



Clinicopathological Study of Benign Neoplastic Lesions of the Oral Cavity

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Oral benign tumors are common in the Indian subcontinent. These benign neoplastic lesions may mimic other tumors like lesions or malignant tumors of the oral cavity. Aim: The current study's goal is to investigate the demographical distribution of benign tumors of the oral cavity and to study their histopathological and site-wise distribution. Materials and method: It's a retrograde observational study of 30 patients. In the Indian subcontinent, benign tumors and tumor-like lesions are prevalent. Data is collected from the otorhinolaryngology department of a referral center and medical college in the Maharashtra state of India. Data was collected from previous histopathological reports of excision biopsies done in the Otorhinolaryngology Department. Result: papilloma is the most common benign tumor found in the present study is a retrospective observational study. This research was carried out at tertiary care referring facility and health college in the Indian state of Maharashtra. Data were collected from 30 patients from the department of otorhinolaryngology and histopathology reports of benign neoplastic lesions.

Keywords: *Benign tumor; oral cavity; haemangioma; papilloma; neoplastic.*

1. INTRODUCTION

Oral benign tumors and tumor-like lesions are common in the Indian subcontinent. The present study is about benign neoplastic lesions. Benign tumors mimic other tumor-like lesions or malignant tumors of the oral cavity. Histopathological examination plays an important role here to distinguish them [1,2]. Benign neoplastic lesions of the oral cavity are from the epithelium (papilloma), soft tissue (haemangioma, lipoma, nevus, lymphangioma), odontogenic origin (ameloblastoma, odontogenic keratocyst, adenomatoid odontogenic tumor), salivary gland tumors (pleomorphic adenoma, papillary cystadenoma), jawbones (osteoma, fibrous dysplasia). Papilloma, presumably caused by human papillomavirus infection [1]. Papilloma is the most common of masses arising from soft palate[2]. Haemangioma is the most common vasoformative tumor of infancy and childhood [3,4].

2. MATERIALS AND METHODS

The current research is a follow-up observational study. This research was carried out at a tertiary hospital referred clinic and health college in the Indian state of Maharashtra. Data were collected from 30 patients from the department of otorhinolaryngology, histopathology reports suggestive of the benign neoplastic lesion. Clinical history and reports collected from record section of the Hospital, of 6months duration. The study only included the 30 individuals whose histology results indicated a benign neoplastic lesion, and it has people of all ages.

3. RESULTS

In the present study, the most common age group affected is 21 to 30 years (26.66%), closely followed by 31-40(20%). In females, the 30 to 60years age group was most commonly

affected. At the same time, in males, it was 30 to 70 yrsIn Table 1 shows the analysis of benign neoplastic tumors of the oral cavity by age group. The current research examined the distribution of harmless neoplastic lesions of the oral cavity by age group.

In this study, males (53.33 percent) had a slightly higher percentage of benign oral tumors (46.66 percent) than females (46.66 percent). (M: F 1.14:1)Table 2 shows the gender wise distribution of benign neoplastic lesions of the oral cavity in the present study.

There was 33.33 percent of benign tumors in the tongue, followed by buccal mucosa.

Based on histopathological reports, haemangioma was the most common benign tumor of the oral cavity in the present study, counting 50%, followed by papilloma 16.66%. Haemangioma showed female predilection with M: F of 1.14:1. Sclerosing haemangioma was found as the most common subtype of haemangioma in the present study, followed by capillary haemangioma; Table 3 shows Site-specific oral cavity benign neoplastic tumors in this research.

Odontogenic keratocyte is considered a benign tumor of the odontogenic tumor by WHO; Table 4 shows the Histopathological diagnoses found in the present study; we found 1 case.

4. DISCUSSION

Haemangioma is by far the most frequent benign tumor identified in the current research, which is similar to studies [5], [6], and [7]. In addition to this, there are studies like [8], [9]. In the oral cavity, a benign tumor called squamous papilloma is the most frequent. Oral Cavity Benign Neoplastic Lesion Distribution Comparison in Table 5.

Table 1. An analysis of benign neoplastic tumors of the oral cavity by age group

Age group In years	No. of case per group	Percentage
01-10	04	13.33%
11-20	03	10%
21-30	08	26.66%
31-40	06	20%
41-50	03	10%
51-60	04	13.33
>60	02	6.66
Total	30	

Table 2. In the current research, benign neoplastic lesions of the oral cavity were distributed by Gender

Sr. no	Gender	Number of cases(Percentage)
1	female	14 (46.66%)
2	Male	16 (53.33%)
3	Total	30

Table 3. Site-specific spread of malignant lesions of the oral cavity

Sr. No	Site	No of cases	Percentage
1	lip	02	6.66%
2	Gingiva	02	6.66%
3	Buccal mucosa	06	23.33%
4	Tongue	10	33.33%
5	Palate	03	10%
6	Floor of mouth	01	3.33%
7	Mandible	03	10%
8	Maxilla	02	6.66%
9	Retromandibular area	01	3.33%
10	Total	30	

Table 4. Histopathological diagnoses found in the present study

Sr. no	Histopathological diagnosis	No. of cases	Percentage(%)
1	Haemangioma	15	50%
2	Papilloma	05	16.66%
3	Nevus	01	3.33%
4	Osteoma	01	3.33%
5	Lipoma	01	3.33%
6	Adenomatoid odontogenic tumor	01	3.33%
7	Ameloblastoma	01	3.33%
8	Pleomorphic adenoma	02	6.66%
9	Papillary cystadenoma	01	3.33%
10	Fibrous dysplasia	01	3.33%
11	Odontogenic keratocyst	01	3.33%

Table 5. Differences in Oral Cavity Neoplastic Lesion Distribution

Study	The most common benign tumor found
Shivshetty et al [7] (includes the single case of fibroma among tumors)	Hemangioma (41.88%)
Hassani B et al [5]	Hemangioma (30%)
Ibnerasa et al. [6]	Hemangioma (46.7%)
Mohammad Ali et al. [10]	Squamous papilloma (28.57%)
Agrawal R et al. [8]	Squamous papilloma (44.44%)
Nikunj Mehta et al[11]	Squamous papilloma (40%)
Swati Parikh et al. [9]	Squamous papilloma (66.66%)
Present study	Hemangioma (50%)

The most common age group in the present study is 21 to 30 years, which is comparable with and studies [10,11]. According to the Agrawal study, the most common age group affected is 30 to 40 yrs [12,13].

The mean age of females and males is in the fourth decade 32.2 and 33.2 in this study, while it is 52 years and 50 years in the study [14,15].

5. CONCLUSION

Knowledge of the oral cavity's benign oral tumor helps differentiate them from malignancy and other tumor-like lesions of the oral cavity. Data is gathered from the otorhinolaryngology department of a referral center and medical college in the Indian state of Maharashtra. Data was collected from previous histopathology

reports of excision biopsies performed in the department of otorhinolaryngology. The most frequent benign tumor identified in this research was papilloma. The current research is a follow-up observational study. An Indian tertiary-care reference hospital outpatient college conducted this study. Data were gathered from 30 patients from the department of otorhinolaryngology whose histology results indicated a benign neoplastic tumor. Histopathological examination is a must, like the most benign oral tumor does not recur after excision. The results of this study are overall in agreement with many other studies.

CONSENT

Consent was taken from patients at the time of admission about data being used for academic and research purposes without revealing their identity.

ETHICAL APPROVAL

Ethical Committee clearance was taken and preserved by author (s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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