SDM
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"IMMUNOEXPRESSION OF p53 AND Ki-67 CORRELATED WITH CLINICOPATHOLOGICAL PARAMETERS IN PREDICTING THE RECURRENCE OF ORAL SQUAMOUS CELL CARCINOMA"

By

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ABSTRACT

Background: Oral Squamous cell carcinoma (OSCC) is a heterogeneous but largely preventable disease with complex molecular abnormalities. Evaluation of both clinicopathological parameters and molecular markers has been used to predict for the recurrences and survival rate. This study aims to study the immunoexpression of p53 and Ki-67 and assess its correlation with clinicopathological parameters among recurrent and non-recurrent OSCC and using it to predict the prognosis and survival rate of OSCC.

Methods: Retrospective study included 50 cases of OSCC where clinicopathological parameters and p53 and Ki-67 immunoexpression at the negative margin and ITF were assessed. Overall survival and Disease free survival was estimated. The data was subjected to statistical analysis such as Mann Whitney U test, t Test, Pearson correlation coefficient, Kaplan Meier curve and Log Rank test.

Results: The mean LI of p53 and Ki-67 were higher in ITF than in margin (p=0.001) and an overall marginal increase in expression of these 2 markers were observed in recurrent OSCC than in non-recurrent cases.

In NRec OSCC, p53 LI in margin did not show any significant association with clinicopathologic parameters except for site, muscle invasion and POI (p=0.045, 0.014, 0.036) whereas in ITF with muscle invasion and POI (p=0.034, 0.004). However, Ki-67 immunoexpression in margin and ITF didn't show any statistical significance with any clinicopathological parameters. In Rec OSCC, p53 LI in margin and ITF did not show any statistical significance with

clinicopathologic parameters except for duration of recurrence (p=0.034, 0.046) respectively. Ki-67 LI in margin didn't show any statistical significance with any clinicopathological parameters except for habit and POI (p=0.014, 0.041) whereas ITF with staging (p=0.003).

In non-recurrent group, the OS and DFS was higher in patients with lesser LI of p53 and Ki-67 in contrast to the recurrent group in which the OS and DFS was higher in the greater LI of p53 and Ki-67 but more number of deaths occurred in this category.

Conclusion: The current study described p53 and Ki-67 positivity in the tumor adjacent margin and ITF of the patients with NRec and Rec OSCC suggesting these proteins as an important marker for identification of individuals into high risk and low risk.

Keywords- Disease free survival, invasive tumor front, margin, non-recurrent, recurrent, survival rate.