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# DYSPLASTIC CHANGES AT POST EXCISION SCAR SITE, IN ORAL SQUAMOUS CELL CANCERS - AN ANALYTICAL STUDY.

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ABSTRACT

Oral squamous cell cancers are one of the most common cancers affecting the Indian population with various prognostic factors which determine the pattern of recurrence, progression and response to treatment. We conducted an analytical study with 112 patients who were operated in our hospital from January 2017 to January 2018. The study is a prospective analytical study. Statistical significance was drawn using Chi square test and p value, calculating degree of freedom with a 2x2 contingency table. **Results:** of the 112 patients analysed , 21 patients had no dysplasia, 54 patients had mild dysplasia , 20 patients had moderate dysplasia and 17 patients had severe dysplasia .Out of this 17 cases of severe dysplasia, 11 cases had recurrence with in a year and only 2 patients who did not have dysplasia , recurred. Of these 17cases, 14 cases were post RT and 3 cases were operated upfront. **Conclusion:** Presence of severe dysplasia at the post excision scar site in oral squamous cell carcinomas is strongly associated with recurrence.

## Introduction:

Severe oral epithelial dysplasia is a late stage premalignant/ pre invasive lesion that is believed to have a high cancer progression rate. Oral epithelial dysplasia is the earliest form of precancerous lesion. This term is applied to early cellular changes, also called atypia, that are associated with an increased risk of malignant potential.[1] The presence of epithelial dysplasia is the manifestation of the continuum of clinical change that occurs as oral cancer develops and progresses with time.

Epithelial dysplasia is graded as mild, moderate, severe, and carcinoma in situ.[2,3,4] Distinctions between mild, moderate, and severe are made on the basis of a histological examination. Knowledge of the degree of dysplasia assists with diagnostic decision-making and helps to predict whether the lesion will progress to cancer or will resolve on its own after removal of the irritant.

## Aims and objectives:

To evaluate the significance of presence of severe dysplasia at the site of previous wide excision in oral squamous cell cancers and its risk of progression to invasive cancers.

## Materials and Methods:

112 patients who were operated in our hospital from January 2017 till date were analyzed with scrape cytology taken from previous excision site during routine follow up after a minimum period of 6 months after completion of multimodality treatment with established cure at local and nodal site. Lesions that are T3 and T4 were only included in our study. Cases were categorized as those operated post radiation or upfront. Also dysplasia was categorized as mild, moderate and severe.

Results were statistically analyzed calculating p value, using chi square test and degree of freedom values for a 2x2 contingency table.[5]

## Results:

Total number of patients analyzed in our study was 112. Of these 54 were tongue cancers, 29 cases are buccal mucosal cancers, 9 are floor of mouth cancers ,17 cases are alveolus and 3 cases are Retromolar trigone. 80 cases were operated after receiving radiation and had residual disease and 32 cases were operated upfront . Scrape cytology showed no dysplasia inssss 21 cases, mild dysplasia in 54 cases , moderate dysplasia in 20 cases and severe dysplasia in17 cases. Patients who had severe dysplasia ,out of 17, cases 11 recurred with in 12 months form date of primary surgery.

## Conclusion:

Presence of severe dysplasia at the scar site is a strongly associated with recurrence and hence needs intervention. Also patients operated post radiation had more severe dysplasia at the margins probably due to advanced nature of presentation in these patients

## Statistical Analysis Data:

| Severe Dysplasia | Recurrence (No of cases) | No Recurrence(No of cases) |
|---|---|---|
| Severe Dysplasia Present | 11 | 6 |
| Severe Dysplasia Absent | 2 | 93 |

Chi square value- 55.076
Degree of freedom -1
P value- 0.001(< 0.005)- statistically significant

| Treatment status(operated) | Severe dysplasia (cytology) | No dysplasia(cytology) |
|---|---|---|
| Post RT | 14 | 66 |
| upfront | 3 | 29 |

Chi square value- 1.172
Degree of freedom-1
P value- 0.278- statistically insignificant.

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