Patient Compliance With Photoprotection

Dermatologists must encourage photoprotection in all patients, especially those who are at risk for skin cancer. Here, tips on sunscreen use and responses to claims about vitamin D deficiency are provided.

Vincent A. DeLeo, MD

What does your patient need to know at the first visit?
Patients need a realistic approach to photoprotection based on their genetics, including Fitzpatrick skin type and family history of melanoma and nonmelanoma skin cancer; skin examination for photodamage and photoaging as well as number and type of pigmented lesions; and lifestyle history, which should include location of residence as well as occupation and recreational pursuits. This discussion should, as usual, include questions about general health, systemic and skin disease, and medication usage, with particular focus on photoaggravated diseases such as lupus and melasma as well as ongoing use of topical agents and systemic photosensitizers. These inquiries should lead to a frank discussion of the patient’s risk for developing photodamage and skin cancer and other specific conditions that alter the advice you would give.

What are your go-to treatments? Is your recommendation anecdotal or evidence based? What are the side effects?
I always recommend that my patients use a product that they like, which may sound simplistic. But if the patient doesn’t like the feel and look of the sunscreen, he/she won’t use it. Patients routinely should use a sunscreen with a sun protection factor (SPF) of 30 or higher that also carries a “broad spectrum” label. At the beach or during sweaty sports, patients should use one with a water-resistant SPF.

I prefer spray sunscreens for application on the back if the patient is alone without someone to help apply sunscreen to hard-to-reach areas and for male scalps. But you never know how much spray to use, so use a lot!

If patients are at the beach, playing sports, or watching sports outside, then they should reapply sunscreen every 2 hours. If patients work indoors and use a facial sunscreen in the morning, that’s sufficient.

Although there is no evidence that sunscreens are harmful for children older than 6 months of age and pregnant women, if patients in these special populations have concerns, I recommend using agents with inorganic compounds (physical blockers) such as titanium dioxide and zinc oxide.
only. Children are best protected with clothing and hats.

The evidence supports this approach. Patients really don’t need SPF 30 protection, but no one uses the amount of product that will result in the SPF listed on the bottle. So if patients use an SPF 30 or greater, they will get at least an SPF 15, which is sufficient everywhere but at the equator. Using SPF 30 the way we all apply it will give SPF 15–level protection.

There is evidence that sunscreens prevent squamous cell carcinoma, actinic keratosis, and photaging. Early evidence, less strong but positive, also suggests protection against basal cell carcinoma and melanoma.

The biggest side effect is not using the sunscreen. Others include irritation and allergy. Irritation is common, but finding a product to use without irritation should be easy. Allergy is rarer, and when it occurs, it is usually due to the preservative or fragrance, not the active ingredients. If allergy does occur, patch testing by a dermatologist is necessary to determine the allergen.

Although it is still controversial, wearing sunscreens religiously can lead to vitamin D insufficiency or deficiency, which is particularly true for individuals with skin of color—Fitzpatrick skin types IV, V, and VI—and those cancer patients who adhere to rigorous photoprotection. These patients should be encouraged to take supplemental vitamin D₃ and I suggest 2000 IU; this recommendation is my opinion and is not evidence based.

As to the literature in the laypress about hormonal changes from benzophenone, cancer from retinoids, and nanoparticle toxicity: There is no evidence to support those claims.

**How do you keep patients compliant with treatment?**
Keep telling them, and then tell them again.

**What do you do if they refuse treatment?**
Tell them to see someone else.

**What resources do you recommend to patients for more information?**
Consult the American Academy of Dermatology Web site (www.aad.org) and the Skin Cancer Foundation (www.skincancer.org).

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