Analyzing Risk Factors for Subsequent Primary Melanomas

BY JONATHAN WOLFE, MD

Although risk factors for melanoma are fairly well defined, we are much less familiar regarding the risk factors and predictors for secondary melanomas. The specific level of risk that melanoma patients may be at for another melanoma is a matter of some debate. Preliminary reports suggest that patients who have had one melanoma have anywhere from a six to 20 percent chance of being diagnosed with another melanoma at some point. One thing for certain, however, is that secondary melanomas have been on the rise, raising speculations about possible contributing factors.

A 2010 study examined the risk factors for second melanomas and yielded compelling results that deserve further investigation as we consider the growing number of patients at risk. To identify the predictors of second primary melanoma, investigators followed a cohort of more than 1,000 Australian patients who had been diagnosed with incident melanoma between 1982 and 1990 and who completed a baseline questionnaire. During a median follow-up period of 16.5 years, 221 patients were diagnosed with at least one additional primary melanoma.

In multivariate analyses, second primary melanomas were associated with high nevus count, high familial melanoma risk, fair skin, inability to tan, an in situ first primary melanoma, and male sex. In addition, results indicated that patients whose first primary tumor was lentigo maligna melanoma or nodular melanoma had higher risks of subsequent primaries than patients whose first primary tumor was superficial spreading melanoma. Importantly, the investigators noted that these characteristics could be assessed in patients presenting with first primary melanoma to evaluate risk of developing a second primary melanoma.

Follow-up and Counseling. We have much to learn about the incidence of second melanomas, but it behooves dermatologists to be vigilant regarding the risk factors outlined in this study. In general, it appears that the highest risk period is within the first three years of initial diagnosis. Therefore, close observational follow-up during this period is critical. Certainly, male patients with high nevus counts will require close observational follow-up. Incidence rates in men between the ages of 55 and 64 have experienced a rapid rise recently, and these rates have climbed even further in men aged 65 years and older. Further, mortality rates have substantially increased in men in the same age range. Thus, it seems prudent to aggressively monitor these patients. In addition, older patients should be monitored closely, as being older than 70 has been suggested to worsen melanoma prognosis, independent of tumor thickness. Family history of melanoma is higher in patients with multiple primary melanomas, so these patients should be watched closely.

In terms of counseling and follow-up, talking to all patients and their families about the risk of second melanomas is essential. Standard precautionary measures include stressing to patients that exposure to tanning salons can magnify the risk significantly. In addition, it is important to educate patients about monthly self-examinations. Depending on risk factors, follow-up appointments can range between three to 12 month intervals for one to three years.

CONCLUSION

Although great strides have been made within the realm of melanoma research over the last several years, many questions remain regarding incidence and risk factors that will continue to occupy the minds of dermatologists and oncologists. As studies hopefully continue to offer more insight into melanoma, physicians should be mindful of the existing risks and keep close observation of all patients who have been previously diagnosed.

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