



A CLINICO-PATHOLOGICAL STUDY OF SALIVARY GLAND TUMORS

General Surgery

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ABSTRACT

Aim and Objectives: Salivary gland tumors are one of the most complex human neoplasm's, demonstrating variations in their clinicopathological profile related to racial and geographic differences. This study was to find out the clinicopathological variation of salivary gland tumours in our region.

Materials & Methods: It is a type of retrospective study, all cases of primary epithelial salivary gland tumors, which had been recorded in a last one and half year from September 2015 to February 2017 were included. Clinical data such as histopathologic type and site of the lesion as well as patients' age and gender were analyzed.

Results: The average age group involved was between 35-45 years of age. Benign tumors were more than malignant salivary gland tumors. Pleomorphic adenoma was the commonest among benign and Adenoid cystic carcinoma was common in malignant tumours. Male were affected more than females. Majority of tumours arises from major salivary gland. Most common operation performed was superficial parotidectomy. Conclusions: It is concluded that benign tumors are more with parotid gland involvement is common. Age group involved was between 35-45 years. Male were more affected than females.

KEYWORDS:

salivary gland tumor, Pleomorphic adenoma, warthins tumor, parotidectomy

Introduction

Salivary gland neoplasms are remarkable for their histological diversity and several studies point to their varied occurrence in the population. Salivary gland tissues are diffusely distributed in the upper aerodigestive tract. The parotid, submandibular, and sublingual glands are the major salivary glands. Minor salivary glands are present in many sites, such as the lips, gingiva, cheek, palate, tongue, oropharynx, paranasal sinuses, and parapharyngeal space. Salivary gland tumors are relatively uncommon lesions accounting for 3–6% of all head and neck neoplasms. The global incidence of these tumors is 0.4–13.5 per 100,000 persons annually. These neoplasms composed heterogeneous groups of tumors with variable histological pictures. The site, patient age, and sex distributions of different types of salivary gland neoplasms vary with race and geographic location. Salivary gland neoplasms constitute, by virtue of their diverse histopathology and variable biological course, a fascinating and challenging subject to both surgeons and pathologists in general and the Head and neck surgeons in particular. Parotid gland tumors are especially challenging because of the intimate anatomical relationship of the gland to the facial nerve, presence of intraparotid lymph nodes and presence of deep lobe. The consequence of sacrificing the facial nerve, may at times constitute a deterrent to the performance of adequate surgery for tumor arising from the Parotid gland. The range of numerous histological possibilities associated with a parotid gland mass and a lack of universally accepted classification of Parotid tumors constitute a further challenge to the study. The majority of neoplasms arise in the parotid gland (70%), whereas tumors of the submandibular gland (22%), and sublingual and minor salivary glands (8%) are less common. The ratio of malignant to benign tumors varies by site. Parotid-80% benign, 20% malignant, submandibular and sublingual gland – 50% benign, 50% malignant, minor salivary glands – 25% benign, 75% malignant. Patients with benign salivary gland neoplasms usually present with asymptomatic, slowly enlarging mass

Materials & Methods:

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Results:

The average age group involved was between 35–45 years of age. Male were affected more than females.

Majority of tumours arises from major salivary gland.

Type of salivary gland	Number of cases
Major	34
Minor	06

Benign tumors were more than malignant salivary gland tumors

Type	Number of cases
Benign	31
Malignant	09

Pleomorphic adenoma was the commonest among benign.

Types	No. of cases
Pleomorphic adenoma	17
Monomorphic adenoma	03
Warthins tumor	08
Basal-cell adenoma	03
Total	31

Adenoid cystic carcinoma was common in malignant tumours.

Adenoid cystic carcinoma	04
Mucoepidermoid carcinoma	02
Malignant mixed tumor	02
Lymphoma	01
Total	09

Most common operation performed was superficial parotidectomy.

Discussion

Approximately 1% of salivary gland tumors are epithelial myoepithelial carcinomas. Although they have predilection for parotid gland they may arise in minor salivary glands and rarely in extra oral sites such as the paranasal sinuses, pharynx, bronchus, palate. It is seen predominantly in elderly women with peak incidence in 7th decade. The present study of 40 cases exhibit an incidence of 31 benign tumors and 09 malignant tumors with pleomorphic adenoma accounting being the most common of benign tumors. This is in agreement with Takahama Junior A, Satko I, Stanko P. The present series tallied with the other studies. The study conducted by Spiro RH in 1986 showed benign tumors to constitute about 80% and malignant tumor to be about 20%. Pleomorphic adenoma undoubtedly is the most common Salivary Gland Tumor. As, similar to the present study, all researchers worldwide have noticed that this neoplasm stands for 40.4–89.9% of all SGTs (Valizadeh and Mohagheghi, 1995; Ma'aita et al., 1999; Satko et al., 2000; Vargas et al., 2002; Vuhahula, 2004; Ito et al, 2005; Lima et al., 2005; Otoh et al., 2005; Ansari, 2007; Li et al., 2008; Subhashraj,

2008; Atarbashi-Moghadam et al., 2010). Warthin's tumor was the second common benign tumor. Other studies in Denmark and Pennsylvania reported a high incidence of this tumor (about 30% of parotid tumors), however some populations such as Africans were affected rarely (Poulsen et al., 1987; Monk and Church, 1992; Vuhahula, 2004).

Conclusions:

It is concluded that benign tumors are more with parotid gland involvement is common. Age group involved was between 35-45 years. Male were more affected than females.

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