

## Original Article

# Salivary Gland Lesions in Jammu Population: A Series of Cases over Eight Year Period

Nidhi Khajuria<sup>1</sup>, Rubeena Anjum<sup>2</sup>

<sup>1</sup>Registrar, <sup>2</sup>HOD, Department Of Oral Pathology, IGGDC, Jammu, J & K, India

### ABSTRACT:

**Background:** malignant tumors of the minor salivary glands comprise a small but significant proportion of oral cancers. We analyzed this group of tumors in our population. **Methods:** the records of all cases of salivary gland lesions diagnosed at the department of oral Pathology, IGGDC Jammu, during a period of 9 years (2011-2019) are described. **Results:** A total of 40 tumors were recorded during the study period. these included 4 malignant minor salivary gland lesions(10%), ten of these (25%) arose in the parotid gland, while the remaining tumors originated at other sites in the oral cavity. The commonest histological type was mucocele, constituting 20 cases (80 %). the least common type was mucoepidermoid carcinoma comprising 1 (0.025%) cases. the mean age of cases was 43.4 years and the male-to-female ratio was 1:1.5. There were 2 cases each of adenocarcinoma and clear cell adenocarcinoma. The remaining cases included undifferentiated carcinomas, adenocarcinomas (not otherwise specified) and a few other rare tumors. **Conclusion:** Mucocele was the commonest salivary gland lesion of the minor salivary glands. The palate was the commonest location of these tumors.

**Key words:** Salivary lesions, salivary gland, neoplasm.

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**Corresponding author:** Dr. Nidhi Khajuria, Registrar, Department Of Oral Pathology, IGGDC, Jammu, J & K, India

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### INTRODUCTION

Salivary gland tumors (SGTs) are a heterogeneous group of neoplasms in the maxillofacial area with different clinical behavior and diversified morphologic appearance.<sup>1</sup> Salivary gland tumors are relatively uncommon, account to less than 3% of all neoplasms of the head and neck region.<sup>2</sup>

Where as tumors of minor salivary gland origin comprises of less than 25% of all salivary neoplasms.<sup>3</sup> The parotid gland is the common site for the benign lesions (70%) CASES.<sup>4</sup> Whereas sublingual gland is the common site for the malignant lesions.(90%) cases.<sup>5</sup> Salivary gland tumors are of great interest for both the histopathologists and surgeons because of their varied histological and biological patterns.<sup>6</sup> In spite of the uncommon lesion in the maxillofacial region, they are an important issue in the science of head and neck pathology, due to their unpredictable clinical course, difficult diagnosis and management of disease. The exact cause of etiology for this group of neoplasms have not been recognized however; sunlight, Ionizing, chemotherapy, radiation, smoking and

vitamin A deficiency have been pointed out in the literature.<sup>7,8</sup>

These tumors have inconsistent characteristics in different countries and it is found that geographic location and ethnic factors may also play role in the clinicopathologic profile of these tumors.<sup>9</sup> We didn't found any study on the salivary gland neoplasm in Jammu population j& k. This research aims to analyzes a large group of patients in Jammu population pertaining to clinicopathologic data of tumors.

### MATERIALS AND METHOD

A cross-sectional study was conducted in the department of oral pathology at Indira Gandhi Dental College And Hospital Jammu Hospital, from March 2011 to Jan 2018. A total of 40 patients of salivary gland lesions were included. Data collected included the detailed history, physical examination, cytological and histopathological findings.

## RESULTS

A total of 40 tumors were recorded during the study period. these included 4 malignant minor salivary gland lesions(10%), 10 of these (25%) arose in the parotid gland, while the remaining tumors originated at other sites in the oral cavity. The commonest histological type was mucocele, constituting 20 cases (80 %). the least common type was mucoepidermoid carcinoma comprising 1 (0.025%) and nine cases were pleomorphic adenoma. The mean age of cases was 43.4 years and the male-to-female ratio was 1:1.5 There were 2 cases each of adenocarcinoma and clear cell adenocarcinoma. the remaining cases included undifferentiated carcinomas, adenocarcinomas (not otherwise specified) and a few other rare tumors

## DISCUSSION

Tumors of the minor salivary glands constitute a heterogeneous group of neoplasms originating from the proliferation of different precursor cells.<sup>10-11</sup>

Many occur within the oral cavity, although origination from other sites in the upper aerodigestive tract, such as the tharot pharynx, nasal cavity and paranasal sinuses is reported.

The etiology is unknown and unlike squamous cell carcinoma is not related to smoking. Tumors of the salivary glands constitute an important area in the field of oral and maxillofacial pathology. A number of investigators have published their findings on salivary gland neoplasms, but a comparison of these studies is often difficult. Some studies have been limited to only the major glands or have not included all the minor salivary gland sites. An Iranian study of 130 cases (9) found 68.2% benign and 31.8% malignant tumours. Although these reports are from different geographical areas, they are very similar between each other and to the present review, suggesting that benign salivary gland tumours are more common than malignant tumours worldwide, with an estimated prevalence between 67 and 75% of all salivary gland neoplasms.<sup>12</sup>

Tian et al.<sup>13</sup> and Li et al.<sup>14</sup> reported in their series that the majority of primary epithelial salivary gland neoplasms were located in major salivary glands, especially the parotid gland. In the present study 25 % of the primary epithelial tumours compromised major salivary gland with a marked predilection for the parotid gland, making it the most affected gland. The minor salivary glands together were the second more common location. According to the gender distribution of these neoplasms there was a M:F ratio of 1:1.5 which is very similar to the one reported by Cho et al.<sup>15</sup> which was 1:1.25. The average age for this group of patients was 43.4 years

## CONCLUSION

Salivary glands because of their unique position, complex histogenesis, diverse histopathology, and clinical

significance can link the dental profession with the medical profession. However, neoplasms of salivary glands are neglected by ENT surgeons and ignored by the Dentists. Salivary gland tumours are uncommon neoplasms that usually arise in the parotid gland showing some predilection for females. Benign tumours are by far more common than malignant tumours. Pleomorphic adenoma and mucocele were the most common benign lesions reported in this series respectively.

## REFERENCES

1. Ansari M (2007). Salivary gland tumors in an Iranian population: a retrospective study of 130 cases. *J Oral Maxillofac Surg*, 65, 2187-94.
2. Toida M, Shimokawa K, Makita H, Kato K, Kabayashi A, Kusunoki Y, et al. Intraoral minor salivary gland tumors: a clinicopathological study of 82 cases. *Int J Oral Maxillofac Surg*, 34: 528-532, 2005.
3. (Bardwill JM, Reynolds CT, Ibanez ML, Luna MA. Report of 100 tumors of minor salivary glands. *Am J Surg*. 112: 493-497, 19E.
4. Eveson JW, Cawson RA. Tumors of minor (oropharyngeal) salivary glands: A demographic study of 336 cases. *J Oral Pathol*. 1985;14:500-9.
5. Arshad AR. Parotid swellings: report of 110 consecutive cases. *Med J of Mala* 1998;53(4):417-22.
6. Vuhahula EA. Salivary gland tumors in Uganda: Clinical pathological study. *Afr Health Sci* 2004; 4 : 15-23.
7. Licitra L, Grandi C, Prott FJ, et al (2003). Major and minor salivary glands tumours. *Crit Rev Oncol Hematol*, 45, 215-25.
8. Hashemi P, Zarei MR, Chamani G, et al (2007). Malignant salivary glands tumors in Kerman province: a retrospective study. *Dent Re J*, 4, 4-10.
9. Kayembe MK, Kalengayi MM (2002). Salivary gland tumours in Congo (Zaire). *Odontostomatol Trop*, 25, 19-22 .
10. Hyam DM, Veness MJ, Morgan GJ . Minor salivary gland carcinoma involving the oral cavity or oropharynx. *Australian Dental Journal* 2004;49(1):16-9.
11. Pandey M, Thomas S, Mathew A, nair Mk. Malignant tumors of the minor salivary glands: a survival analysis of 17 years from a Tertiary refer- -ral Cancer Centre. *J postgraduate Medicine* 2003; 49:25-8.
12. Shishegar M, Ashraf MJ, Azarpira N, Khademi B, Hashemi B, Ashrafi A. Salivary gland tumors in maxillofacial region: a retrospective study of 130 cases in a southern Iranian population. *Pathology research international*. 2011;2011:934350.
13. Tian Z, Li L, Wang L, Hu Y, Li J. Salivary gland neoplasms in oral and maxillofacial regions: a 23-year retrospective study of 6982 cases in an eastern Chinese population. *International journal of oral and maxillofacial surgery*. 2010;39:235-42.
14. Li LJ, Li Y, Wen YM, Liu H, Zhao HW. Clinical analysis of salivary gland tumor cases in West China in past 50 years. *Oral oncology*. 2008;44:187-92.
15. Cho KJ, Ro JY, Choi J, Choi SH, Nam SY, Kim SY. Mesenchymal neoplasms of the major salivary glands: clinicopathological features of 18 cases. *Eur Arch Otorhinolaryngol*. 2008;265 Suppl 1:S47-56.