

Letters to the Editor

MALIGNANT MELANOMA: SUNSCREEN FOR PREVENTION AND SENTINEL NODE MAPPING FOR TREATMENT

To the Editor:

We appreciate the recent article "Early Detection and Treatment of Malignant Melanoma" (Liang BA, Baldor RA, Humphreys TR: *Hospital Physician* 1998; 34[12]:27-37). The increased incidence and mortality rate of malignant melanoma over the last several decades are sobering. Elevated melanoma awareness and education are vital in order to prevent further rise in incidence.

We are concerned by the authors' recommendation that patients should use sunscreens with a sun protection factor (SPF) of 15 or greater. An SPF of 15 has been touted as a complete ultraviolet (UV) radiation blocker. Studies in animals have demonstrated that SPF 15 sunscreens can suppress erythema formation (sunburn) and therefore decrease the risk of malignant cell transformation.¹ However, these studies were conducted on nonhuman models in controlled, hypothetical settings.

A recent article suggests that, in a nonclinical setting, people do not apply sunscreen adequately.² If the sunscreen is not applied thickly enough, the SPF is roughly cut in half. Thus, an SPF of 15 would actually be an SPF of 7 or 8, offering reduced protection from UV radiation.³ In addition, on a typical day at the beach, a sunscreen user plays, sweats, and swims: all of these factors diminish the SPF effect.

We therefore differ in the recommendation that an SPF of 15 is satisfactory to prevent sun-associated skin damage and, potentially, malignant melanoma. The fact that most studies have been conducted on animal models in ideal conditions leads us to advocate a higher SPF as minimum protection against UV radiation. Until further human studies are completed, we endorse an SPF of 30 or greater to provide effective protection against UV radiation.

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To the Editor:

In "Early Detection and Treatment of Malignant Melanoma" (Liang BA, Baldor RA, Humphreys TR: *Hospital Physician* 1998;34[12]:27-37), the authors state that the long axis of an excisional biopsy should point toward the nearest draining nodal basin so as not to interfere with sentinel node mapping. The authors also state that excisional biopsy should be performed by a physician experienced in surgical management of

melanoma. No references or evidence are provided to support these statements. Additionally, sentinel node biopsy has not been shown to improve survivability.

A lymphoscintigraphy study showed that excised melanomas drain in different directions than predicted depending on anatomic location.⁴ The study noted a 63% discordance in the head and neck and 32% discordance in the trunk. Thus, minimizing the amount of tissue disturbed while maximizing the ease of closure seems prudent for most biopsies.

In conclusion, recommendations should be based on evidence. Even if sentinel node mapping is proven beneficial, a standard biopsy technique makes most sense given the often unpredictable direction of lymph drainage. Primary care physicians and dermatologists can adequately perform a biopsy even if they refer the patient to follow-up surgical management when the melanoma is diagnosed.

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In reply:

Drs. Lienert and Wentworth raise some excellent points as they highlight the controversial role of sunscreen in melanoma prevention. However, the question of how to advise patients in the face of this SPF debate remains unanswered. The issue continues to be researched, and physicians will not have a clear answer for some time. I have found the advice in the May 1998 *Consumer Report*, "Sunscreens: Ratings and Recommendations," to be helpful.⁵ I suggest purchasing a product with SPF 30 if the sunscreen costs the same as an SPF 15 sunscreen. Because there is no evidence of harm in using a higher SPF, I endorse such a recommendation.

The comments of Drs. Brown and Blivin are also appreciated. Like sunscreen use, outcomes research on sentinel node mapping remains incomplete. Whether sentinel node biopsy improves survivability remains to be determined. Dr. Brown's and Dr. Blivin's advice to "minimiz[e] the amount of tissue disturbed while maximizing the ease of closure" is reasonable and reflects traditional practice. If this standard biopsy is completed in a fashion that does not interfere with subsequent sentinel node mapping, should it be necessary, then both goals can be accomplished. Nevertheless, it is important to palpate regional lymph nodes for any enlargement prior to biopsy when treating a patient with a suspected melanoma. Suspicious nodes should be noted at the time

of examination because the biopsy itself may cause a nodal reaction and lead to an unnecessary exploration.

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REFERENCES

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