Grading

**Evaluation of TP53 Oncoprotein Expression in Mucoepidermoid Carcinoma of Salivary Glands and it’s Relation with Grading**

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**Introduction:** Mucoepidermoid carcinoma is the most common malignancy in salivary glands. This tumor has a variable biologic potential, so it was first divided into two groups: one with malignant behavior and the other with benign behavior and good prognosis. The purpose of this study was evaluation of TP53 oncoprotein and its relation to different grades of mucoepidermoid carcinoma.

**Materials & Methods:** This retrospective study included 22 paraffin embedded mucoepidermoid carcinoma samples stained by H&E. The samples were classified into low grade, intermediate grade and high grade. Then, new sections were made and stained by immunohistochemistry method (IHC method) for TP53 marker. Finally, the relation between the two methods was statistically (ANOVA and Kendall test) analyzed. Seven sections of normal salivary gland tissue were also used as control group.

**Results:** All control cases were negative for TP53 marker while 68.2% of mucoepidermoid carcinoma samples were positive. A significant relation was revealed between histological grade and nuclear TP53 staining by IHC method.

**Conclusion:** Parallel to increasing histologic grade of salivary gland mucoepidermoid carcinoma, TP53 expression is also increased so that immunohistochemistry technique is helpful for determination of the biologic behavior of salivary gland mucoepidermoid carcinoma and prognosis of patients.

**Key words:** Mucoepidermoid carcinoma, grading, immunohistochemistry, TP53.

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