

Putting Prevention into Practice

An Evidence-Based Approach

Screening for Oral Cancer

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► See related U.S. Preventive Services Task Force Recommendation Statement at <http://www.aafp.org/afp/2015/0315/od1.html>.

This PPIP quiz is based on the recommendations of the USPSTF. More information is available in the USPSTF Recommendation Statement and the supporting documents on the USPSTF website (<http://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <http://www.uspreventiveservicestaskforce.org/Page/Topic/recommendation-summary/oral-cancer-screening1>.

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

CME This clinical content conforms to AAFP criteria for continuing medical education (CME). See CME Quiz Questions on page 356.

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Case Study

A.C. is a 35-year-old man with a 15-year history of using chewing tobacco. He quit five years ago at his wife's urging. Although A.C. has no current symptoms, his wife asked him to make an appointment to get screened for oral cancer.

Case Study Questions

1. Based on the recommendations of the U.S. Preventive Services Task Force (USPSTF), what should you tell A.C.?

- ☐ A. Screening for oral cancer with facial computed tomography is recommended.
- ☐ B. Screening for oral cancer with biopsy is recommended.
- ☐ C. Screening is not recommended because chewing tobacco use is not a risk factor for oral cancer.
- ☐ D. Screening is not recommended because 90% of oral cancer cases are already associated with regional or distant metastases at the time of diagnosis.
- ☐ E. Although the evidence is not clear whether clinicians should screen for oral cancer in all adults, patients can reduce their risk by avoiding smoking and other forms of tobacco and limiting their alcohol intake.

2. Which one of the following is considered a major risk factor for oral cancer?

- ☐ A. Human papillomavirus infection.
- ☐ B. Tobacco and alcohol use.
- ☐ C. Male sex.
- ☐ D. *Candida* infection.
- ☐ E. Older age.

3. While discussing screening for oral cancer with A.C., you mention its associated harms. Which of the following statements about the harms of screening are correct?

- ☐ A. The natural history of screen-detected oral cancer is unclear.
- ☐ B. There is a substantial body of literature on the harms of overdiagnosis and overtreatment.
- ☐ C. Harms of screening include complications from surgery, radiotherapy, and chemotherapy.
- ☐ D. Confirmation of diagnosis with tissue biopsy is not associated with any harms.

Answers appear on the following page.

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Answers

1. The correct answer is E. The USPSTF found inadequate evidence that the oral screening examination accurately detects oral cancer. The USPSTF found inadequate evidence that screening for oral cancer and treatment of screen-detected oral cancer improves morbidity or mortality. There was also insufficient evidence on the harms of screening. Therefore, the USPSTF concluded that the current evidence is insufficient to assess the balance of benefits and harms of screening for oral cancer in asymptomatic adults by primary care clinicians. This recommendation focuses on screening (visual inspection and palpation) of the oral cavity performed by primary care clinicians and not dental providers or otolaryngologists. Tobacco and alcohol use are major risk factors for oral cancer. The USPSTF recommends that clinicians screen all adults for tobacco use, recommend against tobacco use, and provide tobacco cessation interventions for those who use tobacco products. The USPSTF also recommends screening and behavioral counseling interventions in primary care settings to reduce alcohol misuse by adults. Of all cases of oral cavity and pharyngeal cancer, 90% are classified as squamous cell carcinoma, which, at the time of diagnosis, involves regional or distant metastases in more than 50% of cases.

2. The correct answer is B. In the United States, up to 75% of cases of oral cancer (or oral cavity cancer) may be attributable to tobacco and alcohol use. Lesser risk factors include male sex, older age, use of betel quid, ultraviolet light exposure, infection with *Candida* or bacterial flora, and a compromised immune system. Human papillomavirus infection is a risk factor for oropharyngeal cancer.

3. The correct answers are A and C. The natural history of screen-detected oral cancer or potentially malignant disorders is unclear and, as a result, the harms from overdiagnosis and overtreatment are unknown. Furthermore, confirmation of a positive screening result with tissue biopsy may lead to additional harms, as may surgery, radiotherapy, and chemotherapy.

The views expressed in this work are those of the authors, and do not reflect the official policy or position of the Uniformed Services University of the Health Sciences, the Department of Defense, or the U.S. government.

SOURCES

U.S. Preventive Services Task Force. Screening for oral cancer: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med*. 2014;160(1):55-60.

Olson CM, Burda BU, Beil T, Whitlock EP. Screening for oral cancer: a targeted evidence update for the U.S. Preventive Services Task Force. Evidence synthesis no. 102. AHRQ publication no. 13-05186-EF-1. Rockville, Md.: Agency for Healthcare Research and Quality; 2013. ■

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