

Putting Prevention into Practice

An Evidence-Based Approach

Screening for Testicular Cancer

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► See related U.S. Preventive Services Task Force Recommendation Statement on page 444.



This clinical content conforms to AAFP criteria for evidence-based continuing medical education (EB CME). See CME Quiz on page 381.

The case study and answers to the following questions on screening for testicular cancer are based on the recommendations of the U.S. Preventive Services Task Force (USPSTF), an independent panel of experts in primary care and prevention that systematically reviews the evidence of effectiveness and develops recommendations for clinical preventive services. More detailed information on this subject is available in the USPSTF Recommendation Statement and the systematic evidence review on the USPSTF Web site (<http://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <http://www.uspreventiveservicestaskforce.org/uspstf10/testicular/testicuprs.htm>.

A collection of Putting Prevention into Practice quizzes published in *AFP* is available at <http://www.aafp.org/afp/ppip>.

Case Study

A 17-year-old male presents to your office for a college entrance physical examination. He learned about testicular cancer in health class, and asks you about screening. He has no history of cryptorchidism and no physical symptoms.

Case Study Questions

1. Which one of the following statements about testicular cancer is correct?
 - A. Most cases of testicular cancer are discovered during the clinical examination.
 - B. Testicular cancer is the most common type of cancer in men older than 50 years.
 - C. Testicular cancer is common compared with other types of cancer.
 - D. In most cases, testicular cancer is managed surgically; treatment also may include radiation therapy or chemotherapy.
 - E. Less than 40 percent of newly diagnosed cases of testicular cancer are curable.
2. According to the U.S. Preventive Services Task Force (USPSTF), how should you respond to your patient's question about whether he should be screened for testicular cancer?
 - A. Tell him he should be screened for testicular cancer when he is 50 years of age.
 - B. Explain why a clinical screening examination and self-examinations for testicular cancer would not be of benefit to him.
 - C. Inform him that regular self-examinations have been shown to reduce the risk of death from testicular cancer.
 - D. Recommend that he be checked today for testicular cancer, as part of a routine physical examination.
 - E. Perform a clinical screening examination for testicular cancer if he is currently sexually active.
3. Which of the following statements about screening for testicular cancer are correct?
 - A. Clinical examination for testicular cancer has a 95 percent sensitivity rate for detecting disease.
 - B. Regular self-examination of the testicles has been shown to detect more early-stage cancer than diagnosis on the basis of symptoms.
 - C. Potential harms associated with screening for testicular cancer include anxiety and harms from diagnostic tests or procedures.
 - D. The benefits of screening asymptomatic men for testicular cancer with clinical examination or patient self-examination are small to none.

Answers appear on the following page.

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Answers

1. **The correct answer is D.** Management of testicular cancer consists of orchiectomy and may include other surgery, radiation therapy, and chemotherapy, depending on the disease stage and tumor type. Most cases of testicular cancer are discovered accidentally by patients or their partners. Testicular cancer is the most common type of cancer among males 15 to 34 years of age. However, with an annual incidence rate of 5.4 cases per 100,000 males, testicular cancer is relatively rare when compared with other types of cancer. Regardless of disease stage, more than 90 percent of all newly diagnosed cases of testicular cancer will be cured.

2. **The correct answer is B.** The USPSTF does not recommend screening for testicular cancer in asymptomatic adolescent or adult males (Grade D recommendation). Screening examinations performed by patients or clinicians are unlikely to provide meaningful health benefits because of the low incidence of testicular cancer and its high survival rate, even when it is detected at symptomatic stages. The USPSTF concludes that there is moderate certainty that screening for testicular cancer has no net benefit.

3. **The correct answers are C and D.** Based on the low incidence of the condition and favorable outcomes of treatment even in cases of advanced disease, there is adequate evidence that the benefits of screening for testicular cancer are small to none. Potential harms of screening include false-positive results, anxiety, and harms from diagnostic tests or procedures. The sensitivity, specificity, and positive predictive value of testicular examination in asymptomatic patients are unknown. There is inadequate evidence that screening by clinician examination or patient self-examination has a higher yield or greater accuracy for detecting testicular cancer at earlier (and more curable) stages compared with incidental or symptomatic presentation.

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SOURCES

U.S. Preventive Services Task Force. Screening for testicular cancer: U.S. Preventive Services Task Force reaffirmation recommendation statement. *Ann Intern Med.* 2011;154(7):483-486.

Lin K, Sharangpani R. Screening for testicular cancer: an evidence review for the U.S. Preventive Services Task Force. *Ann Intern Med.* 2010;153(6):396-399. ■