(A) Clinical Research

Title: Sexually Transmitted Infections in Patients with Squamous Cell Carcinoma: A Population-Based Analysis

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Background:
Squamous cell carcinoma (SCC) is one of the most common non-melanoma skin cancers, with a multitude of known risk factors, including ultraviolet radiation exposure, immunosuppression, and chronic inflammation.[1] Recent studies suggest an association between high-risk sexual behavior and SCC.[2, 3, 4.] However, the relationship between SCC and STIs is still underexplored..

Objective
To evaluate the prevalence and odds of STIs in patients with SCC compared to matched controls, investigating potential associations between SCC and sexually transmitted infections such as human papillomavirus (HPV), human immunodeficiency virus (HIV), herpes simplex virus (HSV), syphilis, gonorrhea, and chlamydia.

Methods
A retrospective case-control study was conducted using the NIH All of US database identifying patients diagnosed with SCC.[5] Cases were matched to controls without SCC based on age, sex, and other relevant demographics. The prevalence of STIs was compared between groups, and univariate and multivariate logistic regression models were used to calculate odds ratios (ORs) with 95% confidence intervals (CIs), adjusting for potential confounders.

Results
Among 2,755 SCC cases and 15,020 matched controls, the prevalence of STIs varied across different infections. In our multivariate analysis, SCC patients had a significant association with C. trahomatis, N. gonorrhea, herpes simplex virus, human immunodeficiency virus, human papillomavirus, and syphilis ($p < .01$)

Conclusions
Patients with SCC had a significant association with STD comorbidities, suggesting potential interactions between oncogenic and immunomodulatory mechanisms. These findings indicate a need for further research on the role of STIs in SCC pathogenesis and emphasize the importance of STI screening in high-risk patient populations.

References

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