

Clinical Evaluation of Oral Benign Lesions in population of Jammu and Kashmir

¹Dr. Akriti Mahajan, MBBS, MS ENT, Senior Resident, Govt. Medical College, Kathua, J&K.

²Dr. Ritesh Mahajan, MBBS, MS ENT, ENT Consultant, Govt. Medical College, Kathua, J&K.

Corresponding Author: Dr. Akriti Mahajan, MBBS, MS ENT, Senior Resident, Govt. Medical College, Kathua, J&K.

How to citation this article: Dr. Akriti Mahajan, Dr. Ritesh Mahajan, “Clinical Evaluation of Oral Benign Lesions in population of Jammu and Kashmir”, IJMACR- July – August - 2022, Vol – 5, Issue - 4, P. No. 175 - 180.

Copyright: © 2022, Dr. Akriti Mahajan, et al. This is an open access journal and article distributed under the terms of the creative commons attribution noncommercial License 4.0. Which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Type of Publication: Original Research Article

Conflicts of Interest: Nil

Abstract

Oral cavity is the commonest sites for tumours and tumour like lesions (odontogenic or non-odontogenic). Oral lesions can affect any age group. Any abnormal alteration in color, surface aspect, swelling, etc. in oral mucosal membrane is known as oral mucosal lesion. The prevalence of oral mucosal lesions globally varies according to geographical areas from 4% to 64.7%. This prospective observational study was done in the ENT department of Government Medical College, Kathua, J&K, during the period February 2022 to July 2022 and a total of 100 patients diagnosed with oral benign lesions and exhibiting the sign and symptoms of oral benign lesions (white mouth ulcer, oral thrush, stomatitis, etc.) were included. Findings revealed that the majority (37%) of the patients were in the age group of 31-40 years and most of the patients were males 64% with the male female ratio of 1.8:1. Mostly (28%) of the patient had matric education status and the majority of the participants were labourer (43%), 62% were from low socioeconomic class and residing (59%) in rural area and most common oral benign lesions were leukoplakia

(30%) and commonest site of development of oral benign lesion was soft palate (30%). It was concluded that all the patients were at a risk factor of transformation of oral benign lesions into malignant lesions. Thus, the actual diagnosis and screening is must for early detection or for appropriate treatment of these lesions.

Keywords: Oral Lesion, Benign, Oral Cavity, Non-neoplastic lesions, Buccal mucosa and pre-malignant lesions.

Introduction

The abnormal growth in the oral cavity, benign or malignant is known as a oral lesion, generally it grows slow and are non-invasive. A variety of oral lesions are present in oral cavity.¹

Oral cavity is the commonest sites for tumours and tumour like lesions (odontogenic or non-odontogenic).² Oral lesions can affect any age group. Any abnormal alteration in color, surface aspect, swelling, etc. in oral mucosal membrane is known as oral mucosal lesion. The prevalence of oral mucosal lesions globally varies according to geographical areas from 4% to 64.7%.³

An overall prevalence of oral neoplasm was 37% and malignant lesions were 63% in central India.¹In Kashmir valley the overall prevalence of oral mucosal lesion was 8%.⁴

The oral lesions can lead to poor quality of life among patients as it causes various problems, like discomfort, pain during mastication, difficult swallowing, difficult speech, halitosis, etc.⁵

The poor oral hygiene, chronic smoking, removable dentures, malposition, use of tobacco, etc. increases the risk of lesion development. As per Global Adult Tobacco Survey, it was observed that the India is the 3rd largest producer of tobacco and also ranked 2nd in consumption of tobacco. Various studies observed that use of tobacco in any form is the major cause of oral lesion development (benign or malignant).⁶

The most common oral lesions observed in oral cavity are benign, i.e., lymphoid hyperplasia, retention cyst, inflammation, hemangioma, fibroma etc. and squamous cell carcinoma is the most common malignant lesion in the oral cavity.⁷

Thus, the present study was undertaken to determine the overall prevalence of benign oral lesion.

Material and methods

This prospective observational study was done in the ENT department of Government Medical College, Kathua, J&K during the period February 2022 to July 2022 after obtaining approval from the institute ethical committee.

A total of 100 patients diagnosed with oral benign lesions and exhibiting the sign and symptoms of oral benign lesions (white mouth ulcer, oral thrush, stomatitis, etc.) and attending the ENT department were involved after obtaining the informed consent from all the patients.

Data was collected with the help of a structured proforma which consists the items (data) regarding demographic variables (age, gender, education, occupation), clinical manifestations and investigations detail.

Inclusion Criteria

- Patients who were willing to participate in the study were included.
- Patients with oral benign lesion.

Exclusion Criteria

- The patients with co-morbid illnesses were excluded.
- Patients with oral lesions due to systemic diseases.

A detailed history and oral examination was done. The demographic variables; age, gender, education, occupation of the patient were recorded. Clinical manifestations and other associated systemic symptoms (pain, fever, bleeding from lesion, etc.) were recorded. Inspection of oral lesion for all patients was done, the characteristics of lesion were recorded and further investigation, radio graphic imaging, oral cytology, biopsy and FNAC was done in all the patients.

Data was tabulated, organized, analyzed and interpreted in both descriptive and inferential statistics i.e. frequency and percentage distribution, by using statistical package for social science software (SPSS), version 22. Categorical variables were expressed as number and percentage.

Observations and results

In the present study, a total of 100 patients diagnosed with oral benign lesion and attending the ENT department were involved.

In the present study it was observed that the majority (37%) of the patients were in the age group of 31-40 years and most of the patients were males 64% with the male female ratio of 1.8:1. Mostly (28%) of the patient

had matric education status and the majority of the participants were labourer (43%), 62% were from low socioeconomic class and residing (59%) in rural area.

Table 1: Risk factors

Risk factors	Number	Percentage
Use of tobacco	31	31
Alcohol intake	19	19
Smoking	25	25
Human papilloma virus	3	3
Poor nutrition	11	11
Use of dentures	1	1
Poor oral health	10	10

Figure 1: Risk Factors

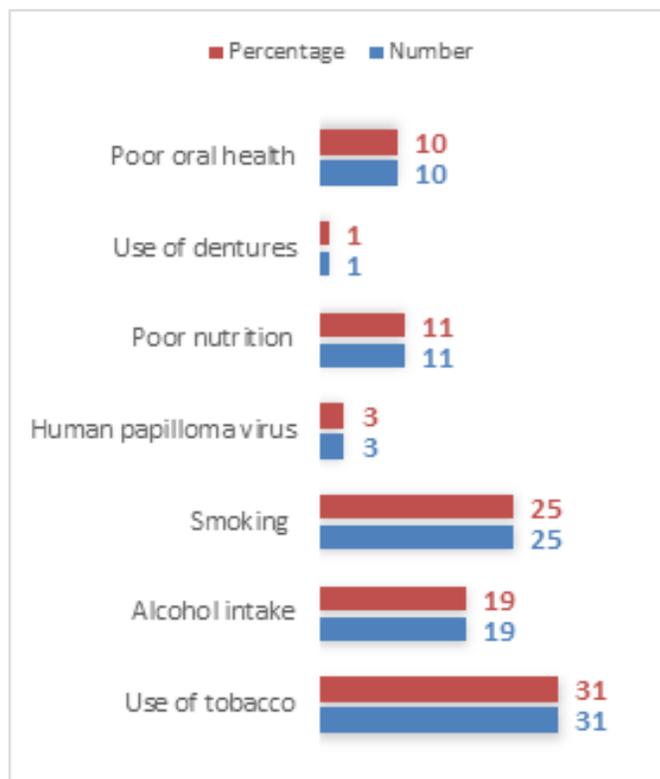


Table 1 showed that in the majority (31%) of the patient's habit of tobacco chewing was the major risk factor of development of oral benign lesion.

Followed by alcohol intake (19%), smoking (25%), human papilloma virus (3%), poor nutrition (11%), use of dentures (1%) and poor oral health (10%).

Table 2: Clinical manifestation

Clinical manifestations	Number	Percentage
Halitosis	33	33
Oral pain	83	83
Difficulty in chewing	79	79
Difficulty in swallowing	74	74
Difficulty in speaking	47	47
Sore in mouth	39	39
Growth of a lump	63	63

Table 2 depicted that the most (83%) of the patients had oral pain, followed by halitosis (33%), difficulty in chewing (79%), difficulty in swallowing (74%), difficulty in speaking 47%, sore in mouth (39%) and growth of a lump (63%).

Table 3: Types of oral benign lesions

Types	Number	Percentage
Oral candidiasis lesion	9	9
Herpes labialis	5	5
Aphthous stomatitis	18	18
Mucocele fibroma	24	24
Pyogenic granuloma	1	1
Erythema migrans	3	3
Hairy tongue	0	0
Lichen planus	10	10
Leukoplakia	30	30

Table 3 represent that the most frequent type of oral benign lesion was leukoplakia (30%).

Followed by oral candidiasis (9%), herpes labialis (5%), aphthous stomatitis (18%), mucocele fibroma (24%), pyogenic granuloma (1%), erythema migrans (3%) and lichen planus (10%).

Figure 2: Leukoplakia



Figure 3: Mucocele Fibroma



Figure 4: Sites of oral benign lesions

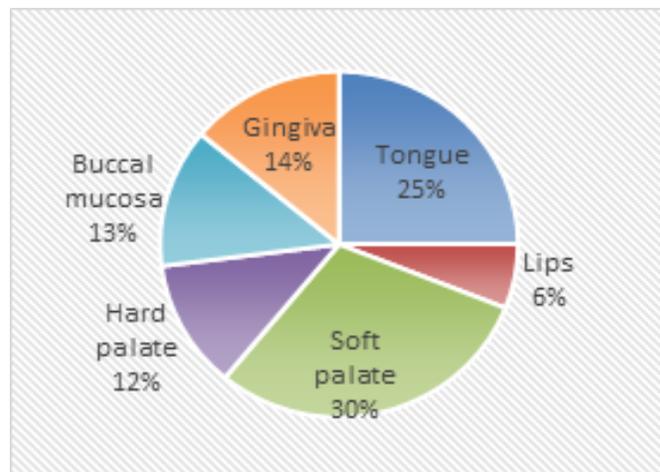


Table 4 showed that the commonest site of development of oral benign lesion was soft palate (30%), followed by tongue (25%), lips (6%), hard palate (12%), buccal mucosa (13%) and gingiva (14%).

Further, it was observed that the majority of the patients were males affected by oral benign lesions, as there was male predominance in leukoplakia with male and female ratio 1.3:1, followed by mucocele fibroma with male and female ratio 1.4:1. Aphthous stomatitis was commonly seen in female patients with female to male ratio 1.54:1, followed by lichen planus with female to male ratio 1.42:1.

The oral benign lesions were most commonly found in 31-40 years of age group. The leukoplakia was commonly found in the 21-30 years (70%), followed by mucocele fibroma (73.9%) was found in 31-40 years, Aphthous stomatitis was common (64%) in 41-50 years, lichen planus (70%) was common in 31-40 years of age and oral candidiasis (66%) was commonly seen in age 41-50 years. No oral benign lesion was found in age \leq 20 years and \geq 60 years of age group.

Discussion

In this study 100 patients, who were clinically diagnosed with oral lesion upon examination were included.

Table 4: Sites of oral benign lesion

Site	Number	Percentage
Tongue	25	25
Lips	6	6
Soft palate	30	30
Hard palate	12	12
Buccal mucosa	13	13
Gingiva	14	14

Detailed examinations and investigations were carried out in all the cases. Data was analyzed and discussed with previous literature.

In the present study it was observed that the majority (37%) of the patients were in the age group of 31-40 years and most of the patients were males 64% with the male female ratio of 1.8:1. Findings are in accordance with the study conducted by Ayaz Mehwish, et al. (2020), reported that majority (28%) of the patients were in the age group of 21-30.⁷ Similarly Allon Irit, et al. (2022), showed that the males were mostly affected than females.⁸

The majority (31%) of the patient's habit of tobacco chewing was the major risk factor of development of oral benign lesion and most (83%) of the patients had oral pain. Similarly, a study conducted by Ain TS, et al. (2016), reported that major risk factor was smoking (56.46%).⁹ In another study conducted by Patil et al. (2015), reported that major risk factors of oral benign lesion was tobacco use.¹⁰

The most frequent type of oral benign lesion was leukoplakia (30%) and commonest site of development of oral benign lesion was soft palate (30%), followed by tongue (25%). The findings are correlated with the study conducted by Allon Irit, et al. (2014), observed that lipomatous tumors (27.4%) were the commonest type of oral benign lesions and the commonest (28.3%) site of development of oral lesion was tongue.⁸ In similar study conducted by Handanakere SS. (2020), found that majority of the oral benign lesions were lipoma (61.53%).¹¹ Similarly Agarwal R, et al. (2015), found that most common site of occurrence of oral benign lesion was tongue (29.32%).¹²

The present study reported that the majority of the patients were males affected by oral benign lesions, as

there was male predominance in leukoplakia with male and female ratio 1.3:1, followed by mucocele fibroma with male and female ratio 1.4:1. Aphthous stomatitis was commonly seen in female patients with female to male ratio 1.54:1, followed by lichen planus with female to male ratio 1.42:1. Moreover, leukoplakia was commonly found in the 21-30 years (70%). In a similar study conducted by Keche PN, et al. (2017), observed the male predominance; as oral sub mucus fibroma was common in male with male female ratio 4.4:1 and was observed most commonly in 21-30 years age group with (57.1%).¹³

Conclusion

The present study concluded that most common oral benign lesions were leukoplakia (30%) and commonest site of development of oral benign lesion was soft palate (30%). The observed most common risk factor was use of tobacco. Among all the patients there was a risk factor of transformation of oral benign lesions into malignant lesions. Thus, the actual diagnosis and screening is must for early detection or for appropriate treatment of these lesions.

Reference

1. Suhani Ghai, Yogesh Sharma (2022) Demographic Profile of Benign and Malignant Oral Tumors in Central India: A Retrospective Comparative Study. Cureus14 (5): e25345.
2. Błochowiak K, Farynowska J, Sokalski J, Wyganowska-Świątkowska M, Witmanowski H. (2019) Benign tumours and tumour-like lesions in the oral cavity: a retrospective analysis. Postepy Dermatol 36 (6): 744 -751.
3. El Toum S, Cassia A, Bouchi N, Kassab I (2018) Prevalence and Distribution of Oral Mucosal Lesions by Sex and Age Categories: A Retrospective Study of

Patients Attending Lebanese School of Dentistry. *Int J Dent* :4030134.

4. Tasneem S., Owais Gowhar, Saima Sultan, Pradeep Tangade (2016) Prevalence of oral mucosal lesions and associated habits in Kashmir, India. *Int J Res Med Sci.* 4 (8):3525-3530.

5. Prashant N. Keche, Nishika nt P. Gadpayle, Surendra H. Gawarle, Gaurav A. Cha mania (2017) An observational study of benign oral lesions in central India. *Int J Otorhinolaryngol Head Neck Surg.* 3(4):816-820.

6. Ranjan Agrawal, Ashok Chauhan, Parbodh Kumar (2015) Spectrum of Oral Lesions in A Tertiary Care Hospital. *J Clin Diagn Res.* 9(6):EC11-3.

7. Feroz Ali Mehwish, Afzal Sapeedah, Mehdi Hasan, Kaukab Hibba (2020) Prevalence of reactive hyperplastic oral lesions. *Pakistan Oral & Dental Journal* 40: 162-166.

8. Allon I, Kaplan I, Gal G, Chau Shu G, Allon DM (2014) The clinical characteristics of benign oral mucosal tumors. *Med Oral Patol Oral Cir Buccal.* 19(5): e438-43.

9. Tasneem S. Ain, Owais Gowhar, Saima Sultan, Pradeep Tangade (2016) Prevalence of oral mucosal lesions and associated habits in Kashmir, India. *Int J Res Med Sci.* 4(8):3525-3530.

10. Patil S, Doni B, Maheshwari S. (2015) Prevalence and distribution of oral mucosal lesions in a geriatric Indian population. *Can Geriatr J.* 18(1):11-4.

11. Shruthi Satyanarayana Handanakere (2020) Clinical study of benign tumours and tumour like lesions of oral cavity. *IP Journal of otorhinolaryngology and Allied Science.* 3(3):104-108.

12. Agrawal R, Chauhan A, Kumar P. (2015) Spectrum of Oral Lesions in A Tertiary Care Hospital. *J Clin Diagn Res.* 9(6):EC11-13.

13. Prashant N. Keche, Nishika nt P. Gadpayle, Surendra H. Gawarle, Gaurav A. Cha mania (2017) An observational study of benign oral lesions in central India. *Int J Otorhinolaryngol Head Neck Surg.* 3(4):816-820.