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# Non specific oral cavity lesions: Our experience

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#### Abstract

*Aim:* The present study was conducted to study the pattern and distribution of various non-specific oral cavity lesions in a tertiary care hospital GMC Baramulla, Kashmir.

**Background:** Oral cavity presents with diversity of oral pathology both benign and malignant. Benign lesions are more common than malignant ones. The lesion may present either as mucosal surface lesion or alteration in thickness, texture or colour. The association of oral cavity lesion is strongly linked to ill fitting dentures, tobacco and alcohol consumption.

Materials and methods: This was a retrospective study carried out in the Department of ENT in GMC Baramulla during a period of one year from April 2021 to March 2022. The study included 62 patients.

**Results:** The most common site was buccal mucosa with 17 (27.4%) cases was the commonest site of involvement followed by tongue 13 (20.9%) cases, gingival was involved in 8 (12.9%) cases, palate in 7 (11.2%), tonsils 6 (9.67%) cases, lips accounted for 6(9.67%) cases, alveolus 3 (4.8%) cases, floor of mouth saw 2 (3.2%) cases. Out of the 62 cases of oral cavity lesions, 60 cases (96.8%) were benign and 2 cases (3.2%) were malignant. The malignant lesions included one case of squamous cell carcinoma of lateral border of tongue and one case of Mucoepidermoid carcinoma of minor salivary gland of buccal mucosa.

**Conclusion:** A variety of lesions were encountered in the study with predominance of benign lesions. Histopathology of the lesion is mandatory to confirm diagnosis and rule out malignancy. A larger epidemiopathological study in this region needs to be carried out.

Keywords: oral cavity lesions, buccal mucosa, mucoepidermoid carcinoma.

# INTRODUCTION

The oral cavity comprises of multiple types of tissue viz mucosa, minor and major salivary glands, muscle, nerves, vessels, bone, teeth and periodontal structures. The oral cavity lesions may originate from any of these tissues.

The oral cavity lesion can present as a mucosal surface lesion (ulceration, white, red, brown lesions), swelling at an oral subsite (lips/buccal mucosa, tongue, floor of mouth, palate and jaws or alteration in thickness,texture and colour. (Wong T, Yap T, Wiesenfeld D). Ulceration is most common presenting sign of wide spectrum of oral pathology. Most of the ulcerations are traumatic, immunological or infectious in origin. Malignancy may also present as ulcerated lesion. Hence it's very important for any ulcer that persists beyond 2 weeks, to be biopsied (Berkovitz BKB, Holland GR, Moxham BJ).

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Alteration in thickness, texture and colour of the oral mucosa can present an array of white and/or red lesions. It may be due to frictional causes, infectious causes, immunemediated causes or pre-malignant and malignant changes. Such types of oral lesions are usually asymptomatic.

The ill fitting dentures, tobacco chewing and cigarette smoking are strongly linked to the etiopathogenesis of oral cavity lesions, both benign and malignancy.

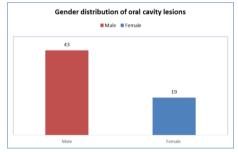
# MATERIALS AND METHODS

The present study was a retrospective study, carried out in the department of ENT Head & Neck Surgery, Government Medical College and Hospital, Baramulla (Jammu and Kashmir) during the period of 01 year from April 2021 to March 2022.

The study included all the patients visiting to ENT OPD of the hospital with oral pathology. Findings of clinical history and physical examination were noted. The parameters included in the study were age, gender, site and histopathological diagnosis. All the biopsy specimens of oral cavity lesions were included in the study.

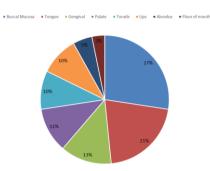
### RESULTS

A total of 62 patients were included in the study. The age ranged from 8 to 72 years. Out of 62 patients, 43(69.35%) were males and 19(30.65%) were females with male to female ratio 2.3:1. The youngest patient (8 year male) presented with mucocele of the lower lip. The oldest patient was 72 year female had leukoplakia buccal mucosa. The more common age group (47.6%) was 20- 40 years followed by the age group above 60 years (19%). Among 62 cases, 60 cases (96.8%) were benign and 2 cases (3.2%) were malignant.



The sites of involvement of various lesions included- tongue, buccal mucosa, tongue, tonsil, floor of mouth, palate, upper lip, lower lip and cases was the commonest site of involvement followed by tongue 13 (20.9 %) cases, gingival was involved in 8(12.9%) cases, palate in 7(11.2%), tonsils 6 (9.67\%) cases, lips accounted for 6(9.67%) cases, alveolus 3(4.8%) cases, floor of mouth saw 2 (3.2\%) cases.

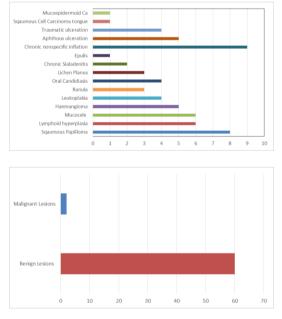
Regional distribution of oral cavity lesions



Benign lesions mostly involved the buccal mucosa followed by tongue, tonsil, palate, lower lip, upper lip, floor of mouth and vestibule. Buccal mucosa was the most common site involved in the non specific inflammatory lesions.

Among the benign lesions, sqaumous papilloma was seen in 8, lymphoid hyperplasia 6, mucocele in 6, haemangioma in 5, , leukoplakia 4, ranula 3, oral candidiasis 4, lichen planus 3, chronic sialadenitis 2 and one case of epulis. Chronic nonspecific inflammatory lesions accounted for 9 cases. Benign ulceration of the oral mucosa was also seen in 9 cases. The ulcerations were either traumatic secondary to ill fitting dentures, infectious or aphthous ulceration.

In the present study, 2 cases of malignant lesions were noted. Malignant lesions were SCC of lateral border of oral tongue and one case mucoepidermoid carcinoma arising from minor salivary glands of buccal mucosa.



#### Various types of oral cavity lesions

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# DISCUSSION

The present study was aimed to study the pattern of various oral cavity lesions in the population. In the present study the age range was 8 to 72 years. This correlates with the study done by Khateeb et al, in Northern Jordanian population in which the mean age of the patient ranged from 6 to 98 years. In another study done by Furlong et al, the youngest patient was 9 years and the oldest was 92 years old. In the present study the peak incidence of oral cavity lesions were seen in age group 20 to 40 years which was comparable with study done by Al-Khateeb et al where peak incidence were seen in 2nd to 4th decade.

In the present study, the M:F was 2.3:1, which was comparable with the study conducted by Puasaini S and Brar R who observed male to female ratio of 2:1. This could be attributed to prevalence of deleterious oral habits among males.

In the present study, the incidence of benign lesions was 95.2%. This was comparable to the study conducted by Mujica et al where majority of the lesions were benign. The commonest site was buccal mucosa. The study conducted by Wahi et al and Modi et al also showed buccal mucosa as the most common site . This could be attributed to prevalence of habits of pan chewing and khaini.

In the present study the commonest cases were of sqaumous papilloma and lymphoid hyperplasia, followed by haemangioma. The most common site developing papilloma was buccal mucosa (5 cases) followed by tongue (3 cases) and soft palate (1 case). Tonsil was the commonest site developing lymphoid hyperplasia. Mucocele was seen in 6 cases, 4 arising from lower lip, one from upper lip and one from ventral surface of oral tongue. The study conducted by Oliveira et al showed the similar result of lower lip being the commonest site for mucocele.

Chronic non specific inflammation was seen in 9 cases. We also had 8 cases of benign ulceration out of which 5 cases were aphthous ulcerations and 3 patients had developed ulceration due trauma secondary to jagged teeth. The present study also had 3 cases of lichen planus involving buccal mucosa and vestibule, Oral lichen planus is a chronic, immune mediated mucosal condition that affects up to 2% of the population, with a slight female predilection (Bouquot JE, Gorlin RJ).

The present study also had 4 cases of oral candidiasis, 2 cases of chronic sialadenitis of sabmandibular gland and one case of epulis involving upper gingival. Oral candidiasis involved the tongue in all 3 patients in the study.

In the present study, 2 cases of malignant lesions were noted. There was one case of squamous cell carcinoma (SCC) arising from lateral border of oral tongue in a 65 year old male who was a chronic smoker and chronic user of khaini. The patient developed non-healing ulceroprliferative lesion of 6 month duration. In studies done by Ildstad et al and Weber et al, majority of the squamous cell carcinomas were seen in the 6th decade. The present study also had one case of mucoepidermoid carcinoma arising from minor salivary glands of buccal cavity. The patient was 42 year old female with swelling of 5 month duration duration progressively increasing in size.

#### CONCLUSION

In the present study, majority of the oral cavity lesions were benign in nature with most of them arising from the buccal mucosa. Diagnosis of oral cavity lesions cannot be reached by just history and clinical examination, thus histopatholigical examination of oral cavity lesion is of primary importance to reach an accurate diagnosis and to rule out malignancy. Furthermore the demoghraphic details such as age, gender, and also the deleterious oral habits such as tobacco chewing, khaini etc should be noted which will help in identifying the risk groups.

## REFERENCES

- Wong T, Yap T, Wiesenfeld D. Common causes of 'swelling' in the oral cavity. Aust J Gen Pra 2020;49(9):575–80.
- Berkovitz BKB, Holland GR, Moxham BJ. Oral anatomy, embryology and histology. 3rd edn.Edinburgh, UK: Mosby, 2002.
- 3. Al-Khateeb TH. Benign oral masses in a Northern Jordanian population- a retrospective study. Open Dent J 2009; 3:147-53.
- Furlong MA, Fanburg- Smith JC, Childers EL. Lipoma of the oral and maxillofacial region: site and subclassification of 125 cases. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2004;98:441-50.
- Ildstad ST, Bigelow ME, and Remensnyder JP. Squamous cell carcinoma of the alveolar ridge and palate. A 15-year survey. Ann Surg 1984;199:445–53.
- Modi D, Laishram RS, Sharma LD, Debnath K. Pattern of oral. cavity lesions in a tertiary care hospital in Manipur, India. J Med Soc 2013; 27:199-202.
- Wahi PN, Kapur VL, Luthra UK, Srivastava MC. Submucous fibrosis of the oral cavity: 2: Studies on epidemiological. Bull World Health Organ 1966; 35:793-9.
- Oliveira DT, Consolaro A, Freitas FJ. Histopathological Spectrum of 112 cases of mucocele. Braz Dent J 1993;4:29-36.
- Weber RS, Peters LJ, Wolf P, Guillamondegui O. Squamous cell carcinoma of the soft palate, uvula, and anterior faucial pillar. Otolaryngol Head Neck Surg 1988;99:16-23.
- 10. Mujica V, Rivera H, Carrero M. Prevalence of oral soft tissue lesions in an elderly venezuelan population. Med Oral Pathol Oral Cir Bucal 2008;13:E270-4.
- Bouquot JE, Gorlin RJ. Leukoplakia, lichen planus, and other oral keratoses in 23,616 white Americans over the age of 35 years. OralSurg Oral Med Oral Pathol 1986;61(4):373-81. doi: 10.1016/0030-4220(86)90422-6.