

Putting Prevention into Practice

An Evidence-Based Approach

Behavioral Counseling to Prevent Skin Cancer

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Case Study

A 25-year-old Irish American woman presents for a wellness visit for herself and her two young children, a two-year-old boy and a seven-month-old girl. All three have fair skin, red hair, and freckles. The mother has a history of tanning bed use in her late teens and early 20s and has had multiple sunburns. She reports that she is looking forward to an upcoming family vacation to the Caribbean islands.

Case Study Questions

1. Based on the U.S. Preventive Services Task Force (USPSTF) recommendation, which one of the following approaches to skin cancer counseling would you consider for the mother?

- A. She should be counseled because the benefit of counseling in adults with fair skin types substantially outweighs the harms.
- B. She should be considered for counseling because the benefits and harms are similar in magnitude for all adults.
- C. She should be considered for counseling because of her risk factors for skin cancer.
- D. She should not be counseled because there are known harms from counseling and there is a lack of evidence that counseling affects sun-protection behaviors.
- E. She should be counseled because the studies evaluating the financial impacts of counseling confirmed that it is not only noninvasive but also an inexpensive method of preventing melanoma.

2. Based on the USPSTF recommendation, which one of the following approaches to skin cancer counseling would you consider for her children?

- A. The mother should be counseled on behalf of her children because the benefit of counseling in all young children outweighs the harms.
- B. The mother should be counseled on behalf of her children because the benefit of counseling in young children with fair skin types outweighs the harms.
- C. The mother should not be counseled on behalf of her children because there are known harms from counseling and there is no evidence that counseling affects sun-protection behaviors.
- D. The mother should be counseled on behalf of her children because the USPSTF found that studies on counseling in this age group show that it is both inexpensive and noninvasive.

See related U.S. Preventive Services Task Force Recommendation Statement at <https://www.aafp.org/afp/2018/0715/od1.html>.

This PPIIP quiz is based on the recommendations of the USPSTF. More information is available in the USPSTF Recommendation Statement and supporting documents on the USPSTF website (<https://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/skin-cancer-counseling2>.

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CME This clinical content conforms to AAFP criteria for continuing medical education (CME). See CME Quiz on page 82.

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3. When counseling adults, adolescents, and children about skin cancer prevention, which sun-protective behaviors should be routinely discussed?

- A. Use of broad-spectrum sunscreen with a sun-protection factor (SPF) of 15 or greater.
- B. Self-examination of skin.
- C. Wearing hats, sunglasses, or sun-protective clothing.
- D. Avoiding tanning beds.

Answers

1. **The correct answer is C.** The USPSTF recommends that clinicians selectively offer counseling to adults older than 24 years with fair skin types about minimizing their exposure to ultraviolet (UV) radiation to reduce risk of skin cancer (C recommendation).¹ Existing evidence indicates that the net benefit of counseling all adults older than 24 years is small. In determining whether counseling is appropriate in individual cases, patients and clinicians should consider the presence of risk factors for skin cancer. Persons with fair skin types (ivory or pale skin, light hair and eye color, freckles, or those who sunburn easily) are at increased risk of skin cancer. Persons who use tanning beds and those with a history of sunburns or previous skin cancer are also at substantially increased risk of skin cancer. Other factors that further increase risk include an increased number of nevi (moles) and atypical nevi, family history of skin cancer, human immunodeficiency virus infection, and history of receiving an organ transplant. The USPSTF found that the harms related to counseling are small. The USPSTF does not consider the costs of a preventive service when determining a recommendation grade.

2. **The correct answer is B.** The USPSTF recommends counseling young adults, adolescents, children, and parents of young children about minimizing exposure to UV radiation for persons six months to 24 years of age with fair skin types to reduce their risk of skin cancer (B recommendation).¹ Exposure to UV radiation

during childhood and adolescence increases the risk of skin cancer later in life, especially when more severe damage occurs, such as with severe sunburns.¹ The USPSTF concludes with moderate certainty that behavioral counseling interventions increase skin-protective behaviors and have a moderate net benefit for young adults, adolescents, and children six months to 24 years of age with fair skin types. The USPSTF does not consider the costs of a preventive service when determining a recommendation grade.

3. **The correct answers are A, C, and D.** Sun-protective behaviors include the use of broad-spectrum sunscreen with an SPF of 15 or greater; wearing hats, sunglasses, or sun-protective clothing; avoiding sun exposure; seeking shade during midday hours (10 a.m. to 4 p.m.); and avoiding indoor tanning bed use.¹ UV radiation is a known carcinogen that damages DNA and causes most skin cancer. Behavioral counseling interventions target sun-protection behaviors to reduce UV radiation exposure. The USPSTF found insufficient evidence regarding the benefits of counseling adults about skin self-examination to prevent skin cancer. Interventions can increase skin self-examination in adults but may lead to increased skin procedures without detecting additional atypical nevi or skin cancers.² The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of counseling adults about skin self-examination to prevent skin cancer (I statement).¹

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.

References

1. US Preventive Services Task Force. Behavioral counseling to prevent skin cancer: US Preventive Services Task Force recommendation statement. *JAMA*. 2018;319(11):1134-1142.
2. Henrikson NB, Morrison CC, Blasi PR, Nguyen M, Shibuya KC, Patnode CD. Behavioral counseling for skin cancer prevention: evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2018;319(11):1143-1157. ■