HPI

4:45 pm

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Patient is a 35-year-old female with a past medical history of nephrolithiasis and hyperthyroidism, who is pod15 recent cystoscopy, left ureteroscopy with lithotripsy, and left ureteral stent insertion (3/16/26). She presented to the ED on 3/28 with 4 days of gross hematuria, left flank pain, and systemic symptoms including fevers, chills, nausea, and vomiting, resulting in a sepsis activation (fever and tachycardia). Imaging Ct at that time confirmed left pyelonephritis and mild-to-moderate hydroureteronephrosis despite the presence of the stent. Current antibiotic therapy with Zosyn was initiated based on a history of Proteus mirabilis (60,000 CFU/mL in urine culture 2/16/26). Blood cultures collected on 3/28/26 currently show no growth at 2 days (preliminary). A respiratory pathogen panel and MRSA/MSSA screen were negative.

Currently on Hospital Day 3, the patient reports that her left flank pain worsened beginning yesterday. She also complains of chills and fever spikes every 4–5 hours with highest temperature being 39.3 degree. She notes a headache and nausea and shortness of (with non bilious vomiting) that occurs only during these febrile episodes and resolves once the fever subsides. She denies any recent vomiting today after the morning. Denies hematuria, dysuria, chest pain, palpitations. Foley remains in place with yellow urine output.

PMHx: Nephrolithiasis, hyperthyroidism

PSHx: s/p Cystoscopy, left ureteroscopy and lithotripsy, left ureteral stent insertion (3/16/26); C-section

Colonoscopy: N/A for age

Meds:

- Zosyn 4.5g IV
- acetaminophen 650mg PRN
- ketorolac 15mg IV PRN
- oxycodone 5mg PRN
- propanolol

Fam Hx: Unknown

- Smoke: Denies
- Drugs: Denies recreational drug use
- Alcohol: Social
- Functional Status: Independent

Allergies: No Known Allergies

Code status: Full Code

Review of Systems (ROS)

• Constitutional: Admits to fever spikes every 4-5 hours with associated chill as and nausea. Denies fatigue or weight change.

• Eyes: Denies blurry vision or eye pain.

• ENT: Denies hearing loss, tinnitus, or sore throat.

• Cardiovascular: Denies chest pain or palpitations

• Respiratory: admits to transient shortness of breath when waking up with fever as well as mild cough. Denies other difficulty breathing or sputum.

• Gastrointestinal: Admits to abdominal tenderness and diarrhea. Denies current vomiting, or constipation.

• Genitourinary: Admits to left flank pain and dysuria. Foley in place.

• Musculoskeletal: Admits to mild left CVAT.

• Skin: Denies rash or itching.

• Neurological: Admits to headache only when febrile. Denies dizziness or syncope.

• Endocrine: Hx of hyperthyroidism. Denies heat/cold intolerance..

Top 4 differentials and why

1. Pyelonephritis (Persistent Proteus)

The patient has a confirmed diagnosis of left pyelonephritis following a recent urological procedure. While her leukocytosis is improving (22.09), persistent fever spikes suggest the infection is still active. Proteus mirabilis (history of 60k CFU in Feb) is a urea-splitting organism often associated with stone formation and can be difficult to clear if a nidus remains.

2. Sepsis (SIRS Response)(Not a differential)

The patient met sepsis criteria upon admission. High-grade pyrexia (Tmax 39.3) accounts for the transient headaches and tachycardia. The recent ventricular bigeminy is likely a manifestation of myocardial irritability in the setting of systemic inflammation and electrolyte shifts.

3. Renal Abscess or Phlegmon

This remains a potential complication of pyelonephritis, especially given the history of nephrolithiasis and recent intervention. Persistent fevers despite appropriate antibiotics (Zosyn) warrant consideration of a localized collection that may require repeat imaging if the fever curve doesn't break by tomorrow.

4. Ureteral Stent collic

Ureteral stents are notorious for causing "stent syndrome," including flank pain, dysuria, and referred abdominal pain. While imaging shows the stent is well-positioned, the patient's abdominal tenderness and urinary symptoms could be exacerbated by the presence of the foreign body.

Objective

Vitals:

• BP: 116/75

• Pulse: 102

• Resp: 17

• Temp: 39.3°C (Tmax) / 37.2°C (Current)

• SPO2: 96% on RA

Physical Exam:

• General: Alert, cooperative, in mild discomfort when febrile.

• Skin: Warm and dry. No cyanosis, jaundice, or rash.

• HEENT: Normocephalic, atraumatic. Pupils equal, round, and reactive to light. No scleral icterus Mucous membranes moist.

• Pulmonary: Lungs clear to auscultation bilaterally.

• Cardiac: Tachycardic but regular rhythm. No murmurs noted.

• Abdomen: Soft, non-distended. Tenderness to palpation noted across the abdomen worse upper left and lower left quadrant as well as epigastric region.No rebound or guarding.

• Musculoskeletal: +Mild Left CVA tenderness

• Neuro: A&Ox3.

• GCS: 15

Labs (3/31)

• BMP: Na 137, K 3.9 (s/p replacement), Cl 104, CO2 23, BUN 5, Cr 0.77, Glu 99, Ca 8.3, Mg 2.1 (s/p replacement).

• CBC: WBC 22.09 (Down from 31.3), Hgb 8.4, Hct 26.3, Plt 317.

• TSH: 2.36 (Normal).

• Urinalysis: LE (Large), WBC 62, RBC 6, Bacteria (Rare), Blood (Moderate).

• Micro: Blood Culture (3/28): No growth at 2 days (Preliminary). Urine Culture (3/29): No growth.

Imaging

- CT Abdomen/Pelvis (3/28):
  - Mild to moderate left hydroureteronephrosis despite an appropriately positioned left ureteral stent. Left pyelonephritis. Enlarged liver with mild steatosis
- TTE:
  - *Left ventricular systolic function is normal - EF 58%.*
  - *Normal RV size and function.*
  - *The left atrium is mildly enlarged.*
  - *The aortic valve is normal in structure and function.*
  - *There is mild to moderate mitral regurgitation.*
  - *There is moderate tricuspid regurgitation.*
  - *The estimated PASP is consistent with mild pulmonary hypertension - 45 mm Hg.*

Assessment

35-year-old female with hx of nephrolithiasis pod 15 recent L ureteral stent, currently HD#3 for sepsis left pyelonephritis with history Proteus mirabilis (2/16/26) on urine culture. Clinically stable with improving leukocytosis (22.09) but persistent fever spikes every 4–5 hours associated with transient headaches. Admits to worsening pain beginning yesterday with associated vomitting. Denies further vomiting today after morning. Abdomen remains tender to palpation. 3/28 blood cultures negative. Electrolytes and rhythm stabilized.

Plan

1. Sepsis Left Pyelonephritis
   a. Continue Zosyn 4.5g IV q8h (covering for history of Proteus).
   b. Trend WBC and monitor fever curve; if no defervescence by HD#4, consider repeat CT to look to for absesss
2. Left Hydroureteronephrosis / Stent Management
   a. Follow urine output maintain foley
3. Cardiac Ectopy (Ventricular Bigeminy)

    a. continue propranolol
    b. follow up with cardiology Dr. Goldbarg on 4/30/26, 11:15 am at room WA 200
4. Pain and Fever Management
    a. Acetaminophen 650mg PO/IV q6h PRN for fever/HA.
    b. Oxycodone 5 mg q6hr prn for break through pain management
    c. Ketorolac 15mg IV q6h PRN for flank/abdominal pain.
5. Nausea and Vomitting
    a. Odansetron 4 mg prn
6. DVT Prophylaxis?
    a. Continue Enoxaparin.
7. Diarrhea
    a. Monitor for improvement after Discontinued bowel reg
    b. C-diff testing