Keratinocyte carcinoma and risk of all-cause and cancer-related mortality: A systematic review

Permalink
https://escholarship.org/uc/item/6bv8q3wv

Journal
Dermatology Online Journal, 22(9)

Authors
Barton, V
Armeson, K
Hampras, S
et al.

Publication Date
2016

License
CC BY-NC-ND 4.0

Peer reviewed
Abstract

Keratinocyte carcinoma and risk of all-cause and cancer-related mortality: A systematic review


Dermatology Online Journal 22 (9)

University of South Carolina
Moffitt Cancer Center
University of Pittsburgh
Johns Hopkins Medical Institutions

Background
Some reports suggest a history of keratinocyte carcinoma (KC) may be associated with increased mortality. The high prevalence of KC makes the possibility of associated subsequent mortality from other causes important from a clinical and public health perspective. However, the variable methods and findings of existing studies leave the overall significance of these results uncertain. To provide clarity, we conducted a systematic review to characterize the evidence on the associations of KC with: 1) all-cause mortality, 2) cancer-specific mortality, and 3) cancer survival.

Methods
Bibliographic databases were searched through February 2016. Studies were included if adequate data were provided to estimate mortality ratios in patients with- vs.-without KC. Data were abstracted from the studies that met inclusion criteria.

Results
For all-cause mortality, a significant increased risk was observed for patients with a history of squamous cell carcinoma (SCC) (relative risk estimates (RR) 1.25 and 1.30), whereas no increased risk was observed for patients with a history of basal cell carcinoma (BCC) (RRs 0.96 and 0.97). In one study, cancer-specific mortality was increased for patients with a KC history (RR 1.28; 95% CI 1.22-1.34). With few exceptions, across multiple types of cancer BCC and SCC were consistently associated with poorer survival from second primary malignancies.

Conclusion
Multiple studies support an association between KC and fatal outcomes; the associations tend to be more potent for SCC than BCC. Additional investigation is needed to more precisely characterize these associations and elucidate potential underlying mechanisms.