Risks of Multiple Primary Melanomas

Studies offer clarity on risks and patterns after diagnosis, as well as survival outcomes.

BY JONATHAN WOLFE, MD

As new research continues to shed light on melanoma, strategies for both prevention and treatment are emerging. We are also learning more about specific types of melanoma. Several studies published late last year shed new light on multiple primary melanomas (MPM), offering further clarity on risks after diagnosis, location and sex differences, as well as survival outcomes. Ahead is a summary of several notable studies.

NEW DATA

Risk After Diagnosis. A new study found that the risk of MPMs is highest in the first year after diagnosis and remains stable thereafter.

Examining incidence of and risk factors associated with MPMs among 16,750 Kaiser Permanente Northern California members with melanoma from 1996 through 2011, the authors compared characteristics between patients with MPMs and single primary melanomas and estimated crude and adjusted hazard ratios of MPMs using Cox models. Patients with MPMs were older and more often male, non-Hispanic white, and partnered, the authors noted. Subsequent primary melanomas were diagnosed after a mean of 3.83 years and were more likely in situ and thinner than initial tumors. The risk of a subsequent melanoma decreased from two percent in the first year after diagnosis to roughly one percent through 15 years of follow-up.

Location and Sun-Protective Behaviors. It appears that the location of MPMs differs based on sex, and that patient behaviors toward sun protection across the board are vastly different. A new study finds that patients with MPMs show higher rates of skin self-examination, sunscreen use, and other sun protection methods than patients with single primary melanomas (SPM).

Authors surveyed 137 patients with MPM regarding their sun-protection measures and then compared it to published reports on patients with a history of SPM. Patients with MPM had higher rates of skin self-evaluation (74 vs. 22 percent), sunscreen use (70 vs. 45 percent) and other sun-protection measures (95 vs. 46 percent) than have been published for patients with a history of SPM. It is worth considering, however, that patients diagnosed with one melanoma are probably likelier to be self-vigilant looking for another, which may represent an inherent bias in the study.

Survival Outcomes. Patients with multiple invasive lesions seem more at risk of death from melanoma, independent of known prognostic factors, according to a new study.

Researchers performed melanoma-specific survival analysis to find associated variables after adjustment for known prognostic factors, using four different models, each selecting a different index melanoma lesion. In total, they followed 1,068 stage I and II melanoma patients for a median of 24.4 years. They found MPM in 17.8 percent of the cohort; “more likely among males and older age groups.” Other clinicopathological parameters were similar between the MPM and SPM cohorts, but MPM was a hazard for death across all models, even after adjustment for age, sex, and Breslow thickness.

Risk to Family Members. A recent study suggests that risks of MPMs in first-degree relatives (FDR) are roughly similar.

Researchers investigated a detailed family history of MPM by number of melanomas in one FDR over a 40-year span of data. They found that for one affected FDR, familial risk increased significantly. The authors concluded that their findings offer evidence for genetic counseling in melanoma, and that physicians need to consider the number of affected family members as well as the diagnosis of MPM in relatives.

CONCLUSION

While previously little was known about MPM, new studies are rapidly emerging to offer much needed perspective about risks and other details.

Jonathan Wolfe, MD is an Associate Professor of Dermatology at the University of Pennsylvania.