# "IMMUNOHISTOCHEMICAL EXPRESSION OF p53 AND p63 IN ORAL EPITHELIAL DYSPLASIA AND ORAL SQUAMOUS CELL CARCINOMA - A COMPARATIVE STUDY"

by

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# ABSTRACT

**Background & Objective:** *p53* mutations are found in 50–55% of all human cancers. The p53 gene has been studied since it was established that more than half of all head and neck tumors harbour p53gene mutations. p63 overexpression is also observed in squamous cell carcinomas suggesting that p63 can act as an oncogene. However p53 functions as a classical tumor suppressor gene, the role for p63 in tumorigenesis remains controversial. The present study is performed to evaluate the expression of p53 & p63 in oral epithelial dysplasia & oral squamous cell carcinoma & compare the expression between the study groups.

**Methods:** Immunohistochemical expression of p53 & p63 was evaluated in a total of 60cases, which included histologically diagnosed, 30 cases of Epithelial dysplasia & 30cases of Squamous cell carcinoma. The percentage of positive tumor cells was considered for statistical evaluation.

**Results:** On comparison of p53 expression with combined grades of epithelial dysplasia, statistical significance was seen, but no statistical significance was seen on comparison between p63 expression & combined grades of epithelial dysplasia. However significance was seen on comparison of p53 & p63 expression in Epithelial dysplasia. On comparison of p53 & p63 expression with combined grades of SCC, statistical significance was seen respectively. But no statistical significance was seen on comparison of p53 & p63 expression in SCC.

**Conclusion:** Our study arrived at a conclusion that p53 & p63 expression progress from Epithelial dysplasia to Squamous cell carcinoma suggesting their role in stages of carcinogenesis, but may have complementary or independent role in oral tumorigenesis.



**Keywords:** (p53; p63; immunohistochemistry; Epithelial dysplasia; Squamous cell carcinoma)