ABSTRACT

HISTOMORPHOLOGICAL PATTERNS OF
SALIVARY GLAND TUMORS

INTRODUCTION:

Salivary gland tumors are relatively uncommon constituting about 3 to 10% of all head and neck neoplasms. The WHO classification revised 2005 of salivary gland tumors account for more than 35 distinct variants of salivary gland neoplasms. Among this 70-80% of tumors that arises from parotid gland. Only 15-30% are malignant, the rest are benign. In the present study we wish to find the incidence of various salivary gland tumors in our hospital.

AIMS:

To find out the incidence of various salivary gland tumors, categorize them according to WHO classification and delineate the histomorphological patterns of salivary gland tumors.

MATERIALS AND METHODS:

A total of 57 biopsy and excised specimens of salivary gland tumors were collected and examined in the department of pathology at Karpaga Vinayaga Institute of Medical Sciences, Madhuranthagam from August 2012 to July 2017 for a period of five years. All the biopsy and excised specimens were processed into paraffin embedded sections and stained with Haematoxylin-Eosin and examined under the light microscope by pathologist. Special stains like PAS was applied and Immunohistochemical markers were also applied to the tissue sections were ever indicated to enhance the accuracy.
RESULTS:

Out of total 57 salivary gland tumors studied, 40 were benign and 17 were malignant tumors. Pleomorphic Adenoma was the most commonly observed benign tumor. Mucoepidermoid carcinoma was the most commonly observed malignant tumor. Most of the benign tumors were found with the mean age of 31 years and most of the malignant tumors were found with the mean age of 59 years. Female gender was the commonly affected gender by both benign and malignant salivary gland tumors.

We also tried to clarify the possible role of P63, CK-14 and HER2/neu in the diagnosis and differential diagnosis between various types of salivary gland tumors. The P63 was always positive in diagnosing Pleomorphic adenoma, Mucoepidermoid carcinoma, Adenoid cystic carcinoma and Carcinoma ex-pleomorphic adenoma, CK-14 was always positive in Mucoepidermoid carcinoma, Adenoid cystic carcinoma, Carcinoma ex pleomorphic adenoma and Salivary duct carcinoma. Similarly HER2/neu shows diffuse and strong membranous staining in salivary duct carcinoma.

CONCLUSION:

In the present study we indentified that benign tumors were more common than malignant tumors. Most common benign tumor was Pleomorphic adenoma. Mucoepidermoid carcinoma was the most common malignant salivary gland tumor. Benign tumors were seen in younger age group whereas the malignant tumors were commonly seen in elderly individuals. Female gender was predominantly affect by both benign and malignant salivary gland tumors. Further Immunohistochemistry was found as a useful tool in diagnosis and differential diagnosis of salivary gland tumors.