

UC Davis

Dermatology Online Journal

Title

Predictors of actinic keratosis count in those with multiple keratinocyte carcinomas

Permalink

<https://escholarship.org/uc/item/78t447bn>

Journal

Dermatology Online Journal, 22(9)

Authors

Siegel, Julia A
Luber, Adam J
Weinstock, Martin A

Publication Date

2016

DOI

10.5070/D3229032557

Copyright Information

Copyright 2016 by the author(s). This work is made available under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives License, available at <https://creativecommons.org/licenses/by-nc-nd/4.0/>

Peer reviewed

Abstract

Predictors of actinic keratosis count in those with multiple keratinocyte carcinomas

Julia A. Siegel, Adam J. Lubber, Martin A. Weinstock

Dermatology Online Journal 22 (9)

Providence VA Medical Center; Department of Dermatology, Brown University, Providence, RI

Actinic keratoses (AKs) are frequently treated in the U.S., impacting an estimated 40 million people in 2004 and costing over \$1 billion annually. AKs are a major public health concern because of their high prevalence, substantial cost, and potential for malignant transformation to keratinocyte carcinoma (KC). In this analysis, predictors of AK count were explored using pre-randomization baseline data from two large randomized trials of veterans with multiple prior KCs (n=932 and n=1131). Multivariate analyses were conducted to elucidate associations between AK count and several demographic and health related factors. In both trials, greater baseline AK count on the face/ears was strongly associated ($p \leq 0.01$) with older age, lower latitude, male sex, greater sun sensitivity, previous 5-FU use, and a higher number of prior invasive SCCs, but was not associated with number of prior BCCs. Additionally, mean baseline AK count was higher on the left side of the face/ear compared to the right, which may be explained by increased UV radiation to the left side while driving. Risk factors for actinic keratoses in a high-risk population are particularly important as actinic keratoses in this group are more likely to progress to keratinocyte carcinoma. Recognizing predictors of AK count in individuals at high risk for KC may help providers tailor AK prevention and treatment efforts. This may in turn lower the risk of KC—perhaps a more important goal—as the keratinocytic dysplasia that gives rise to malignancy, and sometimes appears as an AK, is what actually threatens patient health.