

Genital Herpes Case Study

Roberta Patterson: History

Roberta Patterson is a 26-year-old woman who presents for her first prenatal visit. She is concerned for her baby because of her husband Franklin's history of genital herpes. She states that she is six weeks pregnant.

- Roberta has never had symptoms of vaginal or oral herpes.
- She was diagnosed and treated for chlamydia seven years ago (age 19); no other STD diagnoses reported.
- Her 26-year-old husband had his first episode of genital herpes during his last year of high school; no other STD diagnoses reported.
- Her husband (and sex partner for the last 16 months) has not had visible HSV lesions since she's been sexually active with him, and reports having had no prodromal symptoms or symptoms of active disease.
- She has had no sex partners other than her husband for the last 16 months.

Physical Exam

- Vital signs: blood pressure 112/68, pulse 58, respiration 13, temperature 38.5° C
- Cooperative, good historian
- Chest, heart, musculoskeletal, and abdominal exams within normal limits
- Uterus consistent with a six-week pregnancy
- Normal vaginal exam without signs of lesions or discharge
- No lymphadenopathy

Questions

1. Which HSV general education messages should be discussed with Roberta?
 - a) Genital herpes is a chronic viral infection.
 - b) HSV-2 causes most genital herpes cases in the U.S.
 - c) Genital herpes is very common; at least one in ten adolescents and adults in the United States are infected with HSV2.
 - d) Most persons infected with HSV-2 have been diagnosed; and most new cases are symptomatic.
 - e) Most sexual transmission occurs while the source contact case is symptomatic.
 - f) a and b are correct; the other options are inaccurate.
2. Given that Roberta's husband Franklin has a history of genital herpes, would it be appropriate to test Roberta for genital herpes using a type-specific serologic test?
 - a) Yes
 - b) No
3. What other STD screening should be considered for Roberta?
 - a) Syphilis, Chlamydia, Gonorrhea, HPV, and HIV
 - b) Syphilis, Chlamydia, Gonorrhea, Hepatitis B, and HIV
 - c) Syphilis, Chlamydia, and Gonorrhea
 - d) Chlamydia and Gonorrhea

Roberta's Laboratory Results

- HSV gG-based type-specific serologies: HSV-1 negative; HSV-2 positive
- NAAT for *Chlamydia trachomatis*: negative
- NAAT for *Neisseria gonorrhoeae*: negative
- RPR: nonreactive
- HIV antibody test: negative
- Pregnancy test: positive

Questions

4. What would you tell Roberta about her HSV infection, based on clinical manifestations and test results?
- a) She most likely is having a first episode of primary infection.
 - b) She most likely is having a first episode of nonprimary infection.
 - c) She most likely has a recurrent symptomatic infection.
 - d) She most likely is having an asymptomatic or unrecognized genital herpes infection.
5. Would routine viral cultures during Roberta's pregnancy be recommended?
- a) Yes
 - b) No

Partner Management

Sex partner and exposure information

Franklin Patterson

First sexual exposure: Sixteen months ago

Last sexual exposure: One month ago

History of genital herpes infection: First episode 8 years ago. No HSV testing or treatment at time of first episode, or with subsequent episodes.

No history of other STDs; no sex partners other than Roberta in the past 16 months.

Question

6. Franklin reports genital lesions during Roberta's sixth month of pregnancy. Which laboratory tests should be performed on him?
- a) HSV viral culture or PCR test of the lesions
 - b) Tzanck stain of the lesions for HSV
 - c) DFA
 - d) Darkfield microscopy on genital lesions and RPR to test for syphilis
 - e) Testing for *Chlamydia trachomatis* and *Neisseria gonorrhoeae*

Laboratory Results for Franklin

Franklin's laboratory test results are as follows:

HSV cultures: HSV-1 negative; HSV-2 positive

NAAT for *Chlamydia trachomatis*: Negative

NAAT for *Neisseria gonorrhoeae*: Negative

RPR: Nonreactive

DFA: Negative for *Treponema pallidum*

Question

7. What is an appropriate episodic treatment for Franklin?
- Acyclovir 400 mg orally three times a day for five days
 - Acyclovir 800 mg orally twice a day for five days
 - Acyclovir 800 mg orally three times a day for five days
 - Famciclovir 1000 mg orally twice a day for one day
 - Valacyclovir 500 mg orally twice a day for three days
 - Valacyclovir 1 g orally once a day for five days
 - All of the above.

Follow-Up

Roberta had no HSV symptoms during her pregnancy.

Roberta discussed the use of acyclovir treatment in late pregnancy with her certified nurse-midwife, but decided against it because there are no data to support the use of antiviral therapy among HSV seropositive women without a history of clinical genital herpes episodes.

At onset of labor, she reported no prodromal or other HSV symptoms and no lesions were found on examination.

After a 14-hour labor, she vaginally delivered a healthy 7.2 lb baby girl.

Questions

8. What questions should be asked of all women beginning labor (regardless of their history of genital HSV infection)?
- Question the patient about any prodromal symptoms of genital herpes.
 - Question the patient about symptoms of active genital herpes.
 - Examine the patient for herpetic lesions.
 - All of the above.
9. If Roberta had genital herpetic lesions at the onset of labor, should she deliver vaginally or abdominally? What is the risk to the infant?
- She should deliver abdominally, as it would eliminate the risk of HSV transmission to the infant.
 - She should deliver abdominally, as it would reduce the risk of HSV transmission to the infant.
 - She should deliver vaginally, since abdominal delivery does not completely eliminate the risk of transmission to the infant.
10. Roberta is asymptomatic at the time of delivery. Is it medically appropriate for her to deliver vaginally?
- Yes
 - No
11. If Roberta had acquired genital herpes around the time of delivery, would she be more or less likely to transmit genital herpes to her baby during a vaginal delivery than if she had a history of recurrent genital herpes?
- Less likely.
 - More likely.