Children Are the Future of Melanoma Prevention

BY SUSAN LONDON

SEATTLE — Teaching children and their parents about sun safety is the best way to reduce the risk of melanoma both during childhood and later in life, according to Dr. Annette M. Wagner, a pediatric dermatologist at Northwestern University in Chicago.

"There is an epidemic of melanoma," she said at a meeting sponsored by the American Academy of Pediatrics, noting that the incidence is rising among both pediatric and adult populations. "Just because you see only children, do not believe you don't have to worry."

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DR. WAGNER

Adolescents should be counseled about the deadliness of melanoma, Dr. Wagner advised.

"They don't know how dangerous this is," she said. "Every one of them believes that parents who smoke cigarettes are crazy because that can cause lung cancer. But they don't know that they are at more risk of getting a melanoma from going in the tanning booth than their parents ever were of getting lung cancer from smoking."

Pediatricians also should teach all children, starting at a young age, about wearing sunscreen daily.

"When you are doing your general care for pediatric patients, just like you talk about brushing teeth and wearing seat belts, you have got to teach them to put on sunscreen," Dr. Wagner noted. "If you teach a child under the age of 2 to wear sunscreen, they will wear it every day."

Sunscreens with a sun protection factor (SPF) greater than 30 provide minimal additional protection against solar radiation, compared with those with an SPF of 30, Dr. Wagner noted. If anything, suncreens with an SPF greater than 30 are likely to contain a greater number of chemicals that can be irritants.

She advocated choosing sunscreens that contain only a physical radiation blocker—zinc oxide or titanium dioxide—often marketed as chemical-free sunscreens. "They are not hard on sensitive skin, they don't sting or burn when you rub them into your eyes, and they are much better tolerated in the pediatric population," she explained.

"You can and should put sunscreen on all infants who are outside," she continued, even those younger than 6 months of age. However, clothing remains the best form of sunscreen for young infants, if it can provide adequate protection.

Recent concerns about vitamin D deficiency should be addressed with a multivitamin supplement containing this vitamin, she said. "I would never, ever use concerns about vitamin D as an excuse for not using sunscreen."

When it comes to moles, educating parents and children about warning signs is key, said Dr. Wagner. The A, B, C, D's of melanoma—asymmetry, border irregularity, color variation, and diameter greater than 6 mm—are not very helpful in the pediatric population because children tend to get monomorphous moles that all look alike.

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Therefore, when trying to determine which moles to worry about in younger children, she recommended using the Ugly Duckling or Sesame Street rule: "It's that one mole that does not look like the others, and therefore it does not belong."

Although a black lesion is what most often comes to mind with melanoma, this cancer often has a different appearance in children.

"The most common presentation of a melanoma in a child is a rapidly growing pink papule," Dr. Wagner emphasized. And these papules may resemble Spitz nevi, so "don't ever ignore a Spitz nevus on a child."

In the pediatric population, moles that itch or bleed are generally not worrisome, unless the bleeding is spontaneous, she said. But size is important. "If you have a mole in a child at any age that is smaller than their thumbnail, the risk of melanoma is less than 1%, and that mole probably does not require anything but observation," she said. Larger moles require a referral to a specialist.

Dr. Wagner reported that she had no conflicts of interest relevant to her presentation. ■

Smoking, Sun Exposure Flag Melanoma Risk in Older Patients

BY RENÉE MATTHEWS

Environmental factors, such as smoking and severe sunburn, were more important than genetic factors in establishing risk for melanoma in older patients, according to the findings of an observational case-control study.

The study also found that melanoma risk factors in older patients (aged 60 and older) were different than those already established for a younger population. Other risk factors cited included prolonged occupational sun exposure, blond or red hair, and a personal (but not family) history of nonmelanoma skin cancer, noncutaneous neoplasia, or melanocytic nevi.

"The most striking differences in melanoma incidence and mortality occur in the elderly," wrote Dr. Eduardo Nagore of the department of dermatology at the Instituto Valenciano de Oncología, Valenica, Spain, and his colleagues. In the United States, for example, the melanoma mortality rate in older patients increased 157% from 1969 to 1999, with a nearly fivefold increase in incidence in older men.

Thicker melanomas were found to be associated with aging—bearing in mind that Breslow thickness is the most accurate prognostic tool in cutaneous melanoma; lentigo malignant melanomas and acral lentiginous melanomas are more prevalent in this age group; and aging itself, independent of Breslow thickness, ulceration, and node metastases, is an independent prognostic factor.

For the current study, the investigators selected consecutive melanoma patients who visited the institute in Valenica for the first time or for a control visit. To be included, they had to be aged 60 years or older and have a diagnosis of melanoma that had been histopathologically confirmed. The final sample after deaths and loss to follow-up was 160 patients (54% men, median age 68 years). There were 318 controls—two age- and sex-matched controls for each melanoma case, except for one, a 96-year-old man (J. Eur. Acad. Dermatol. Venereol. 2009 June 26 [doi:10.1111/j.1468-3083.2009.03353.x]).

'Broadly demonstrated melanoma risk factors such as low phototype, fair eye color, and family history of melanoma have not shown significance in patients' aged 60 or older.

The data for both cases and controls were derived from an interview and a physical examination by two dermatologists. Details of the following were obtained: intermittent sun exposure, such as during sunbathing or sports; occupational sun exposure—chronic exposure from an outdoor job such as gardening, farming, or sailing—and the duration in years; the lifetime number of episodes of severe and light sunburns; smoking history; personal history of noncutaneous neoplasias and nonmelanoma skin cancer; family history; phototype; and hair and eye color.

In the physical examination, the investigators recorded number of melanocytic nevi of more than 2 mm in diameter and the presence of solar lentigines and actinic keratoses.

The results of univariate comparisons between the cases and the controls showed that a higher proportion of melanoma patients had blue or green eyes, blond or red hair and a low phototype, and a history of sunburns. A higher percentage of melanoma patients also reported having had many years of occupational sun exposure and having smoked, and there was a higher prevalence of solar lentigines, actinic keratoses, and melanocytic nevi, and of a personal history of nonmelanoma skin cancer and other noncancerous neoplasias, the authors reported. However, not all of these factors showed significance in multivariate analyses.

"Chronic sun exposure and smoking seem to be a risk factor of developing melanoma in the elderly in contrast to the entire population," wrote the authors, who also put the number of lifetime severe sunburns in this category. "On the other hand, broadly demonstrated melanoma risk factors such as low phototype, fair eye color, and family history of melanoma have not shown significance in patients" aged 60 or older.

In addition to chronic sun exposure and smoking, lifetime severe sunburns, blond or red hair, the number of melanocytic nevi, and personal history were statistically significant in the multivariate analyses, whereas solar lentigines and actinic keratoses and intermittent sun exposure were not.

The authors emphasized the importance of these findings in the context of a progressively aging population. However, they cited their use of self-reported data, selection bias, and small sample size as limitations of the study and said that further studies are needed.

None of the authors disclosed any conflicts of interest. ■