

# Traumatic Fibroma : A Case Report

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**Abstract:-** Fibroma is a benign fibrous tissue growth that develops as reactive hyperplasia to trauma or local irritation. It is usually characterized by slow growing, painless, firm, nodular mass merging with the colour of surrounding tissue. It is mainly seen in the region of buccal mucosa, along the plane of occlusion of maxillary and mandibular teeth, tongue, gingiva and hard palate. On clinical examination it resembles pyogenic granuloma, peripheral giant cell granuloma.

**Keywords:-** Fibroma, Benign Neoplasm, Exophytic Lesion.

## I. INTRODUCTION

A fibroma is a non-cancerous growth which occurs due to prolonged irritation. It mainly occurs due to lip biting, cheek biting, trauma, foreign bodies, orthodontic treatments, caries, chronic biting and sharp bony spicules.<sup>[1]</sup>

It is usually firm, painless, nodular and merging in color with the surrounding tissue commonly located in buccal mucosa, tongue, gingiva and lip. Its size commonly less than 1.5cm. The suggested treatment is the complete surgical excision along with the elimination of precipitating

/ aggravating factors. They are slow growing, mostly well defined, might occur at any age most common in 3<sup>rd</sup> – 5<sup>th</sup> decades. More common in females than males.<sup>[2]</sup> They are most common benign tumors of oral cavity comprising of 1-2% in general population.<sup>[3]</sup>

## II. CASE HISTORY

A 38-year-old female patient reported to the Department of Oral Medicine and Radiology with the complaint of pain and discomfort during chewing due to the gingival growth in the upper front tooth region which started as a small papule approximately 8 months ago and gradually increased in size with time to attain present size.

Patient gives a history of same complaint 15 years ago and 2 years ago which was excised later on.

On intra oral examination a well-defined lesion was present in between right and left maxillary central incisor extending from the labial aspect till the palatal aspect of approximately the size 0.5X 0.5 cm which was oval in shape and erythematous with midline diastema noted. [Fig 1]



**Fig 1: Exophytic Growth Noted on the Maxillary Labial Aspect**

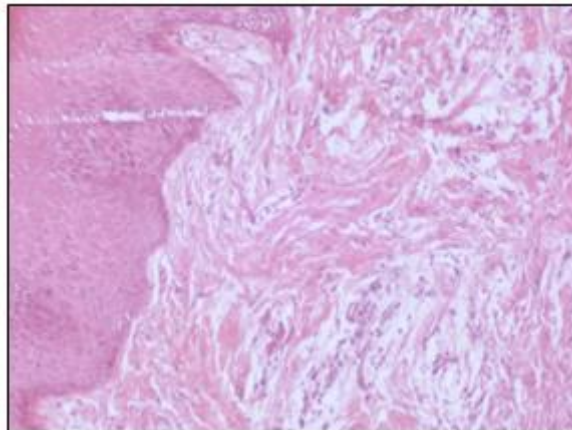
On palpation the papule was tender and firm, soft in consistency, sessile with no local raise in temperature. Provisional diagnosis of irritational fibroma is given and a differential diagnosis of pyogenic granuloma was given. Surgical excision under local anesthesia was performed which resulted in complete elimination of the lesion. [Fig 2]



**Fig 2: Surgical Excision of the Lesion**

Histopathological examination revealed, epithelium and connective tissue stroma, the epithelium is stratified squamous keratinized type with atrophic changes. Underlying connective tissue shows proliferating bundles of collagen fibers and very few inflammatory cells.

Thus, the microscopic evaluation was suggestive of fibroma. [Fig 3]



**Fig 3. Histopathological Picture**

Patient was recalled after 3 weeks and the healing was satisfactory. [Fig 4]



**Fig 4. Postoperative Follow Up After 3 Weeks.**

### III. DISCUSSION

Fibroma is a harmless growth of fibrous tissue in response to trauma or irritation. They are mainly seen in the region of buccal mucosa being the most common, tongue, gingiva, hard palate with size ranging from 0.5cm to 1.5 cm. It is usually asymptomatic, sessile or pedunculated, firm nodular, painless with merging with the color of surrounding tissue and has a likelihood of returning.<sup>[3,4]</sup>

They are slow growing, mostly well defined, might occur at any age most common in 3<sup>rd</sup> – 5<sup>th</sup> decades. More common in females than males.<sup>[2]</sup> It comprises of 4.5% of all lesions. Histopathology of oral fibroma reveals the epithelium with proliferating bundles of collagen fibers with few inflammatory cells.<sup>[4,5]</sup> Approximately 60% of the fibromas are seen in maxilla and more often in anterior region, 55-60% present in incisor - cuspid region.<sup>[6]</sup>

According to Barker and Lucas, based on the cite of lesion and the amount of irritation fibroma shows two patterns of collagen arrangements a) radiating b) circular pattern. Thus, it hypothesizes that when there is greater trauma, the former appears in sites which are immobile in nature (example; palate), whereas when lesser trauma is involved, it occurs mostly in the region which is flexible in nature (example; cheeks).<sup>[7]</sup> In this case the lesion was radiating pattern. The biopsy was taken to exclude other lesions

Conventional treatment involves removal of etiological factors and conservative surgical excision, Laser or electrocautery are the newer treatment modalities that have added advantages in the recent treatment plan.<sup>[8]</sup> This case report demonstrates the case of an intraoral irritational fibroma and treatment of choice is complete surgical excision to prevent the recurrence of the lesion.

### IV. CONCLUSION

Traumatic fibroma that developed in response to local irritating factor, the lesion presented as a well-defined fibrous mass and managed by surgical excision or elimination of precipitating / aggravating factors. Recording a thorough history and being well – versed with the clinical features is the key for diagnosis of such conditions.

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