



## Vulvar pain in pregnancy

The patient was first diagnosed with candida vaginitis, but a second opinion and a closer look at the clinical picture gave way to a different diagnosis.

A 30-YEAR-OLD PREGNANT WOMAN presented to a rural Panamanian hospital with new onset genital pain, vaginal itching, and dysuria that she'd had for 48 hours. The patient was in the first trimester of her pregnancy and indicated that she'd had recent unprotected sex with a new partner who wasn't the father of the developing fetus. The patient had never experienced symptoms like these before and denied ever having a sexually transmitted infection

(STI). On physical exam, the physician noted numerous pustules covering tender, swollen labia (FIGURE). A small amount of white discharge was noted at the introitus.

- WHAT IS YOUR DIAGNOSIS?
- HOW WOULD YOU TREAT THIS PATIENT?

FIGURE

Pustules covering swollen labia



IMAGE COURTESY OF: RICHARD P. USATINE, MD

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➤ **Antiviral therapy is most effective if begun within 72 hours of symptom onset in primary herpes genitalis.**

**Diagnosis:  
Herpes simplex virus**

The physician on-call diagnosed candida vaginitis along with a bacterial skin infection, and admitted the patient to the hospital for intravenous (IV) antibiotics. Fortunately, we were there on a medical mission and were consulted on the case.

We diagnosed a primary herpes simplex virus type 2 (HSV-2) infection in this patient, based on the classic presentation of grouped pustules and vesicles on erythematous and swollen labia, and the patient’s complaint of dysuria.

Herpes cultures weren’t available in the hospital, but the clinical picture was unmistakable for HSV infection. Since multiple STIs may occur simultaneously, we ordered a serum rapid plasma reagin (RPR) test for syphilis, and tested her urine for gonorrhea and chlamydia. The tests were negative.

**Differential Dx includes other STIs and a fixed drug eruption**

Herpes is a common STI and most people don’t have symptoms. In 2012, an estimated 417 million people worldwide were living with genital herpes caused by HSV-2.<sup>1</sup>

The differential diagnosis for HSV infection includes primary syphilis, chancroid, folliculitis, and fixed drug eruptions.

■ **Primary syphilis** (*Treponema pallidum*) commonly presents with a painless, ulcerated, clean-based ulcer. While the chancre of primary syphilis can sometimes be painful, this patient did not have ulcers at the time of her presentation. Her pustules would likely ulcerate over time, but would not resemble the chancre of syphilis.

■ **Chancroid** (*Haemophilus ducreyi*) is a less common STI than syphilis and HSV infection. It presents with deep, sharply defined, purulent ulcers that are often associated with painful adenopathy. The ulcers can appear grey or yellowish in color.

■ **Folliculitis** presents with pustules surrounding hair follicles. Some of the pustules were surrounding hair follicles in this patient’s case, but others were independent of the hair. The patient’s marked swelling and tenderness along with dysuria also did not fit the characteristics of folliculitis.

■ **Fixed drug eruptions** can occur in the genital region, but the patient had neither bullous nor ulcerated eruptions (as one would expect with this condition). Fixed drug eruptions are usually hyperpigmented and require a history of taking medication, such as an antibiotic or a nonsteroidal anti-inflammatory drug.

■ **Questions that help narrow the differential.** Zeroing in on the cause of a patient’s genital lesions requires that you ask whether the lesions are painful, if the patient has dysuria, if there are any constitutional symptoms, and if this has happened before. Other distinguishing factors include enlarged lymph nodes and the presence of multiple (vs single) lesions.

**Viral cell cultures are the preferred lab test**

Common laboratory tests to make the diagnosis include viral culture, direct fluorescence antibody (DFA), polymerase chain reaction (PCR), and type-specific serologic tests.

Viral cell culture is the preferred test for suspected HSV of the skin and mucous membranes.<sup>2</sup> PCR is the preferred test for suspected herpes meningitis or encephalitis when cerebrospinal fluid has been obtained through lumbar puncture.<sup>3</sup> DFA and herpes culture can be ordered simultaneously. DFA can provide a quick result, and herpes culture can provide a more sensitive result (this may take 5-7 days before results are available).

**No evidence that antivirals pose risk during pregnancy**

Treatment with antivirals (acyclovir, famciclovir, or valacyclovir) may help to reduce the length of the outbreak. Oral antivirals are usually sufficient for uncomplicated HSV; IV antivirals may be needed in complicated cases. The current recommendation for acyclovir (the most commonly prescribed drug for HSV infection) is 400 mg 3 times daily or 200 mg 5 times daily for 7 to 10 days in a primary outbreak.<sup>3</sup>

Antiviral therapy is most effective if begun within 72 hours of symptom onset in primary herpes genitalis.<sup>4</sup> Analgesics can help with pain control and sitz baths are helpful for women with severe dysuria.

■ **Maternal–fetal transmission of HSV** is associated with significant morbidity and mortality in children.<sup>5</sup> The Centers for Disease Control and Prevention and the American College of Obstetricians and Gynecologists recommend that cesarean delivery be offered as soon as possible to women who have active HSV lesions or, in those with a history of genital herpes, symptoms of vulvar pain or burning at the time of delivery.<sup>3</sup>

There is no evidence that the use of antiviral agents in women who are pregnant and have a history of genital herpes prevents perinatal transmission of HSV to neonates.<sup>6</sup> However, antenatal antiviral prophylaxis has been shown to reduce viral shedding, recurrences at delivery, and the need for cesarean delivery.<sup>7</sup>

■ **Our patient** was treated with oral acyclovir 400 mg 3 times a day for 10 days. One day after seeking care, she had less pain, swelling, and tenderness and was discharged. (Based on the severity of the outbreak and lack of sanitary living conditions, hospitalization was the safest and most reliable option.) The patient was counseled on the ramifications of HSV infection in pregnancy, including the fact that she might need a cesarean section. She

was told that she must get prenatal care and that she needed to tell her primary care physician about her HSV infection. She was also warned about the risk of disease transmission to sexual partners and the importance of using barrier contraception to minimize the risk of future transmission. **JFP**

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## PART 3 Patterns of care

By Bobby Daly, MD, MBA, and Olufunmilayo I. Olopade, MD, FACP, OON

**AVAILABLE NOW** Part 3 of **“A Perfect Storm,”** a five-part series that discusses the pathologic, genomic, and clinical factors that contribute to the racial survival disparity in breast cancer.

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