

Abstract

Family history of cancer in relation to the risk of keratinocyte carcinoma plus another type of cancer: a case-control study

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Background

A personal history of keratinocyte carcinoma (KC) is associated with increased risk for other malignancies. To assess the role of inherited cancer predisposition we investigated if family history (FH) of skin cancer plus noncutaneous malignancy is associated with the risk of KC plus another type of cancer.

Methods

This clinic-based case-control study of non-Hispanic Caucasians had three age- and gender-matched groups: KC plus another cancer (n=49), KC only (n=50), and cancer-free controls (n=50). Patients were interviewed to assess FH in first-degree relatives of “skin cancer” and “cancer other than skin cancer.” Controls were the referent category for the risk of 1) KC only and 2) KC plus another cancer.

Results

When FH was categorized into a four-level variable and evaluated across the 3 study groups, compared to the control group a FH of skin plus noncutaneous malignancy was strongly associated with risk of KC only (OR 9.9; 95% CI 1.7-59.7) and KC plus another cancer (OR 9.8; 95% CI 1.7-57.0). The ORs for FH of skin cancer only were weaker and non-significant for both KC only (OR 4.3) and KC plus another cancer (OR 6.8). FH of noncutaneous malignancy only was null across groups.

Conclusions

The overall pattern of associations, especially the similar associations in patients with KC only and with KC plus another cancer, reinforce the known association between a family and personal history of KC but do not support a link between FH of skin plus noncutaneous malignancy and the KC cancer-prone phenotype.