

## **SYPHILLIS CASE STUDY**

Stan Carter is a 19-year-old male who presents to the STD clinic because he's had a sore on his penis for 1 week.

### **History**

- Came to the STD clinic with a chief complaint of a penile lesion that had been present for 1 week.
- Last sexual exposure was 3 weeks prior, without a condom.
- No history of recent travel.
- Predominantly female partners (3 in the last 6 months), and occasional male partners (2 in the past year).
- Last HIV antibody test (2 months prior) was negative.
- Has 3 children with 2 different women.

### **Physical Exam**

- No oral, perianal, or extra-genital lesions.
- Genital exam shows an uncircumcised penis with a lesion on the ventral side near the frenulum. Lesion is red, indurated, clean-based, and non-tender.
- Two enlarged tender right inguinal nodes, 1.5 cm x 1 cm.
- Scrotal contents are without masses or tenderness.
- No urethral discharge.
- No rashes on torso, palms, or soles. No alopecia. Neurologic exam WNL.

### **Questions**

1. Based on Stan's history and physical exam, what are the possible etiologic agents that should be considered in the differential diagnosis?
2. What is the *most likely* diagnosis?
3. Which laboratory tests would be appropriate to order or perform?

### **Laboratory Results**

Results of stat laboratory tests:

RPR: Nonreactive

Darkfield examination of penile lesion: Positive for *T. pallidum*

4. What is the diagnosis?
5. What is the appropriate treatment?

## **Laboratory Results**

Results from the reference laboratory:

RPR: Nonreactive

FTA-ABS: Reactive

HSV culture: Negative

Gonorrhea culture: Negative

Chlamydia DNA-probe: Negative

HIV antibody test: Negative

6. Do the reference laboratory results change the diagnosis?

7. Who is responsible for reporting this case to the local health department?

## **Partner Management**

Stan had the following sex partners during the past year:

Tracy – Last sexual exposure 3 weeks ago (receptive oral and vaginal sex with Stan)

Danielle – Last sexual exposure 6 weeks ago (vaginal sex with Stan)

Jonathan – Last sexual exposure 1 month ago (receptive anal sex with Stan)

Tony – Last sexual exposure 8 months ago (insertive oral and anal sex with Stan)

Carrie – Last sexual exposure 6 months ago (receptive oral and vaginal sex with Stan)

8. Which of Stan's partners should be evaluated and treated prophylactically, even if their test results are negative?

9. Stan's partner, Tracy, is found to be infected and is diagnosed with primary syphilis. She is also in her second trimester of pregnancy and is allergic to penicillin. What is the appropriate treatment for Tracy?

## **Follow-Up**

Stan returned to the clinic for a follow-up exam one week later. Results were as follows:

- His penile lesion was almost completely healed.
- He had not experienced a Jarisch-Herxheimer reaction.
- The RPR (repeated at the follow-up visit because the initial one was negative) was 1:2.

10. What type of follow-up evaluation will Stan need?

11. What are appropriate prevention counseling messages for patients with syphilis?