

**COMPARISON OF IMMUNOHISTOCHEMICAL
EXPRESSION OF MDM2 PROTEIN IN ORAL SQUAMOUS
CELL CARCINOMA AND VERRUCOUS CARCINOMA**

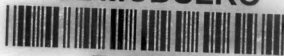
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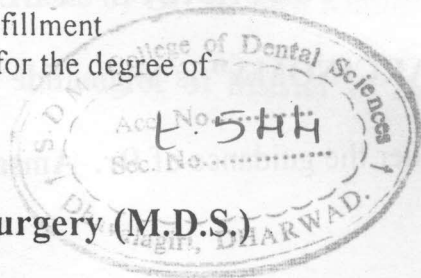
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Abstract:

Human *mdm2* (murine double minute gene 2) is a cellular proto-oncogene, mapped in chromosome 12q 13 – 14 and it encodes a 90 kDa protein that forms a complex with p53 tumour suppressor protein. The MDM2 oncoprotein promotes p53 degradation via ubiquitin ligase pathway, establishing negative feedback control on p53. p53 affects cell cycle, apoptosis and thereby leading to tumorigenicity.

Overexpression of MDM2 protein has been detected in more than forty different types of human malignancies, including sarcomas, leukemias, esophageal carcinomas, malignant breast tumours and oral squamous cell carcinomas.

This study is designed to evaluate the expression of MDM2 in oral squamous cell carcinoma and verrucous carcinoma and compare the expression between the study groups.

Immunohistochemical expression of MDM2 was evaluated in a total of 60 cases, which included histopathologically diagnosed, 30 cases of Oral Squamous cell carcinoma (WDSCC 11 cases, MDSCC 11 cases and PDSCC 8 cases) and Verrucous Carcinoma each. Presence of brown coloured end product in the nucleus was considered positive. The percentage of positive tumour cells was considered for statistical evaluation.

All the cases of squamous cell carcinoma and verrucous carcinoma were positive for MDM2.

When SCC & VC were compared there was significant difference observed in MDM2 expression. When comparing the expression values within the grades of SCC, significant difference was appreciated only between WDSCC - MDSCC and WDSCC – PDSCC. When each grade of SCC was compared with VC, the values showed very high significance with MDSCC and PDSCC but not with WDSCC.

To conclude our study showed increasing MDM2 expression with the higher grades of the tumour and it also showed a significant difference in the expression values between VC and SCC.

Keywords: (MDM2; immunohistochemistry; squamous cell carcinoma; verrucous carcinoma ;)