

Putting Prevention into Practice

An Evidence-Based Approach

Behavioral Counseling to Prevent Skin Cancer

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► See related U.S. Preventive Services Task Force Recommendation Statement at <http://www.aafp.org/afp/2012/1015/od3.html>. Access to the statement is free and unrestricted.



This clinical content conforms to AAFP criteria for evidence-based continuing medical education (EB CME). See CME Quiz on page 731.

The case study and answers to the following questions 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 evidence synthesis on the USPSTF Web site (<http://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <http://www.uspreventiveservicestaskforce.org/uspstf/uspskco.htm>.

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

Case Study

A 17-year-old white female patient with dark hair comes to your office for a refill of her seasonal allergy prescription. Her primary residence is in Minnesota. She mentions that she heard that sun tanning was “bad for you” and asks whether it is true.

Case Study Questions

1. Which one of the following statements about skin cancer is correct?
 - A. Behavioral counseling has been found to increase the use of sun-protective behaviors in children, adolescents, and adults of all ages.
 - B. Ultraviolet (UV) exposure after 35 years of age is the strongest contributor to the lifetime risk of developing skin cancer.
 - C. All three types of skin cancer (basal cell, squamous cell, and melanoma) commonly metastasize and can cause death.
 - D. Use of all sun-protective behaviors (i.e., using broad-spectrum sunscreen with a sun protection factor [SPF] of 15 or greater, wearing hats or other shade-protective clothing, avoiding the midday sun, and avoiding indoor tanning) is important to minimize the risk of skin cancer.
 - E. The incidence of melanoma has remained relatively unchanged since 1975.
2. According to the U.S. Preventive Services Task Force (USPSTF), should you counsel this patient about sun-protective behaviors?
 - A. No, because the recommendation does not apply to persons with dark hair.
 - B. Yes, because all children, adolescents, and young adults should be counseled.
 - C. Yes, if the patient has other signs of a fair skin type, such as freckling, light eye color, or a history of burning easily with sun exposure.
 - D. No, because the patient lives in a northern latitude region and is at risk of vitamin D deficiency.
 - E. No, because there are no skin cancer counseling interventions that are effective in female adolescents.
3. Which of the following statements about skin cancer counseling interventions are correct?
 - A. Appearance-focused interventions reduce the intent to pursue indoor tanning among late-adolescent women.
 - B. There is strong evidence that counseling adults older than 24 years increases their use of sun-protective behaviors.
 - C. Effective appearance-focused interventions include self-guided booklets, videos on photoaging, and 30-minute peer counseling sessions.
 - D. Effective interventions can be of low intensity and completed during a single office visit.

Answers appear on the following page.

Answers

1. The correct answer is D. Sun-protective behaviors include using broad-spectrum sunscreen with an SPF of 15 or greater, wearing hats or other shade-protective clothing, avoiding the outdoors during midday hours (10 a.m. to 3 p.m.), and avoiding indoor tanning. Using all of these behaviors is important to minimize the risk of developing skin cancer. Although there is adequate evidence that behavioral counseling increases the use of sun-protective behaviors in children, adolescents, and young adults 10 to 24 years of age, there is not enough evidence to determine whether such counseling is effective in adults older than 24 years. Evidence suggests that UV exposure after 35 years of age may contribute less to the lifetime risk of skin cancer than exposure at younger ages. Whereas basal cell cancer rarely metastasizes and is not associated with cancer deaths, squamous cell cancer has metastatic potential and does account for a small percentage of cancer deaths; melanoma, although less common, is more deadly. The incidence of melanoma has been increasing in white Americans, from 8.7 per 100,000 persons in 1975 to 27.6 per 100,000 in 2008.

2. The correct answer is C. The USPSTF recommendation for skin cancer counseling applies to children, adolescents, and young adults 10 to 24 years of age who have a fair skin type. Fair skin type can be defined by light eye and hair color, freckling, and historical factors, such as usual reaction to sun exposure (always or usually burning or infrequently tanning). Because most trials of skin cancer counseling include only

persons with a fair skin type, the recommendation is limited to this population. Theoretical concerns about sun-protective behaviors include the risk of vitamin D deficiency in adults living in northern latitudes, but little evidence supports this hypothesis. For children, adolescents, and young adults (10 to 24 years of age), the USPSTF found adequate evidence that counseling interventions available in or referable from a primary care setting can moderately increase the use of sun-protective behaviors.

3. The correct answers are A, C, and D. Successful counseling interventions use cancer prevention or appearance-focused messages to reach specific audiences. Appearance-focused messages are successful at reducing the intent to pursue indoor tanning among late-adolescent women. Appearance-focused interventions use various methods, including self-guided booklets, videos on photoaging, and 30-minute peer counseling sessions. Effective interventions are generally of low intensity and can be completed during the primary care interaction or visit. For adults older than 24 years, there is inadequate evidence to determine the effect of counseling on the use of sun-protective behaviors.

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SOURCES

U.S. Preventive Services Task Force. Behavioral counseling to prevent skin cancer: recommendation statement. *Ann Intern Med.* 2012;157(1):59-65.

Lin JS, Eder M, Weinmann S. Behavioral counseling to prevent skin cancer: a systematic review for the U.S. Preventive Services Task Force. *Ann Intern Med.* 2011;154(3):190-201. ■