Light on HPV UV exposure may play role in virus and skin cancer

Optimal approach Type of treatment for MCC depends on stage, patient health

Counseling consumers

New labeling requirements, recent literature provide groundwork for educating patients about sunscreen use

By Cheryl Guttman Krader Senior Staff Correspondent

New York — Photoprotection with use of sunscreens is an important strategy for preventing melanoma, and thanks to the new rules on sunscreen labeling that will take effect at the end of 2012, counseling patients on appropriate sunscreen selection will now be easier, says Darrell S. Rigel, M.D., M.S.

"Although recent U.S. data show that the five-year survival rate for melanoma has been improving, the bad news is that melanoma is one of the few cancers for which the mortality rate continues to rise. The best way to prevent melanomarelated mortality is to not get this cancer in the first place, and we know that sunscreen use does work for melanoma prevention," says Dr. Rigel, clinical professor of dermatology, New York University Medical Center.

QUICK READ

New sunscreen labeling and recent literature on sunscreen effectiveness and safety provide a foundation for counseling consumers about sunscreen selection.

Discussing advances in photoprotection at the 2012 Winter Clinical Dermatology Conference, Dr. Rigel noted that while there have been numerous studies undertaken to investigate the efficacy of sunscreen use for preventing melanoma, they've produced conflicting results. However, the findings need to be interpreted in light of the limitations of the research, as the studies were retrospective, may have been affected by recall bias on sunscreen use, and were based on use of older sunscreen products that were not as effective as more contemporary formulations,

In 2011, results were published from a well-designed trial that clearly demonstrated efficacy of regular sunscreen use for reducing the risk of melanoma (Green AC, Williams GM, Logan V, et al. J Clin Oncol. 2011;29(3):257-263). Conducted in Australia, it randomized 1,621 patients ages 25 to 75 to daily sunscreen use or discretionary application to the head and arms.

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DT Extra

Caffeine may cut BCC risk



Caffeinated coffee may help reduce the risk of developing basal cell carcinoma (BCC), according to a study published in the July issue of Cancer Research. People who drank more than three cups of coffee a day had a 17 percent reduction in relative risk of BCC compared to those who drank less than one cup a month. The study, which included more than 112,000 participants, did not find an association between coffee consumption and squamous cell carcinoma or melanoma.

Quotable

"Combined data support the hypothesis that betaPV may play a role in the development of cutaneous SCC."

Eggert Stockfleth, M.D.

Berlin

On causal relationship between UV and HPV

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New labeling requirements will aid in teaching patients about sunscreen from page 63

Participants used sunscreens for five years, and after 10 more years of prospective follow-up, the data showed that compared with the discretionary use group, persons using sunscreens on a regular daily basis had a 50 percent lower risk of melanoma and a 75 percent decreased risk of invasive melanoma.

"This is the first prospective, randomized study looking at the efficacy of sunscreens for melanoma prevention, and although it enrolled a relatively small number of patients, the treatment benefit was still statistically significant," Dr. Rigel says. "Therefore, the bottom line is that for the first time, we can tell patients with the assuredness of evidence from a well-designed study

that regular use of sunscreen lowers the risk of melanoma."

New labeling

In advising patients on choosing a sunscreen once the new labeling takes effect, Dr. Rigel says they should be told to look for three simple things - the terms "broadspectrum" and "water resistant 80 minutes" along with an SPF (sun protection factor) rating of

"With real-world product usage, users get better protection from a sunscreen with a higher SPF, and for some phenotypes, the difference between an SPF 51 and SPF 100 product probably makes a difference."

30 or higher.

Darrell S. Rigel, M.D., M.S. **New York**

"As long as the sunscreen is labeled with those three pieces of information, that is a great start to help patients select a sunscreen," Dr. Rigel says. "However, the new labeling does not tell consumers how long the sunscreen will last before the filters break down ("substantivity") and how cosmetically acceptable the formulation is. Both of these factors also significantly impact on how effectively sunscreens are used."

According to the final Food and Drug Administration monograph on sunscreens, products are allowed to be labeled with the term broad-spectrum only if they meet criteria for providing good UVA and UVB protection (based on critical wavelength testing for UVA protection and having an SPF ≥15, respectively). Manufacturers will no longer be able to label their products as "water proof" or "sweat proof," but the label can state if the product is water resistant for 40 or 80 minutes.

Selecting a product with an SPF of at least 30 means that consumers get nearly 95 percent protection from UVB absorption if the amount of sunscreen applied matches the quantity used in SPF testing. A decision is still pending about whether the SPF rating allowed on the label will be capped at 50+, and Dr. Rigel says arguments can be made both ways.

The rationale for setting a limit is that an SPF 50 product provides 98 percent UVB protection and there is only a marginal increase in UVB protection for products with higher SPF ratings. However, those levels of protection are based on application of 2 mg of product per cm² of body surface area, whereas typically, consumers apply only 25 to 50 percent of that amount, he says.

"With real-world product usage, users get better protection from a sunscreen with a higher SPF, and for some phenotypes, the difference between an SPF 51 and SPF 100 product probably makes a difference. Therefore, it would be helpful to be able to identify products that give more protection based on their labeling," Dr. Rigel says.

Other consumer questions

Patients may also have questions

about whether there is a benefit for choosing products that contain antioxidants, of which polyphenols, vitamin C and vitamin E are the most popular. Available data indicate these ingredients are at least additive to, and may be synergistic with, other sunscreen components in providing photoprotection. However, that assumes the antioxidant is present in a therapeutically effective concentration, which is not always the case, Dr. Rigel says.

He also addresses questions that have been raised about the safety of two common sunscreen ingredients the vitamin A derivative, retinyl palmitate, which is often added as a stabilizer, and the broad spectrum UV filtering agent, oxybenzone.

For both of these compounds, the safety concern is based on results of single animal studies, one showing that retinyl palmitate significantly accelerated growth of skin tumors and lesions in UV-exposed animals and another showing high doses of oxybenzone resulted in estrogenic side effects. However, neither of these concerns is supported by the entire body of available literature, Dr. Rigel says.

He also cites a paper reviewing the published evidence on retinyl palmitate in which the authors concluded there is no convincing data that retinyl palmitate in sunscreens is photocarcinogenic (Wang SQ, Dusza SW, Lim HW. J Am Acad Dermatol. 2010;63(5):903-906), while calculations based on a realistic scenario of sunscreen application should allay concerns about oxybenzone safety (Wang SQ, Burnett ME, Lim HW. Arch Dermatol. 2011;147(7):865-866). The authors of the latter paper found that a person would have to use an oxybenzone-containing sunscreen daily for 277 years to achieve the same level of exposure associated with estrogenicity in the animal study. DT

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