

Abstract

New keratinocyte carcinomas worsen skin-related quality of life

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Keratinocyte carcinoma (KC) is the most common malignancy in the U.S. Because KC affects many people but has a low mortality rate, it is important to consider the impact of KC on skin-related quality of life (QoL). We aimed to determine if KCs, actinic keratoses (AKs), and several demographic and health-related factors were associated with skin-related QoL in those at high risk for KC. We used data from a double-blind, placebo-controlled trial in which 932 veterans with multiple prior KCs were randomized to apply topical 5-fluorouracil (5-FU) or vehicle control cream to the face/ears. Skin-related QoL was measured at baseline, 12, 24, and 36 months using Skindex-29 and Skin Cancer Index and participants received skin examinations semiannually. At baseline, worse skin-related QoL was strongly associated ($p \leq 0.01$) with younger age and greater functional impairments (e.g. inability to bathe, walk). It was also associated with higher comorbidities, increased sun-sensitivity and prior 5-FU use, but almost entirely unrelated to baseline AKs and prior KCs. However, participants who developed new KCs or more AKs during the trial had worse skin-related QoL, particularly in year 1. Our ability to detect these relationships in longitudinal analyses but not in cross-sectional analyses may indicate the importance of the more precise control of potential confounding factors that is inherent in comparing each individual to their own prior state. These findings suggest that additional KCs and AKs may worsen skin-related QoL in a high-risk population and individuals with worse overall health may need more dermatologic attention, not less.