

Aisef Ahmed  
Rotation #4 - OB/GYN

## H&P #2

### Identifying Data:

Full Name: M.L  
Address: Brooklyn, NY  
Date of Birth: 08/22/1999  
Location: Woodhull Hospital  
Religion: None  
Source of Information: self  
Reliability: reliable  
Mode of transport: private car  
Race: Hispanic  
Marital status: single

Chief Complaint: Foul-smelling vaginal discharge, vaginal itching, and lower abdominal pain for 2 weeks.

History of Present Illness: 26-year-old G0P0000 Hispanic female with a past medical history significant for HIV infection presents with 2 weeks of foul-smelling vaginal discharge associated with vaginal pruritus, dyspareunia, and new-onset lower abdominal pain. She describes the discharge as thin, grayish-white, and malodorous with an odor that is more noticeable after intercourse. Over the past 5 days, she has developed bilateral suprapubic/lower abdominal pain rated 6/10 that is constant and worsens with movement and sexual activity. She reports mild postcoital spotting. She denies fever, chills, nausea, vomiting, dysuria, urinary frequency, or hematuria. The patient is sexually active with one male partner with inconsistent condom use. She denies recent antibiotic use, douching, or new hygiene products. She has known HIV infection and is prescribed Biktarvy (bictegravir/emtricitabine/tenofovir alafenamide) once daily, and is compliant with the medication regimen. Her last menstrual period was 3 weeks ago, normal in flow and duration. She denies prior intermenstrual bleeding but has had occasional postcoital spotting with this episode. She is up to date with HPV vaccination (Gardasil-9) and denies any new sexual partners or recent travel.

### Differential Diagnosis:

1. Pelvic Inflammatory Disease (PID): This is the most likely diagnosis given the patient's lower abdominal/pelvic pain, dyspareunia, postcoital spotting, abnormal vaginal discharge, and history of inconsistent condom use. PID is an ascending polymicrobial infection of the upper genital tract commonly associated with sexually transmitted infections such as *Chlamydia trachomatis* and *Neisseria gonorrhoeae*, though vaginal anaerobes may also contribute. Her HIV-positive status further increases susceptibility to genital tract infections and complications. Even in the absence

of fever or severe systemic symptoms, mild-to-moderate PID remains highly concerning due to the combination of pelvic pain and abnormal vaginal discharge.

2. Tubo-ovarian Abscess (TOA): TOA is an important consideration as it is a serious complication of PID, particularly in immunocompromised patients such as those with HIV infection. Patients commonly present with pelvic or lower abdominal pain, vaginal discharge, dyspareunia, fever, adnexal tenderness, or a palpable pelvic mass. Although this patient currently lacks severe systemic symptoms or obvious adnexal masses on examination, early TOA cannot be excluded and should remain high on the differential due to the risk of abscess formation, infertility, rupture, and sepsis if left untreated.
3. Cervicitis secondary to Chlamydia trachomatis or Neisseria gonorrhoeae: Cervicitis is a strong consideration because the patient reports dyspareunia, postcoital spotting, and abnormal vaginal discharge in the setting of inconsistent condom use. Cervicitis may present with minimal symptoms and can progress to PID if untreated. Cervical inflammation, friability, and mucopurulent discharge are common findings. Given her sexual history and HIV status, STI-related cervicitis must remain high on the differential.
4. Ectopic Pregnancy: Ectopic pregnancy must be excluded in any reproductive-age female presenting with pelvic pain and vaginal spotting, even in the absence of significant bleeding. Risk factors include sexually transmitted infections and PID, which can result in tubal scarring. Although the patient's symptoms are more suggestive of an infectious etiology, pregnancy testing is essential to rule out this potentially life-threatening condition.
5. Bacterial Vaginosis (BV): BV remains a consideration due to the patient's thin, gray, malodorous vaginal discharge that worsens after intercourse. BV results from disruption of the normal vaginal flora, leading to overgrowth of anaerobic bacteria, and is commonly associated with PID as part of a polymicrobial infectious process. While BV alone does not typically cause significant pelvic pain, it may coexist with PID and contribute to the patient's vaginal symptoms.

Past Medical History: HIV infection

Medications: Biktarvy 1 tablet PO daily

Allergies: No known drug, food, or environmental allergies

Maintenance/screening: Up to date with vaccines, including Gardasil-9, last pap smear was performed 2 years ago with negative results for malignancies

Family History: The patient's mother is currently alive at 44 years of age with no known medical comorbidities. Her father is currently alive at 46 years of age and also has no known medical conditions. Both maternal and paternal grandparents are deceased at an unknown age, and the causes of death are unknown. No history of malignancies in the family.

Social History: Lives with a roommate in Brooklyn. Current occupation: retail associate at a shopping center. Denies any Tobacco usage, alcohol, or recreational drug usage patient is currently Sexually active

with one male partner. The form of contraception is coitus interruptus, consistent condom use. Known HIV-positive status.

#### Review of Systems:

General: Reports mild fatigue and lower abdominal discomfort. Denies fever, chills, night sweats, recent illness, weight loss, or bloating.

Skin: Reports mild vaginal/vulvar itching. Denies rashes, lesions, or skin color changes.

HEENT: Reports intermittent headache. Denies visual changes, ear pain, nasal congestion, sore throat, or oral ulcers.

Pulm: Denies cough, hemoptysis, shortness of breath, or wheezing.

CV: Denies chest pain, palpitations, orthopnea, or peripheral edema.

GI: Reports mild lower abdominal/suprapubic pain rated as a 6/10. Denies nausea, vomiting, diarrhea, constipation, blood in stool, appetite changes, or jaundice.

GU: Endorses foul-smelling vaginal discharge, vaginal pruritus, dyspareunia, mild postcoital spotting, and lower pelvic pain. Denies dysuria, hematuria, urinary frequency, urgency, flank pain, or urinary incontinence. Denies excessive menstrual bleeding.

MSK: Denies joint pain, swelling, muscle aches, or back pain.

Neuro: Reports occasional dizziness. Denies numbness, tingling, weakness, syncope, or balance disturbances.

Heme: Denies easy bruising, abnormal bleeding, or history of blood disorders.

Endo: Denies heat or cold intolerance, polydipsia, or polyuria.

Psych: Denies depression, anxiety, mood changes, or suicidal ideation.

#### Physical Examination:

Vital Signs: T: 98.2F | HR: 80 bpm | BP: 116/72 mmHg | RR: 16 | SpO2: 99% RA

General: Well-developed female in no acute distress, appears stated age.

Skin: Warm, dry, and intact. No rashes, bruising, or ulcerations noted.

Cardiovascular: Regular rate and rhythm. No murmurs, rubs, or gallops.

Respiratory: Lungs clear to auscultation bilaterally. No wheezes, rales, or rhonchi.

HEENT: Normocephalic, atraumatic. PERRLA, EOMI. Conjunctiva pink. Oral mucosa moist without lesions or pharyngeal erythema.

Neck: Supple with a full range of motion. No thyromegaly or cervical lymphadenopathy.

Lymphatic: No cervical, axillary, or inguinal lymphadenopathy.

Abdomen: Soft, non-distended, with mild bilateral lower abdominal/suprapubic tenderness to palpation. No guarding or rebound tenderness. Bowel sounds are present in all quadrants. No hepatosplenomegaly.

GU/Pelvic Exam:

- Vulva: Mild erythema without lesions or ulcerations.
- Vagina: Moderate amount of thin yellow-gray malodorous discharge present.
- Cervix: Cervical motion tenderness present. Mild cervical erythema and friability were noted with mucopurulent discharge from the cervical os.
- Uterus: Mild uterine tenderness on bimanual examination; normal size.
- Adnexa: Mild bilateral adnexal tenderness without palpable masses.

Labs/Imagings:

Pregnancy Testing: Urine  $\beta$ -hCG: Negative

Complete Blood Count (CBC) with Differential:

- WBC: 13.4
- RBC: 4.21
- Hemoglobin: 12.1 g/dL
- Hematocrit: 36.5%
- MCV: 86 fL
- MCH: 28 pg
- MCHC: 32 g/dL
- RDW: 13.2%

Differential:

- Neutrophils: 82%
- Lymphocytes: 12%
- Monocytes: 5%
- Eosinophils: 1%
- Basophils: 0%
- Platelets:  $312 \times 10^3/\mu\text{L}$

### Comprehensive Metabolic Panel (CMP):

- Sodium: 138 mEq/L
- Potassium: 4.1 mEq/L
- Chloride: 103 mEq/L
- Bicarbonate: 24 mEq/L
- BUN: 12 mg/dL
- Creatinine: 0.8 mg/dL
- Glucose: 92 mg/dL
- Calcium: 9.3 mg/dL
- Total Protein: 7.1 g/dL
- Albumin: 4.2 g/dL
- Total Bilirubin: 0.6 mg/dL
- AST: 18 U/L
- ALT: 16 U/L
- Alkaline Phosphatase: 72 U/L

### Inflammatory Markers

- ESR: 42 mm/hr
- CRP: 5.8 mg/dL

### Vaginal / Cervical Testing

- Vaginal pH: 5.5
- Whiff Test: Positive
- Saline Wet Mount: Numerous WBCs present; few clue cells noted
- KOH Prep: No pseudohyphae or budding yeast visualized

### STI Testing

- Gonorrhea NAAT: Positive
- Chlamydia NAAT: Positive
- Trichomonas NAAT: Negative
- RPR (Syphilis): Non-reactive
- Hepatitis B Surface Antigen: Negative
- Hepatitis C Antibody: Negative

### Urinalysis

- Negative for nitrites and leukocyte esterase
- No significant bacteriuria

## HIV Monitoring

- CD4 Count: 528 cells/ $\mu$ L
- HIV-1 RNA Viral Load: Undetectable

## Imaging: Transvaginal Pelvic Ultrasound

Findings: consistent with bilateral salpingitis, including mild fallopian tube thickening and hyperemia, with a small amount of free fluid in the cul-de-sac. There is no evidence of a tubo-ovarian abscess. The uterus is normal in size and contour, and both ovaries demonstrate preserved blood flow bilaterally, making ovarian torsion unlikely.

## Pelvic Ultrasound with Doppler

Findings: show normal bilateral ovarian blood flow with no evidence of ovarian torsion. Mild bilateral adnexal tenderness was reproduced during the exam. Overall findings are most consistent with an inflammatory pelvic process, further supporting PID

Assessment: 26-year-old G0P0000 female with well-controlled HIV CD4 528, undetectable viral load on Biktarvy, presenting with 2 weeks of abnormal vaginal discharge, dyspareunia, postcoital spotting, and worsening lower abdominal pain. Physical exam shows cervical motion tenderness, uterine tenderness, bilateral adnexal tenderness, and mucopurulent cervical discharge. Labs demonstrate leukocytosis with elevated inflammatory markers. STI testing is positive for gonorrhea and chlamydia. Transvaginal ultrasound shows bilateral salpingitis with free fluid, with no tubo-ovarian abscess or ovarian torsion. Overall, findings are most consistent with acute pelvic inflammatory disease (PID) secondary to gonococcal and chlamydial infection. No evidence of ectopic pregnancy, UTI, or isolated vaginitis.

## Plan:

### # Pelvic Inflammatory Disease (PID)

- Treat outpatient PID given GC/CT infection, cervical motion tenderness, adnexal tenderness, and ultrasound evidence of salpingitis.
- Ceftriaxone 500 mg IM x1
- Doxycycline 100 mg PO BID x 14 days
- Metronidazole 500 mg PO BID x 14 days
- Emphasize strict adherence and completion of the full antibiotic course even if symptoms improve early.
- Abstain from sexual activity until treatment is completed and partner(s) are treated.
- Partner treatment recommended for GC/CT (consider EPT if appropriate).
- Educate on complications: infertility, ectopic pregnancy, chronic pelvic pain.
- Clinical reassessment in 48–72 hours; if no improvement, consider inpatient management.

### # Pain management (PID-related)

- Ibuprofen 600 mg PO every 6–8 hours as needed for pain (take with food)
- May alternate with acetaminophen for additional pain relief
- Encourage rest, hydration, and warm compresses/heating pad to the lower abdomen
- Counsel that pain should begin improving within 48–72 hours after antibiotics

### # TOA Monitoring

- No tubo-ovarian abscess on imaging, but the patient remains high risk due to GC/CT infection and HIV status
- Return urgently if worsening pelvic pain, fever, or systemic symptoms develop
- If clinical deterioration occurs, repeat imaging and admit the patient for IV antibiotics

### # Bacterial Vaginosis

- Treat BV concurrently given thin gray malodorous discharge, elevated vaginal pH, positive whiff test, and clue cells on wet mount
- Metronidazole 500 mg PO BID x 7 days- overlaps with concurrent PID infection
- Counsel on adherence and completing the full course even if symptoms improve early.
- Avoid alcohol during therapy and for 48 hours after completion due to disulfiram-like reaction risk.
- Avoid douching, scented soaps, vaginal sprays, or irritants.

### # HIV Infection

- Continue Biktarvy 1 tablet PO daily with good adherence
- CD4 528 cells/ $\mu$ L, HIV-1 RNA undetectable
- Continue routine Infectious Disease follow-up per protocol
- Counsel on increased susceptibility to recurrent STIs and PID complications despite viral suppression

### # STI Management

- GC/CT positive treated within the PID regimen above
- Trichomonas negative, RPR non-reactive
- Partner notification and treatment are strongly recommended
- Repeat STI screening in 3 months due to reinfection risk

## # Patient Education, Counseling & Return Precautions

- Educate the patient that pelvic inflammatory disease (PID) is a serious ascending genital tract infection that can lead to infertility, ectopic pregnancy, and chronic pelvic pain if not fully treated.
- Emphasize the importance of completing the full course of antibiotics, even if symptoms improve early.
- Expected clinical improvement should occur within 48–72 hours after starting treatment. Lack of improvement may indicate treatment failure or complication.
- Advise no sexual activity until Completion of all antibiotics, and partners have been evaluated and treated
- Strongly recommend consistent condom use moving forward and discuss reliable contraception options with emphasis on dual protection (condoms + contraception) to prevent both pregnancy and STIs.
- Counsel to avoid douching, scented vaginal products, sprays, wipes, or irritants, as these disrupt normal vaginal flora and increase recurrence risk.
- Reinforce healthy vulvovaginal hygiene practices (gentle cleansing with water only, breathable cotton underwear).
- Discuss STI prevention strategies, including limiting the number of partners and routine screening, given the increased risk.