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By

PRE-OPERATIVE NEUTROPHIL LYMPHOCYTE RATIO : A PROGNOSTIC FACTOR FOR ASSESSING RECURRENCE IN PATIENTS WITH ORAL SQUAMOUS CELL CARCINOMA

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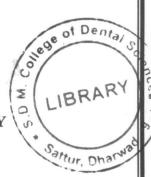
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ABSTRACT

Aim: This study aimed to determine the role of preoperative neutrophil to lymphocyte ratio (NLR) in predicting the risk of recurrence in patients with oral squamous cell carcinoma (OSCC)

Material and methodology: This retrospective study involved OSCC patients, who were treated surgically followed by adjuvant chemo and/or radiotherapy from with year 2010 and with minimum follow-up of at least 5 years. Preoperative NLR is defined as: preoperative neutrophil count /preoperative lymphocyte count. The prognostic value was obtained by univariate and multivariate Cox analysis.

Results: A total of 136 patients were included in this study. There was male predilection noted with 40-60 years being the most commonly affected age group. Of the total patients, 6% died and recurrence was seen in 15%. Based on the ROC curve analysis, NLR >3.51 predicted higher rate of recurrence. NLR was an independent prognostic factor with F-ratio 194.5, p-value < 0.001.RFS is not associated with age, sex or tumor sites.

Conclusion: NLR is an independent factor to assess recurrence. It is an easily available and economical biomarker. The preoperative NLR might be a useful tool in stratifying and predicting outcomes for the patients.

Keywords: Neutrophil lymphocyte ratio, Overall survival, Recurrence free survival