
**Health-Related Behaviors**: Past smoker(20PY)
No new sexual exposure.
No recent travel/occupational/ sick contacts.
**Allergies**: NKDA

**Vitals: T:** 99.9 **HR:** 110s **BP:90/50** **RR:** 26cpm SO2:95% RA
**Exam: Gen:** Looks uncomfortable, diaphoretic
**HEENT:** anicteric, moist mucous membranes
**CV:** tachycardiac, no murmurs
**Pulm:** shallow breaths. Clear B/L, tachypneic
**Abd:** soft, mildly distended. **No Spinal tenderness**. No erythema.
**Neuro:** AO x 4. Mood affect normal.5/5 all four limbs. Subjective weakness
**Extremities/skin:** No rashes. Warm extremities, lipodystrophy

**Notable Labs & Imaging**:
**Hematology**:
WBC:15.5(N81) Hb 13.8, PC 138
CD4 296, Viral load: 30
**Chemistry**:
Na: 128 K: 3.2 Cl: 99 HCO3:19 BUN:6 Cr:1.27(baseline 0.9), Lac 2.4
AST: ALT: Alk-P: Albumin: - Normal
UA: 2+nitrites, 500 leukocyte esterase, 24 rbc, 82WBC
**Day2:** Urine c/s: E.coli, Blood c/s: E.coli PCT 5.25 PSA 16.27
DRE: Non-tender prostate. Reduced pelvic sensations
Gradual worsening of TLC 15→ 17, worsening back pain
(Vanc+Zosyn started initially)

**Imaging**:
CTAP: No stones. Mild bladder wall thickening, Superficial abdominal wall density(post procedure seroma- Site of s.c insulin)
Lumbar spine: Lumbar spondylosis w/ spinal canal narrowing.
No perinephric fat stranding, Normal lung vessel,parenchyma
MRI: Inflammatory changes with psoas collection(2x3cm), epidural enhancement, L3-L4, engorged epidural vessels. Osteomyelitis
**Dx: Osteomyelitis with Psoas,Epidural abscess 2/2 E.Coli**
**Tenofovir induced type 4 RTA**

**Problem Representation**: 74M w/ HIV(CD4 296) on ART p/w 2-3 weeks of fatigue, generalised weakness, subjective fevers and 2 days of B/L flank pain found to have sepsis d/t E.Coli UTI, bacteremia. Course c/b worsening back pain, LE weakness despite broad spectrum abx, eventually diagnosed with Osteomyelitis with psoas abscess on MRI.

**Teaching Points (Parisa)**:
1) Immunocompromised patient + subacute onset generalized fatigue (nonspecific) → even low grade fever is red flag; Sudden onset presentation → infection; MSK issue; recent injury
**HIV patients** are more prone to infections (UTIs; pneumonia; pyelonephritis; OM); HIV → opportunistic infection when CD4 is diminished. /cancers(lung)
**Flank pain** (anatomic approach) => paraspinal muscle; kidneys(stones, infection); spine; nerve; muscle; aorta
2) Trouble in mobility in elderly patients could be do to **polypharmacy**; medication could cause myalgia and rhabdomyolysis; make sure about compliance of ART; **Statin** →1) induced direct muscle toxicity SAM (statin associated myopathy); 2)immune mediated necrotizing myelopathy(more aggressive form). **HCTZ** → volume depletion → provokes prerenal azotemia
3) we need to ask details about daily activity and ability to perform to figure out level of weakness, how much deteriorated from baseline.
4) in elderly patient fever curve drop a bit → lower body temperature → tachycardia; shallow breath; tachypnea; elevated WBC (concerning sign) → more likely it is an infection → considering lower back tenderness → **imaging** r/o abscess (CT/MRI) → CT sensitive 79%
5) considering the fact that UTIs and cellulitis might not cause leukocytosis → leukocytosis might show complicated UTIs
6) **Spine tenderness** on exam palpation → sensitivity 20% in spinal disease (abscess and OM)
7) Mimickers of severe back pain → **transverse myelitis**→ excruciating pain plus; weakness; bowel/bladder problems
8) Mimickers of low BP + back pain → **adrenal insufficiency** → hyponatremia; hypotension; back pain; abdominal pain; non anion gap metabolic acidosis
9) Organisms → E Coli up to 90% UTI (covered by Zosyn); staph (spinal abscess, epidural abscess; IE)
10) if patient is getting worse on extensive ABT→ ABx failure (wrong bug; wrong drug); wrong Dx; lack of source control.
11) UTI travels through venous plexus → spine abscess
12) **UTI** → cystitis ; prostatitis (rectourethral fistula) ; uretritis; pyelonephritis