

# Hair color, socioeconomic status among risk factors for recurring basal cell carcinoma

August 16 2010

---

Patients who receive a diagnosis of the skin cancer basal cell carcinoma at a younger age—along with those who have red hair, a higher socioeconomic status and a cancerous lesion on their upper extremities—appear to be at higher risk of developing multiple cancers and require closer follow-up, according to a report in the August issue of *Archives of Dermatology*, one of the JAMA/Archives journals.

"Basal cell carcinoma is the most common type of cancer in people with European ancestry, and its incidence continues to increase steeply," the authors write as background information in the article. "Although basal cell carcinoma therapy is relatively straightforward and basal cell carcinoma mortality rates are extremely low, the high incidence of basal cell carcinoma and the high risk of developing multiple lesions put a major burden on limited health care resources, placing basal cell carcinoma in fifth place on the list of most expensive cancers to treat in the United States."

[Risk factors](#) for the disease include older age, being male, race and [genetic predisposition](#), which may interact with UV light exposure or other environmental hazards. To investigate the incidence of and risk factors for single vs. multiple basal cell carcinoma lesions, Ville Kiiski, M.D., and colleagues at Erasmus Medical Center, Rotterdam, the Netherlands, studied two cohorts of 10,994 Dutch adults 55 or older, one in 1990 and one in 1999. Patients with basal cell carcinoma lesions were identified from Dutch national records and potential risk factors—including sex, age, hair color, eye color, educational level and

other demographic and health characteristics—were determined when individuals entered the study.

A total of 524 (4.8 percent) individuals in both cohorts had basal cell carcinoma, of whom 361 had single lesions and 163 (31.1 percent) had multiple lesions. Individuals who developed their first lesion after age 75 were significantly less likely to develop multiple lesions, whereas red hair and a first lesion located on the upper extremities was associated with a significantly increased risk of developing multiple lesions.

"In contrast to developing a first lesion, high educational level was significantly positively associated with developing multiple lesions," the authors write. "This finding may be explained by the probability that people with higher levels of education (which correlates strongly with [socioeconomic status](#)) have different lifestyles (e.g., more frequent exposure to UV rays for intermittent periods)." It may also be that these individuals were more likely to develop cancer in places other than the face and neck, or because they tend to live longer and thus have more time to develop lesions, the authors note.

Known risk factors for basal cell carcinoma, including having blue eyes and fair or blond hair, were not associated with the risk for additional lesions. "The observed discrepancy among risk factor profiles of developing single or multiple [basal cell carcinoma](#) lesions may suggest that once cumulative environmental-genetic interaction has surpassed a certain threshold and resulted in a lesion, the phenotypic characteristics of patients seem less important. The clinical relevance of this finding is that physicians' risk assessment efforts should differentiate between patients at risk for a first lesion and those who have a history of basal cell [carcinoma](#)."

Provided by JAMA and Archives Journals

Citation: Hair color, socioeconomic status among risk factors for recurring basal cell carcinoma (2010, August 16) retrieved 25 April 2024 from <https://medicalxpress.com/news/2010-08-hair-socioeconomic-status-factors-recurring.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.