

Vaginitis Case Study

History

Tanya Walters is a 24-year-old single female who presented at her HMO with complaints of a smelly, yellow vaginal discharge and slight dysuria for one week.

- Denies vulvar itching, pelvic pain, or fever
- Has had 2 sex partners over the past 6 months—did not use condoms with these partners—on oral contraceptives for birth control
- No history of sexually transmitted diseases, except for trichomoniasis one year ago
- Last check-up one year ago

Physical Exam

- Vital signs: blood pressure 112/78, pulse 72, respiration 15, temperature 37.3° C
- Cooperative, good historian
- Chest, heart, breast, musculoskeletal, and abdominal exams within normal limits
- No flank pain on percussion
- Normal external genitalia with a few excoriations near the introitus, but no other lesions
- Speculum exam reveals a moderate amount of frothy, yellowish, malodorous discharge, without visible cervical mucopus or easily induced cervical bleeding
- Bimanual examination was normal without uterine or adnexal tenderness

Questions

1. What is your differential diagnosis based on history and physical examination?
 - Mucopurulent cervicitis (MPC)
 - Vaginitis
 - Primary syphilis
 - Pelvic inflammatory disease
2. Based on the differential diagnosis of vaginitis, what is the etiology?
 - *Trichomonas vaginalis*
 - *Candida albicans*
 - Bacterial vaginosis
 - Unknown
3. Which of the following laboratory tests should be ordered or performed? Choose the best answer.
 - Complete blood count (CBC), vaginal saline wet mount, "whiff" test
 - Vaginal saline wet mount, KOH wet mount, "whiff" test, chlamydia
 - Vaginal saline wet mount, KOH wet mount, "whiff" test, vaginal fluid pH, chlamydia

Laboratory Results

- Vaginal pH—6.0

- Saline wet mount of vaginal secretions—numerous motile trichomonads and no clue cells
- KOH wet mount—negative for budding yeast and pseudohyphae

Questions

4. What may one reasonably conclude about Tanya's diagnosis?
 - Chlamydia has been ruled out.
 - Trichomoniasis has been diagnosed and VVC has been ruled out.
 - The vaginal pH was normal.
5. What is the appropriate CDC-recommended first-line treatment for this patient?
 - Metronidazole 2 g orally in a single dose.
 - Ofloxacin 400 mg orally twice a day for 14 days plus metronidazole 500 mg orally twice a day for 14 days
 - Hospitalize for intravenous antibiotic administration.
 - Recommend no pharmacotherapy at this time and refer for follow-up retesting if still symptomatic in two weeks.

Partner Management

Tanya has had two sex partners within the past year:

Jamie

Last sexual contact: two days ago

First sexual contact: two months ago

Frequency, exposure type: Twice a week, vaginal sex

Calvin

Last sexual contact: six months ago

First sexual contact: seven months ago

Frequency, exposure type: three times a week, vaginal and oral sex

Questions

6. How should Jamie and Calvin be managed?
 - Since trichomoniasis has no serious sequelae in males, it is not necessary to treat male partners.
 - Jamie should be treated, and Tanya and Jamie should avoid sex until both are cured (therapy is complete and they are asymptomatic).
 - They should be treated only if they are symptomatic.
 - Calvin needs to be treated.

Follow-Up

Tanya was prescribed metronidazole 2 g orally, and she was instructed to abstain from sexual intercourse until her current partner was treated.

She returned to clinic two weeks later. She reported taking her medication, but still had persistent vaginal discharge that had not subsided with treatment. She reported abstinence since her clinic visit, and her partner had moved out of the area. Her tests for other STDs (including chlamydia and gonorrhea) were negative.

The vaginal wet mount again revealed motile trichomonads.

Questions

7. What is the appropriate therapy for Tanya now?
 - Metronidazole 500 mg twice a day for 7 days
 - Metronidazole gel twice a day for 7 days
 - Metronidazole or tinidazole 2 g orally once a day for 5 days
 - Clindamycin 300 mg orally twice a day for 7 days

8. What are the appropriate prevention and counseling messages for Tanya?
 - Patients should be instructed to avoid sex until they and their sex partners are treated and cured.
 - In the absence of a microbiologic test of cure, "cured" is when therapy has been completed and patient and partner(s) are asymptomatic.
 - Clarify that trichomoniasis is almost always sexually transmitted, and fomite transmission is rare.
 - Inform the patient that latex condoms can reduce the risk of transmission of trichomoniasis when used consistently and correctly.
 - All of the above