CASE STUDY 6:
Adolescent

Overview: This case requires knowledge of sexually transmitted diseases (STDs), growth and development, as well as an understanding of the client’s background, personal situation, and mother-child attachment relationship.

THE REPRODUCTIVE SYSTEM

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Client Profile

**Lynn** is a sexually active 15-year-old who lives in a suburban neighborhood with her parents and two younger sisters. She does not confide in her parents about her activities, but rather discusses them with her two best friends in high school, who also are sexually active. Last week a guest speaker at school discussed the topic of sexually transmitted diseases (STDs) which Lynn thought quite a bit about since the discussion. She has an appointment tomorrow for her annual gynecologic examination.

Case Study

In the privacy of the examination room, Lynn tells the nurse about her sexual activity and comments that her boyfriend has been experiencing a penile discharge and is concerned that “he may have infected me with some disease.” When questioned by the nurse, Lynn states that she has not experienced any vaginal discharge, odor, itching, or painful intercourse. The nurse collaborates with the gynecologist, who prescribes a *C. trachomatis* point-of-care test.

Questions

1. Discuss the significance of Lynn’s clinical manifestations.
2. Discuss the incidence of chlamydia.
3. What other assessment data would be helpful for the nurse to have to prepare Lynn’s care plan?
4. What are the priorities of care for Lynn during this visit?
5. Discuss the relationship between Lynn’s level of growth and development and her risk for STD.
6. Lynn’s *C. trachomatis* point-of-care test is positive. What does this finding mean?
7. What are the common complications associated with Lynn’s condition if it is not effectively treated?
8. Lynn is prescribed doxycycline 100 mg by mouth twice a day for 7 days. Discuss your impression of this prescription.
9. Discuss the adverse effects associated with Lynn’s medication prescription and the appropriate nursing actions when giving Lynn this prescription to fill.
10. Discuss Lynn’s priority teaching needs prior to her discharge from the clinic.

Questions and Suggested Answers

1. **Discuss the significance of Lynn’s clinical manifestations.** Although Lynn is asymptomatic, her boyfriend has a penile discharge. According to the Center for Disease Control and Prevention (CDC), with most STDs, the woman experiences vaginal discharge, odor, painful urination, and/or painful intercourse.
2. Discuss the incidence of chlamydia. According to the CDC, chlamydia is the most frequently reported bacterial sexually transmitted disease in the United States. In 2002, 834,555 chlamydial infections were reported to CDC from 50 states and the District of Columbia. Under-reporting is substantial because most people with chlamydia are not aware of their infections and do not seek testing. An estimated 2.8 million Americans are infected with chlamydia each year. Women are frequently reinfected if their sexual partners are not treated.

3. What other assessment data would be helpful for the nurse to have to prepare Lynn’s care plan?
   a. Vital signs
   b. How sexually active Lynn is and with how many partners
   c. Usual menstrual cycle
   d. Presence of painful urination
   e. Lynn’s use of birth control
   f. Partner(s)’s use of latex condoms
   g. Results of C. trachomatis testing

4. What are the priorities of care for Lynn during this visit?
   a. Risk for infection, transmission related to contagious nature of STDs
   b. Risk for injury related to complications of STDs
   c. Impaired tissue integrity related to presence of pathogenic microorganisms
   d. Situational low self-esteem related to having a socially unacceptable condition
   e. Deficient knowledge related to condition, treatment, prevention of further STD

5. Discuss the relationship between Lynn’s level of growth and development and her risk for STD. Adolescence is the second and final growth spurt during the life cycle. Boys gain more lean muscle mass and girls develop an increased percentage of body fat in preparation for childbirth. In addition, this is a time of hormonal changes during which girls develop breast tissue, menarche begins, and sexual maturation occurs. This is the stage of identity versus role confusion, and peers are the primary source of a sense of belonging. Opposite-sex relationships become common, and the pressures of peers can lead to risk-taking behaviors, among them sexual intimacy. According to the CDC, “Because the cervix . . . of teenage girls and young women is not fully matured, they are at particularly high risk for (chlamydia) infection if sexually active.”

6. Lynn’s C. trachomatis point-of-care test is positive. What does this finding mean? According to the CDC, the C. trachomatis point-of-care test is used to diagnosis chlamydia. These tests were developed so that they “can be
performed within 30 minutes, do not require expensive or sophisticated equipment, and are packaged as single units. The results are read qualitatively. These so-called rapid or stat tests can offer advantages in physicians’ offices, small clinics and hospitals, detention centers, and other settings where results are needed immediately so treatment can begin. Lynn’s test is positive, meaning she has a chlamydial infection.

7. **What are the common complications associated with Lynn’s condition if it is not effectively treated?** According to the CDC, “If untreated, chlamydial infections can progress to serious reproductive and other health problems with both short-term and long-term consequences. Like the disease itself, the damage that chlamydia causes is often ‘silent.’ In women, untreated infection can spread into the uterus or fallopian tubes and cause pelvic inflammatory disease (PID). This happens in up to 40 percent of women with untreated chlamydia. PID can cause permanent damage to the fallopian tubes, uterus, and surrounding tissues. The damage can lead to chronic pelvic pain, infertility, and potentially fatal ectopic pregnancy. . . . Women infected with chlamydia are up to five times more likely to become infected with HIV, if exposed.”

8. **Lynn is prescribed doxycycline 100 mg by mouth twice a day for 7 days. Discuss your impression of this prescription.** Doxycycline is among the common agents used to treat chlamydia infections. Other agents used include azithromycin 1 g by mouth in a single dose; erythromycin 500 mg by mouth q.i.d. for 7 days; erythromycin ethylsuccinate 800 mg by mouth four times a day for 10 days; ofloxacin 300 mg by mouth b.i.d. for 7 days, or levofloxacin 500 mg by mouth for 7 days. Lynn’s dose, frequency, and duration of treatment is appropriate according to the CDC. The student should question whether Lynn’s boyfriend also is being treated to prevent reinfection.

9. **Discuss the adverse effects associated with Lynn’s medication prescription and the appropriate nursing actions when giving Lynn this prescription to fill.** Doxycycline is a tetracycline and the dose can be taken with meals and with a full glass of water to help prevent esophageal ulcerations. The most common adverse effect is photosensitivity so Lynn should be told to avoid such activities as sun bathing and swimming in outdoor pools until she has completed her prescription because she can easily experience a sunburn even with limited time in direct sunlight. When outdoors she should wear sunscreen. Lynn’s sexual partner(s) also must be identified, tested, and treated to avoid reinfection and sexual activity should not resume until treatment is completed. However, if sexual activity does con-
tinue, latex condoms should always be used to avoid reinfection. The nurse must stress to Lynn that she take the entire prescription to avoid the development of antibiotic-resistant microorganisms.

10. Discuss Lynn’s priority teaching needs prior to her discharge from the clinic.
   a. Assess Lynn’s level of understanding about chlamydia
   b. Following collaboration with the health care provider, provide Lynn verbal and written instructions regarding:
      1. CDC recommendations, “To help prevent the serious consequences of chlamydia, screening at least annually for chlamydia is recommended for all sexually active women age 25 years and younger.”
      2. Transmission of chlamydia infections (during vaginal, anal, or oral sex) and that any sexually active person is at risk for chlamydia infection as well as other STDs (assuming other STDs were ruled out).
      3. Medication administration including importance of compliance with her prescription of doxycycline
      4. Signs and symptoms of adverse effects of doxycycline
      5. Signs and symptoms of worsening of condition
      6. Contact phone numbers to report signs and symptoms
      7. Importance of regular handwashing and appropriate technique
      8. Importance of follow-up with health care provider
   c. Encourage Lynn to discuss her sexual activity and pregnancy prevention with her mother.
   d. Provide for sufficient time for Lynn and her mother to ask questions, answering them honestly.
   e. Document teaching and client and family response.

References