

HERPES SIMPLEX VIRUS (HSV) MODULE CASE STUDY

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 6 weeks pregnant.

History

- 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 HSV lesions visible 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 6-week pregnancy
- Normal vaginal exam without signs of lesions or discharge
- No lymphadenopathy

1. Which HSV general education messages should be discussed with Roberta?
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?
3. What other STD screening should be considered for Roberta?

Roberta's Laboratory Results

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

- Pregnancy test: positive
4. What would you tell Roberta about her HSV infection, based on clinical manifestations and test results?
 5. Would routine viral cultures during Roberta's pregnancy be recommended?

Partner Management

Sex partner and exposure information:

Franklin Patterson

- First sexual exposure: 16 months ago
 - Last sexual exposure: 1 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.
6. Franklin reports genital lesions during Roberta's sixth month of pregnancy. Which laboratory tests should be performed on him?

Laboratory Results for Franklin

- Franklin's laboratory test results are as follows:
 - HSV cultures: HSV-1 negative; HSV-2 positive
7. What is an appropriate episodic treatment for Franklin?

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.

Roberta opted to take the acyclovir treatment in late pregnancy after a discussion with her certified nurse-midwife that included the following points:

- The safety of systemic acyclovir therapy in pregnant women has not been established.
- Preliminary data suggest that acyclovir treatment late in pregnancy might diminish the frequency of HSV occurrence at term that would necessitate an abdominal delivery.

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.

8. What questions should be asked of ALL women beginning labor (regardless of their history of genital HSV infection)?

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?

10. Roberta is asymptomatic at the time of delivery. Is it medically appropriate for her to deliver vaginally?

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?