

## Traumatic Fibroma – A Case Report

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### Abstract

Traumatic or irritation fibroma is a benign exophytic oral lesion that develops secondary to tissue. It is the benign reactive lesion, and the treatment of choice is surgical excision. Here is a case of Irritational fibroma on lower lip which was managed by excision biopsy and was diagnosed as irritation fibroma after histopathological evaluation.

**Keywords:** Traumatic fibroma; Irritation fibroma; Hyperplasia

### Introduction

The oral mucosa frequently encounters localized overgrowths. Most of them are hyperplastic and true neoplasms are very rare [1]. An inflammatory hyperplastic lesion may be defined as “an increase in the size of an organ or tissue due to an increase in the number of constituent cells, as a local response of tissue to injury [2].

Various types of localized reactive lesions such as focal fibrous hyperplasia, pyogenic granuloma, peripheral giant cell granuloma and peripheral ossifying fibroma may occur in the oral cavity [3]. The lips are the most common site for a variety of benign and malignant lesions as the lips form the border between two different tissues i.e. the skin and mucosa due to this there is increased risk of development of alterations in comparison to other areas [4]. Fibrous hyperplasia is the healed end product of the inflammatory hyperplastic lesion [5]. Various terms have been used in oral pathology to describe a non neoplastic fibrous lesion of oral mucosa like Irritation Fibroma, Irritational Fibroma, Fibrous Hyperplasia, Focal Fibrous Hyperplasia, Traumatic Fibroma, Localized Fibrous Hyperplasia and Fibro epithelial Polyp [6].

It is a focus of hyperplastic fibrous connective tissue representing a reactive response to local irritation or masticatory trauma [7]. Fibroma is seen in approximately 1.2 percent of adults [8]. It is a result of a chronic repair process that includes granulation tissue and scar formation resulting in a fibrous sub mucosal mass [9]. The most common location of fibroma is along the occlusal line of the buccal mucosa although other locations, such as the labial mucosa, tongue, and gingiva, are possible. Clinically, Fibroma are manifested as asymptomatic, moderately firm, smooth-surfaced, pink, sessile or pedunculated nodules [10].

They appear as broad based lesions, lighter in colour than the surrounding normal tissue, with the surface often appearing white because of hyperkeratosis or with surface ulceration caused by secondary trauma. The growth potential of fibroma does not exceed 10-20 mm in diameter [11]. It is treated by surgical excision, and also the source of irritation must be eliminated. Conservative excisional biopsy is curative and its findings are diagnostic [12]. Recurrences are rare and may be caused by repetitive trauma at the same site. This lesion does not have a risk for malignancy [13].

### Case Report

A 44 year old female patient was reported in Department of Periodontology with chief complaint of growth in lower lip on left side of the angle of mouth since last seven months. A detailed case history was recorded wherein she gave no significant medical or dental history. The lesion was first noticed seven months ago, which was smaller in size initially and has increased gradually to the present size. The growth has interfered in chewing and normal functioning of the mouth.

Intraoral examination revealed, a solitary, sessile, painless, well circumscribed mass with smooth surface, firm in consistency, and lobulated pink swelling measuring 6×6 mm in its greatest diameter in relation to tooth number 34 and 35 on lower lip on left side of the angle of mouth along

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**Figure 1:** Pre-operative view of growth present on lower labial mucosa.



**Figure 2:** Lesion held with suture to stabilise during excision.



**Figure 3:** Intra-operative view of excisional biopsy.



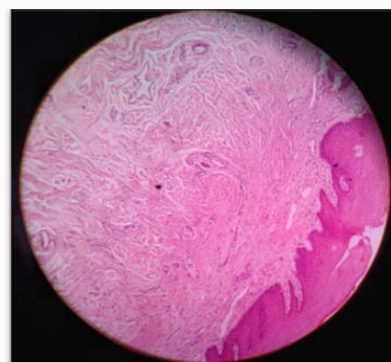
**Figure 4:** Suture placed.



**Figure 5:** Excised lesion.



**Figure 6:** Postoperative view after 7 days.



**Figure 7:** Histopathological image.

scalpel blade no 15 and the wound was sutured (Figure 2, 3, 4 and 5). Post-operative healing was uneventful and no pain or discomfort in chewing was reported on 7 days follow up (Figure 6).

### Histopathology

Haematoxylin & Eosin stained section exhibit parakeratinized stratified squamous epithelium. The connective tissue shows increased cellularity with numerous small and large endothelial cell lined blood vessels, diffuse chronic inflammatory infiltrate chiefly comprising of plasma cells and lymphocytes and dense collagen fibre bundles arranged haphazardly. These findings confirm a diagnosis of "Irritational/Traumatic fibroma" (Figure 7).

### Discussion

Unhealthy habits, when repeated excessively become harmful, and can contribute to dentofacial abnormalities. The literatures have mentioned the reason for a few of the oral lesions like irritation

the occlusal plane of maxillary and mandibular teeth (Figure 1).

### Surgical Procedure

After haematological and general medical investigation, excisional biopsy was performed intra orally under local anaesthesia using

fibroma and mucocele, arising as a result of oral habits such as lip biting/sucking. Fibroma is a result of a chronic repair process that includes granulation tissue and scar formation resulting in a fibrous sub mucosal mass [9]. Usually, irritation fibroma is treated by surgical excision and does not recur, provided the source of irritation and trauma is eliminated. Conservative excisional biopsy is curative and its findings are diagnostic; however, recurrence is possible if the exposure to the offending irritant persist [14].

In 1986, Bouquot & Gundlach examined 23,616 white persons over 35 years of age, and found out that the most common lesion of oral soft tissue was irritation fibroma. They found out that irritation fibroma accounted for 35.8% of the 791 benign soft tissue masses, which had a combined prevalence rate of 12.0 lesions per 1000 population [15]. In 2008, Santiago Torres Domingo *et al.*, conducted a study to analyze the frequency and type of the most common benign tumours of the oral mucosa and to study the clinical characteristics and possible etiological factors. Following the study of 300 patients histologically diagnosed with benign tumour of the oral mucosa, 153 (53.3%) were histologically diagnosed as fibroma, demonstrating that this is the most frequent benign tumour of the oral cavity [16].

## Conclusion

Fibroma in most cases is self-limiting and benign conditions, diagnosed based on clinical and pathological examination. Usually there is a history of habitual lip biting and trauma to the mucosa, with slow development. Prevention can be done by early education and interception of oral habits in children. Swellings arising in the soft tissue should be diagnosed clinically and histopathologically to arrive at a definitive diagnosis. Complete excision has been the choice of treatment [2]. Removal of source of trauma or irritation remains important to prevent the recurrence of the lesions and post-operative follow up is required considering the chances of recurrence [3].

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