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Predictors of tanning dependence in white non-hispanic females and males

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Abstract

Predictors of actinic keratosis count in those with multiple keratinocyte carcinomas

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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.