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## Is training patients in self-examination an effective way to screen for melanoma?

### Evidence-based answer

No, it's not. No studies demonstrate that training patients to examine their skin decreases mortality from melanoma in the general population. Nor is there any evidence to suggest that teaching patients to monitor their skin for suspicious lesions results in earlier detection of melanoma, better prognosis at diagnosis, or better clinical outcomes. However, patients who have had melanoma and perform self-examination have a lower risk of death from subsequent occurrences than those who do not (strength of recommendation [SOR]:

**B**, based on a case-control study). Among patients who find their own melanomas, those who are more knowledgeable about melanoma and aware of their skin are less likely to delay seeking treatment or to have thick lesions upon presentation (SOR: **B**, based on a retrospective cohort study). Patients who detect melanomas themselves know more about the characteristic features of melanoma and are more likely to perform regular skin self-examinations than patients whose lesions are found by a physician (SOR: **C**, based on a case series).

### FAST TRACK

**Skin self-exams are like breast self-exams—often recommended, but not proven to decrease mortality from cancer**

### Clinical commentary

#### Tailor recommendations to the patient

Self-examination of the skin is like breast and testicular self-exams—often recommended but not proven to decrease mortality from cancer. Certainly, patients who have already had one melanoma should check the skin regularly. The approach to patients without a history of melanoma is less clear. For some, regular self-examination decreases anxiety and increases their sense of control. Other patients, however, find self-examination anxiety provoking because it reminds them that they may have a cancer. They may worry

that they aren't examining themselves as often, or as well, as they should.

When caring for anxious patients, it may be best to educate them about the features of melanoma and then tell them, "Don't bother with skin self-exams, just let me know if something new shows up." Encourage them to schedule routine office visits, avoid sun exposure, and engage in proven healthy behaviors, such as exercise.

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### Evidence summary Effects of self-examination on patients with melanoma

Two studies of a group of Connecticut

residents examined the relationship between skin self-examination (SSE) and melanoma. The first, a case-control study compared SSE among 650 Caucasian pa-

tients newly diagnosed with melanoma and 549 age- and sex-matched controls.<sup>1</sup> Fifteen percent of all patients practiced SSE. Investigators monitored a statewide registry system for 5.4 years to identify 110 participants with melanoma who had major adverse outcomes (distant metastases or death).

Patients with a history of melanoma who practiced SSE had lower mortality (odds ratio [OR]=0.42; 95% confidence interval [CI], 0.21-0.85) than those who didn't. One potential weakness of the study was possible lead-time bias, which could overestimate the risk reduction from SSE. Another was the 5.4-year follow-up, because malignant melanoma can recur as long as 10 years later.

In the second study, involving a cohort of 255 patients from the first study who discovered their own melanomas, researchers questioned patients about their knowledge of melanoma signs and symptoms, awareness of the appearance of their own skin, and whether they delayed seeking medical attention for >3 months after detecting the initial lesion.<sup>2</sup>

More knowledgeable patients were less likely to have a thick ( $\geq 0.75$  mm) tumor and a delayed diagnosis (OR=0.34; 95% CI, 0.13-0.88). Similarly, patients with greater awareness of their skin were less likely to have a thick tumor and a delayed diagnosis (OR=0.50; 95% CI, 0.28-0.89 and OR=0.30; 95% CI, 0.12-0.71, respectively). Investigators found no significant difference in mortality based on knowledge or skin awareness.

### Which patients are more likely to detect melanoma?

A retrospective series of 816 consecutive cases of newly diagnosed melanoma investigated the frequency of self-detection in a Mediterranean population at intermediate risk.<sup>3</sup> Subjects were statistically more likely to find melanoma themselves if they had a lesion on the lower limbs, were of younger age (49.8 vs 52.9 years of age), had fewer atypical nevi, had >8 years education, were knowledgeable

about the characteristic features of melanoma, and performed regular SSE ( $P < .01$  for all comparisons).

### Recommendations

The US Preventive Services Task Force finds insufficient evidence to recommend for or against routine counseling by primary care clinicians to prevent skin cancer.<sup>4</sup>

The Cancer Care Ontario Program in Evidence-based Care, on the other hand, advises health care providers to perform annual total-body skin examinations of high-risk patients and teach the patients to examine themselves.<sup>5</sup>

The American Cancer Society (ACS) and the American Academy of Dermatology (AAD) both provide information about recognizing melanoma on their Web sites and recommend that people at high risk perform monthly self-examinations. They further advise such people to periodically see a health care professional qualified to diagnose skin cancer (ACS), or a dermatologist (AAD), for a complete skin examination.<sup>6,7</sup> ■

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Melanoma



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