

## LARGE STUDY

# Melanoma Diagnosis Raises Risk of Future Carcinomas

BY JENNIFER M. WANG  
Senior Writer

Patients with a prior diagnosis of cutaneous melanoma have a higher-than-average risk of developing future basal cell or squamous cell carcinomas, reported Dr. George Kroumpouzou of Boston Medical Center and associates.

In a study of 1,396 patients with age-matched controls, those with cutaneous melanoma had a 3.49 odds ratio for subsequent basal cell or squamous cell carcinoma (*Dermatol. Surg.* 26[6]:547-50, 2000).

The patients were initially diagnosed at the Roswell Park Cancer Institute in Buffalo, N.Y., during 1977 and 1978; they were followed up for a median of 4 years. The researchers paired patients with age- and sex-matched controls in Detroit, because that city receives about the same amount of annual ultraviolet B radiation as Buffalo does.

Overall, 25 patients developed carcinomas over the course of the study. A total of 26 basal cell carcinomas and 9 squamous cell carcinomas were diagnosed at an average of 42 months and 53 months, respectively, after cutaneous melanoma was found.

The type, stage, and location of the cutaneous melanomas did not correlate with the future appearance of skin carcinomas, the investigators reported.

"A total cutaneous examination with a high index of suspicion for non-melanoma skin cancer should be done in persons with prior cutaneous melanoma," they concluded.

The researchers conducted the study in light of the well-recognized reverse relationship that patients with prior basal cell carcinoma develop malignant melanoma at a higher rate than normal. This association was most recently confirmed in an examination of cancer registry records from 13,961 patients in southwest England (*J. Am. Acad. Dermatol.* 42[6]:988-91, 2000).

Dr. C.P.R. Bower of Bristol (England) Royal Infirmary and associates

found a threefold higher risk of malignant melanoma in patients with a prior diagnosis of basal cell carcinoma. They calculated risk ratios of 2.81 for men and 3.08 for women initially diagnosed between 1981 and 1988 and followed up to 1995.

Patients with both basal cell carcinoma and malignant melanoma probably share the same risk factors: white race, advanced age, increased time in the sun, and living at a lower latitude. Moreover, identifying one cancer raises the chance of discovering the other—by way of an increased awareness as well as more frequent visits to the dermatologist.

Contrary to their expectations, Dr. Bower and colleagues also documented an overall decrease in the risk of subsequent noncutaneous cancers in those with prior basal cell carcinoma—at risk ratios of 0.93 in men and 0.83 in women.

Previous studies had suggested a slightly higher risk of developing breast, cervical, prostate, bladder, head and neck, larynx, lung, and thyroid cancers, along with non-Hodgkin's lymphoma and leukemias. A prospective study of 1.1 million Americans reported elevated risk ratios of 1.27 in men and 1.24 in women for noncutaneous cancer mortality over a 12-year period, while smaller European studies yielded conflicting results.

In Dr. Bower's study, breast, cervical, prostate, and bladder cancers occurred less frequently—at risk ratios of 0.8 for breast cancer, 0.34 for cervical cancer, 0.85 for prostate cancer, and 0.74 for bladder cancer in men. The other cancers did not return conclusive results.

"Whereas one must interpret these findings with caution, it is of interest that there is mounting evidence supporting the hypothesis that ultraviolet radiation may protect against clinical prostate and breast cancer through its effect on vitamin D metabolism," the investigators said. ■