

A healthy 15-year-old girl comes to the physician for a routine health maintenance examination. She feels well and has no concerns. Her menstrual cycles are regular and last 3-4 days; her last menses was 1 week ago. The patient has been sexually active with one partner for the past year and takes oral contraceptive pills daily. She has no vaginal discharge or pain. She is an honors student in 10th grade and plays varsity soccer. The patient has tried marijuana "a few times" but does not use tobacco or alcohol. Her parents are healthy. Her maternal grandfather died of a myocardial infarction at age 68. The patient's body mass index is 23 kg/m². Vital signs and physical examination are normal. What is the best next step in the evaluation of this patient?

- ☐ A. *Chlamydia trachomatis* testing
- ☐ B. Complete blood count
- ☐ C. Echocardiography
- ☐ D. Fasting lipid panel
- ☐ E. Urine culture
- ☐ F. Urine toxicology screen

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- ☒ A. *Chlamydia trachomatis* testing [71%]
- ☐ B. Complete blood count [13%]
- ☐ C. Echocardiography [1%]
- ☐ D. Fasting lipid panel [8%]
- ☐ E. Urine culture [1%]
- ☐ F. Urine toxicology screen [7%]

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Explanation:

User Id: 

The purpose of screening tests is to identify individuals at increased risk for a particular disease who would benefit from diagnosis and treatment. All **sexually active women age ≤24** should undergo testing for *Chlamydia trachomatis* and *Neisseria gonorrhoeae*, 2 of the most common sexually transmitted infections. Screening is also recommended for any person with a new partner in past 2 months, multiple partners, history of sexually transmitted infections, illicit drug use, incarceration, and contact with sex workers.

Cervicitis is a common manifestation of chlamydia and gonorrhea, but many patients are asymptomatic. Undetected and untreated infection can lead to **pelvic inflammatory disease** and its associated complications (eg, infertility, ectopic pregnancy, chronic pelvic pain). In addition, these chlamydial and gonorrheal infections can facilitate HIV transmission.

The best screening test is the **nucleic acid amplification test**, which has high sensitivity and specificity. The test can be performed on urine, endocervical, vaginal, or urethral specimens with similar accuracy. Patients diagnosed with infection should receive antibiotics immediately and refrain from sexual intercourse until treatment is

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The best screening test is the **nucleic acid amplification test**, which has high sensitivity and specificity. The test can be performed on urine, endocervical, vaginal, or urethral specimens with similar accuracy. Patients diagnosed with infection should receive antibiotics immediately and refrain from sexual intercourse until treatment is complete and symptoms have resolved. All sex partners from the preceding 2 months should also be tested and treated for infection.

(Choice B) Patients who have no symptoms (eg, fatigue, pallor, dyspnea) and no menorrhagia do not require routine complete blood count testing.

(Choice C) Electrocardiogram, echocardiography, and exercise testing should be performed in athletes at risk for sudden cardiac death. High-risk patients include those with a history of Marfan syndrome, chest pain, or dyspnea on exertion; family history of cardiomyopathy or long-QT syndrome; and premature cardiac death or disability in a close relative age < 50 . Routine screening is otherwise not recommended due to risk of false-positive results and lack of cost efficiency.

(Choice D) Universal screening for dyslipidemia is recommended at age 9-11 and at age 17-21, as lipid levels are relatively stable just prior to and after puberty. Screening outside of these periods should occur in patients at high risk for cardiovascular disease (eg, history of obesity/diabetes mellitus/tobacco exposure, family history of premature coronary disease) and men age ≥ 35 .

(Choice E) Routine screening for asymptomatic bacteriuria is not recommended in men and nonpregnant women. However, pregnant women should be screened for asymptomatic bacteriuria due to the increased incidence of pyelonephritis and low birth

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(Choice E) Routine screening for asymptomatic bacteriuria is not recommended in men and nonpregnant women. However, pregnant women should be screened for asymptomatic bacteriuria due to the increased incidence of pyelonephritis and low birth weight.

(Choice F) A basic drug test can detect amphetamine, cocaine, marijuana, opioids, and phencyclidine that have been used within a few days of the test. Testing may be useful if the patient is in a drug abuse rehabilitation or pain management program or is receiving psychiatric care. Random drug screening is not recommended, but adolescents should be counseled on the increased risk of unintentional injuries, motor vehicle crashes, abuse, and dependence.

Educational objective:

All sexually active women age ≤ 24 should be screened for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* by nucleic acid amplification testing. Athletes with risk factors for sudden death should undergo cardiac evaluation, but routine screening is not recommended otherwise. Random urine toxicology is generally not recommended, but the risks of short- and long-term drug use should be discussed.

References:

1. [Screening for asymptomatic bacteriuria in adults: evidence for the U.S. Preventive Services Task Force reaffirmation recommendation statement.](#)
2. [USPSTF recommendations for STI screening.](#)
3. [Results of random drug testing in an adolescent substance abuse program.](#)