

Original Article

Assessment of prevalence of different benign lesions of the oral cavity affecting a known population: A retrospective study

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Abstract

Background: Benign oral soft tissue masses encompass a wide variety of mass lesions. Characteristically they all share the property of being exuberant with minimal growth into deeper tissues. Hence; we planned the present study to assess the prevalence of different benign lesions of the oral cavity affecting a known population. **Materials & methods:** The present study involved assessment of prevalence of different benign oral lesions. After meeting the exclusion criteria, data records of a total of 48 consecutive patients who were diagnosed with suffering from benign oral lesions were included in the present study. Detailed demographic and clinical data of all the patients was obtained and analyzed. **Results:** Fibroma was the most common lesion observed in the present study. Next in the prevalence was squamous papilloma and Lipoma. **Conclusion:** Fibroma is the most common benign oral lesion encountered.

Key words: Benign, Lesion, Tumor

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INTRODUCTION

Pathological processes of oral and maxillofacial region are generally classified as benign or malignant, based on specific histological criteria, including the presence or absence of necrosis, mitotic figures as well as basic understanding of the entity.^{1,2} Orofacial tumours are known to exhibit geographical variation in prevalence and pattern due to cultural, social, occupational or climatic factors, in a previous, found ameloblastoma, Burkitt's lymphoma, ossifying fibroma and osteogenic sarcoma as the most common tumors in that order.^{3,4}

Benign oral soft tissue masses encompass a wide variety of mass lesions. Characteristically they all share the property of being exuberant with minimal

growth into deeper tissues. These lesions can be either neoplasm or non-neoplasms. Non-neoplastic lesions are usually inflammatory or represent a reaction to some kind of irritation or low-grade injury. Neoplasms on the other hand, represent a process characterized with progressive autonomous growth.⁵⁻⁷ Hence; we planned the present study to assess the prevalence of different benign lesions of the oral cavity affecting a known population.

Materials & methods

The present study was conducted in the department of oral pathology of Govt. dental college, Jammu, and it involved assessment of prevalence of different benign

oral lesions. Exclusion criteria for the present study included;

- Patients with presence of any form of oral malignant lesion,
- Patients with history of any other co-morbid condition,
- Patients with history of any metabolic disorder

After meeting the exclusion criteria, data records of a total of 48 consecutive patients who were diagnosed with suffering from benign oral lesions were included in the present study. Detailed demographic and clinical data of all the patients was obtained. All the data was compiled on Microsoft excel sheet and was analyzed by SPSS software.

Results

In the present study, we analyzed the data records of 48 consecutive patients who were diagnosed with affected by benign oral tumors. Mean age of the subjects of the present study was 33.6 years. There were 29 males and 19 females in the present study. Fibroma was the most common lesion observed in the present study. Next in the prevalence was squamous papilloma and Lipoma.

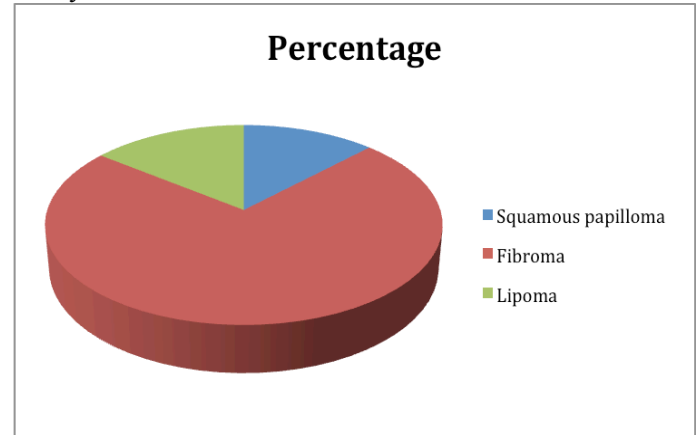
Table 1: Demographics data

Parameter	Value	
Mean age (years)	33.6	
Gender	Males	29
	Females	19
Total	48	

Table 2: Prevalence of benign tumors of the oral cavity

Benign tumor	Number	Percentage
Squamous papilloma	6	12.5
Fibroma	35	72.9
Lipoma	7	14.6
Total	48	100

Graph 1: Prevalence of benign tumors of the oral cavity



Discussion

In the present study, we analyzed the data records of 48 consecutive patients who were diagnosed with affected by benign oral tumors. Mean age of the subjects of the present study was 33.6 years. There were 29 males and 19 females in the present study. Fibroma was the most common lesion observed in the present study. Next in the prevalence was squamous papilloma and Lipoma. Al-Khateeb TH evaluated the relative frequencies, types and distribution of benign oral masses in North Jordanians. The records of the Department of Pathology were reviewed and analyzed for patients with benign oral soft tissue masses, received during an 11-year period (1991-2001). The main outcome measures were patients' age and sex, and the mass type and location. A sum of 818 benign oral soft tissue masses (4% neoplastic and 96% non-neoplastic) was analyzed. Common benign neoplasms were salivary pleomorphic adenoma and lipoma. Non-neoplastic lesions consisted of traumatic (43%) inflammatory/ infective (33%), cystic (14%) and developmental (9%) lesions. Common non-neoplastic lesions were fibroepithelial polyp, pyogenic granuloma, mucocoeles, hemangioma and squamous papilloma, in a descending order. There were 330 (40%) males and 488 (60%) females with a male to female ratio of 1: 1.5. The mean age was 33 years, with the majority in the 2nd, 3rd and 4th decades. The sites commonly affected by benign neoplasms were the palate, tongue, upper lip and buccal mucosa, in a descending order and the sites commonly affected by non-neoplastic lesions were the gingiva, buccal mucosa, lower lip and tongue in a descending order. It is concluded that some of the features of benign oral

masses in north Jordanians published in this paper are similar to those from other countries, and some are different.⁸

Torres-Domingo S et al analyzed the frequency and type of the most common benign tumors of the oral mucosa found at the Hospital Stomatology Service, and to study the clinical characteristics and possible etiological factors. This was a retrospective study of 300 patients with histologically diagnosed benign tumors of the oral mucosa. Data was compiled for each case, documenting information relating to age, gender, medication, habits (smoking, oral hygiene), anamnesis (reason for consultation, symptomatology, evolution), and the characteristics of the lesion (site, color, size, surface, consistency, and base). Of all the tumors studied, 53% were histologically diagnosed as fibroma. In the study of prevalence of benign tumors of the oral mucosa, no differences were found for age; however there were differences according to gender, finding a greater prevalence of fibromas, pyogenic granulomas, and giant cell granulomas in women, at a ratio of 2:1. The group of tumors studied showed a significantly asymptomatic behaviour, and self-limiting and slow growth. With respect to the possible etiologic agents, we found no statistically significant differences between them. Following the study of 300 patients histologically diagnosed with benign tumor of the oral mucosa, we can state that with regard to prevalence, we found significant differences with respect to gender, being more frequent in women. The fibroma is the most frequent benign tumor of the oral cavity.⁹ Agrawal R et al carried out a retrospective study in a tertiary care hospital during the period of two years from June 2012 to May 2014. The study included 133 cases of oral cavity lesions. The parameters included in the study were age, gender, site of the lesion and histopathological diagnosis. A total of 133 cases were included in their study. The age ranged from 8 to 80 years. Males were affected more often than females with a Male: Female ratio of 3.3:1. The most common involved site was tongue 39 (29.32%) followed by tonsil in 30 (22.56%), buccal mucosa 27(20.32%), floor of mouth 14 (10.53%), palate 12(9.02%), lower lip 8 (6.02%), upper lip 2(1.50%) and vestibule in 1 (0.75%) cases. Of the 133 cases, 63 cases (47.36%) were malignant, 52 non-neoplastic (39.10%) and 18 cases (13.53%) of benign neoplasias. The various lesions included - Squamous cell carcinoma, Verrucous carcinoma, Carcinoma-in-situ, Leukoplakia, Fibroma, Lipoma, Squamous cell papilloma, Lymphoid hyperplasia,

Pseudoepitheliomatous hyperplasia, Haemangioma, Schwannoma, Atypical Pleomorphic adenoma, Pleomorphic adenoma, Epidermal cyst, Retention cyst, Parasitic infestation, Tubercular pathology, Granulation tissue, Chronic Sialadenitis and Chronic non-specific inflammatory pathology. Benign lesions were the predominant pathology.¹⁰

Conclusion

Under the light of above mentioned data, the authors conclude that Fibroma is the most common benign oral lesion encountered. However; further studies are recommended.

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