

Location of Irritational Fibroma of the Oral Cavity: An Original Clinico-pathological Study

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Abstract: Objectives: The purpose of this preliminary retrospective study was to determine the most common site of fibroma, age and gender distribution of irritational fibroma in oral mucosa among patients attending the Department of Oral Medicine and Radiology, Government Dental College Srinagar.

Materials and methods: This was a retrospective study of 107 patients with histologically diagnosed irritational fibroma 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).

Results: There were 43 males and 64 female patients having fibroma of the oral cavity with age range of 10-75 years with females having higher incidence of irritational fibromas (60%). Most of the patients with fibroma were in the age range of 30-39 years with 29 fibromas out of 107. Buccal mucosa being most commonly involved site by the fibroma (26.16%). There were 48 (44.86%) patients with fibroma on the buccal mucosa, out of which 28 were on the right side.

Conclusion: Understanding the distribution, aetiology, natural history and epidemiology of oral mucosal pathologies is essential to promote primary prevention, early diagnosis, prompt treatment and the provision of appropriate health services

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I. Introduction

Fibromas are benign tumors that are composed of fibrous or connective tissue. They can grow in all organs, arising from mesenchymal tissue. When the term fibroma is used without modification, it is usually considered benign. Oral Mucosa is the mucous membrane epithelium of the mouth. It can be divided into three categories:

- i. Masticatory mucosa - keratinized stratified squamous epithelium, found on the dorsum of the tongue, hard palate and attached gingiva.
- ii. Lining mucosa - non-keratinized stratified squamous epithelium, found almost everywhere else in the oral cavity.
- iii. Specialized mucosa - specifically in the regions of the taste buds on the dorsum of the tongue.

Localized fibrous exophytic lesions are frequently present in oral cavity.^[1,2] Understanding the distribution, aetiology, natural history and epidemiology of oral mucosal pathologies is essential to promote primary prevention, early diagnosis, prompt treatment and the provision of appropriate health services.^[3] Exophytic lesions can be either reactive or reparative.^[4] Irritational fibroma is known by other terms like irritation fibroma, traumatic fibroma, fibrous hyperplasia, localized fibrous hyperplasia, fibrous polyp, fibroepithelial polyp.^[1-2,5-6] Histologically section shows stratified squamous epithelium with hyperkeratosis or parakeratosis. The underlying connective tissue is fibrocollagenous, papillomatosis & contains scattered blood vessels. The aim of our study was to detect the location, age and gender distribution of irritational fibroma in the oral cavity.

II. Materials and methods

This was a retrospective study which included 107 patients who reported to our Department of Oral Medicine and Radiology, Government Dental College Srinagar. The study includes patients of both sexes and any age group with histologically diagnosed cases. Patients who were immunocompromised were excluded from the study. Patient's biodata, clinical diagnosis, histopathological description and location of the Fibroma

were recorded in a form. The recorded data was compiled and entered in a spreadsheet (Microsoft Excel) and then exported to data editor of SPSS Version 20.0 (SPSS Inc., Chicago, Illinois, USA). Data were expressed as Mean, frequencies and percentages. Graphically the data was presented by bar and line diagrams.

III. Results

There were 43 males and 64 female patients having fibroma of the oral cavity with age range of 10-75 years and mean age of 42.5 years. Figure 1 shows the gender wise distribution of the patients with fibroma with females having higher incidence of irritational fibromas.

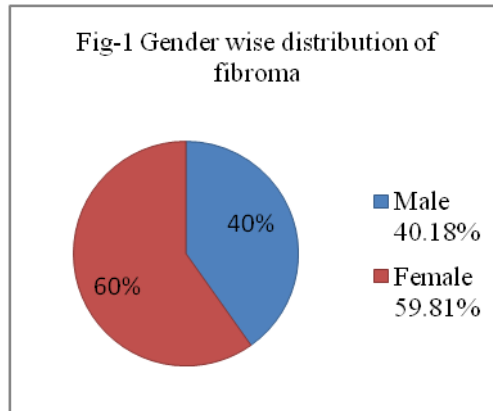


Figure 2 shows age wise distribution of patients with fibroma. Most of the patients with fibroma were in the age range of 30-39 years with 29 fibromas out of 107. The lowest age was a 10 year old boy with fibroma of the tongue and the highest age was a female patient of 75 year old having fibroma of anterior palate. There were no patients with fibromas below the age of 10 years and above 75 years.

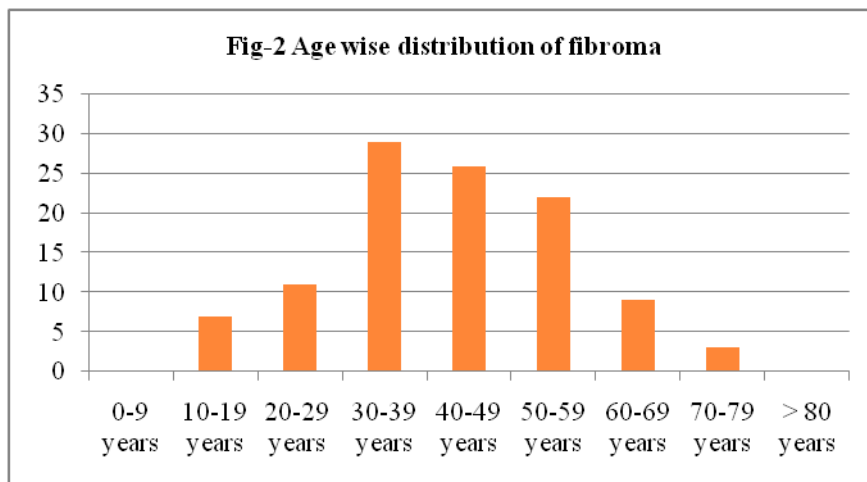


Figure 3 shows different sites involved in the oral cavity, right buccal mucosa being most commonly involved site by the fibroma (26.16%). There were 48 (44.86%) patients with fibroma on the buccal mucosa, out of which 28 were on the right side.

IV. Discussion

Oral Fibroma is one of the most common lesion of the oral cavity derived from fibrous connective tissues (Oral and Maxillofacial Pathology.Neville et al.2009).^[7] A study by Domingo et al (2007),^[8] 300 benign tumors of the oral mucosa were studied, out of which 53.3% were diagnosed as fibroma. They also found that in the total of 160 fibroma patients, 105 (65.60%) were females whereas the rest were males (55, 34.40%).The study shows that there is a higher prevalence of oral fibroma among females. These findings were similar to those obtained in our study where fibroma commonly occurs in females(59.81%), than in males (40.18%) and the most common site involved was right buccal mucosa about 28.16%. On the other hand least incidence of irritational fibroma was found on posterior palate, upper lip and mandibular anterior gingival (0.93%).

Fig-3 showing different sites involved by fibroma

Site	Number		Total
	Male	Female	T
Maxillary Anterior Gingiva	05(4.67%)	07(6.54%)	12(11.21%)
Maxillary Posterior Gingiva	05(4.67%)	10(9.34%)	15(14.01%)
Anterior Palate	05(4.67%)	03(2.80%)	08(7.47%)
Posterior Palate	0 (0%)	01(0.93%)	01(0.93%)
Upper lip	0 (0%)	01(0.93%)	01(0.93%)
Lower Lip	07(6.54%)	04(3.73%)	11(10.28%)
Right Buccal Mucosa	08(7.47%)	20(18.69%)	28(26.16%)
Left Buccal Mucosa	06(5.61%)	14(13.08%)	20(18.69%)
Mandibular Anterior Gingiva	0 (0%)	01(0.93%)	01(0.93%)
Mandibular Posterior Gingiva	02(1.87%)	01(0.93%)	03(2.80%)
Tongue	05(4.67%)	02(1.87%)	07(6.54%)
Total	43(40.18%)	64(59.81%)	107

According to one of the study done by Toida et al (2001), they found out that most of the fibroma lesions occurred in patients at the 6th decade of life .^[9] While in our study, most of the patients with fibroma were in the age range of 30-39 years with 29 out of 107 patients. The lowest age was a 10 year old boy with fibroma of the tongue and the highest age was a female patient of 75 year old having fibroma of the anterior palate. There were no patients with fibromas below the age of 10 years and above 75 years which is different from their studies. Besides that they also found out that 66 lesions were on tongue, 42 lesion on buccal mucosa and 7 cases on hard palate whereas in our study, right buccal mucosa was most commonly involved site by the fibroma(26.16%). There were 48 (44.86%) patients with fibroma on the buccal mucosa, out of which 28 were on the right side

Stress is common in women because women are susceptible to the stresses of all the activities they take on. They are social organizers, mothers, wives, spouses, daughters, friends, athletes, teammates, etc. Besides this, hormonal fluctuations can be a source of stress in girls and women varying in intensity from person to person, but is quite common. Premenstrual syndrome (PMS) can include feeling sad, hopeless, tense, anxious, irritable, disinterest in daily activities and relationships, trouble concentrating, fatigue, sleep disturbances, and feeling out of control. Physical symptoms include, bloating, breast tenderness, headaches, and joint or muscle pain. All these can add on to the stress of a woman and this tells that why oral mucosal fibromas are higher among females than males. All the fibroma cases in our study were diagnosed based on the histological features of the given section. Clinically, majority of the cases of fibroma were found accidentally during routine oral examination. So far, there has been no report of fibroma transforming into malignant case.

V. Conclusion

Oral Fibroma is one of the most common lesion of the oral cavity derived from fibrous connective tissues. Buccal mucosa being most commonly involved site by the fibroma with females having higher incidence of irritational fibromas and most of the patients with fibroma were in the age range of 30-39 years. Understanding the distribution, aetiology, natural history and epidemiology of oral mucosal pathologies is essential to promote primary prevention, early diagnosis, prompt treatment and the provision of appropriate health services.

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