DOES TOBACCO AND ALCOHOL USE MODIFY THE OCCURRENCE OF ORAL LESIONS IN HIV PATIENTS?

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Abstract:

Introduction: Relationship of tobacco and alcohol use (TAU) with progression of HIV has been documented. As HIV and TAU causes significant oral mucosal lesions (OML) separately, their synergistic occurrence was not studied till date from India. This study attempts to elucidate the effect of TAU on OML.

Material and Methods: A cross sectional analysis of consecutive patients presenting at RAGAS-YRG CARE with details of TAU and oral lesions were only considered. Descriptive statistics, Chi-square test and logistic regression for OML based on TAU were performed. \( P \leq 0.05 \) was taken as significant.

Results: Of the 4891 patients, 91.6\%(n=4479) acquired HIV by heterosexual contact; 69.41\%(n=3395) were males(mean age:36±8.25;MeanCD4:299.3±231.68;median252) and rest females(mean age:31.61±8.63;Mean CD4:404.81±248.13;median 365), \( P=0.02 \) and 0.000 respectively. Of the cohort, 41% of males and 97% females did not use TAU. Among males 17.9\% (n=610) used tobacco, 7.9\% (n=271) used alcohol while 33.2\% (n=1134) used both. As compared with non- TAU, those with TAU, for any lesion had significant OR of 2.03(95%CI: 1.71-2.41, \( P=0.000 \)). For oral candidiasis, it was 2.01(1.76-2.43, 0.000). CD4 counts were available for 3722 patients, of whom 1340(36\%) had CD4≤200. Of all those who had CD4≤200, 45\% (n=682) were TAU while 29.8\% (n=658) were non-TAU. Users of TAU had a mean CD4 277.74±220.37 while non-TAU 367.1±259.39. On performing multiple logistic regression for any OML it was inferred that as compared to non-TAU, TAU had 1.65 times higher risk for having an OML.

Discussion: This present study shows that the TAU has a significant impact on oral health and could synergistically influence the course of OML. As OML of HIV are often used as surrogate clinical markers of immunosuppression, influence of TAU on them needs to be studied in depth.