

**IMMUNOHISTOCHEMICAL EXPRESSION OF p53 AND p63 IN
SELECTED ODONTOGENIC CYSTS AND TUMOURS – A
COMPARATIVE STUDY**

by

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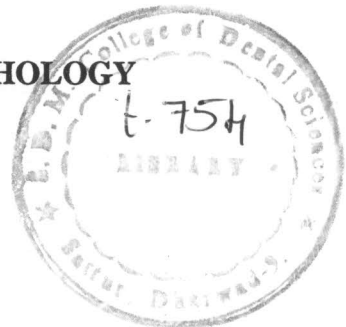
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ABSTRACT

Background & Objective: Odontogenic cysts & tumours are distinct entities and are quite common occurrence in the jaw bones. p53 is a tumour suppressor gene & its mutation has been reported in various head & neck carcinomas. p63 is a homologue of p53 and in recent times it too has been reported to be overexpressed in carcinomas. The present study was performed to evaluate the expression of p53 & p63 in selected odontogenic cysts and tumours & further compare their expression in these lesions.

Methods: Immunohistochemical expression of p53 & p63 was evaluated in a total of 60 cases, which included 15 histologically diagnosed ameloblastomas, 10 adenomatoid odontogenic tumours, 15 odontogenic keratocysts, 10 dentigerous cysts & 10 cases of normal mucosa. The percentage of positive tumor cells was considered for statistical evaluation.

Results: Increased p53 expression was seen in ameloblastoma and odontogenic keratocysts as compared to other lesions. No such difference was observed in the expression of p63 between ameloblastoma and adenomatoid odontogenic tumour or ameloblastoma and odontogenic keratocysts. There was a statistically significant difference seen when the expression of p53 & p63 was compared in all the lesions.

Conclusion: Our study arrived at a conclusion that the increased expression of p53 correlates with the aggressive behavior of the lesions. p63 expression is restricted to the proliferative compartments of odontogenic cysts and tumours & increased expression may indicate greater proliferative activity. The data taken together suggests an independent role of p53 & p63 in the pathogenesis of these lesions.

Keywords: (p53; p63; immunohistochemistry; ameloblastoma; adenomatoid odontogenic tumour; odontogenic keratocysts; dentigerous cyst)