

# Fibroma: A Case Report

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**Abstract:** *Fibromas are proliferative fibrous lesions of the gingiva and oral mucosa that may cause esthetic and functional problems. Fibrous hyperplasia and Fibro-epithelial hyperplasia are histological variants of these non-neoplastic lesions. Fibroma is a benign tumor of oral cavity, with usually the tongue, gingiva, and buccal mucosa being the most common sites. Females are twice more likely to develop fibroma than males. The intraoral fibroma typically is well demarcated; and its size can vary from millimeter to few centimeters. Intraorally the growth is attached to the mucosa by means of a peduncle. Fibroma is generally slow growing, painless, smooth surface lesion and the color is slightly paler than the adjacent healthy tissue. Treatment usually requires total excision and recurrence is rare.*

**Keywords:** Irritation fibroma, Reactive lesion, Traumatic fibroma, Pyogenic granuloma

## 1. Introduction

Fibroma is a common submucosal response to trauma from teeth or dental prostheses and was first reported in 1846 as fibrous polyp and polypus<sup>[1,2]</sup>. Fibroma is also called as "irritation fibroma". It is a benign neoplasm which represents reactive focal fibrous hyperplasia due to local irritation or trauma<sup>[3,4]</sup>. The term focal fibrous hyperplasia describes clinical appearance and pathogenesis of this entity though this term not commonly used. Fibroma is mostly found in 1.2% of adults and usually composed of Type I and III collagen. The causative etiology for this lesion can be attributed to the local irritants like plaque, calculus, overhanging margins, trauma and dental appliances<sup>[3]</sup>. Irritation fibroma represents a reactive focal fibrous hyperplasia due to trauma or local irritation.

Its most common clinical aspect is the growth of well delimited tissue of a smooth surface, with normal colour mucosa, sessile or pedunculated base of hard consistency and smaller than 1.5cm at its largest diameter<sup>[5]</sup>. Although cases have been reported of 4-6 cm, its occurrence is located mainly in anterior maxillary, more precisely in interdental papilla<sup>[6]</sup>. Fibroma occurs more frequently in females than in males between third and fourth decade of life. 60% fibroma occur in maxilla and they are found in anterior region predominantly presenting in incisor- cuspid region<sup>[7]</sup>. This paper reports a case report of fibroma in 65 years old female in relation to maxillary anterior mesial to left lateral incisor and distal to right lateral incisor.

## 2. Case Report

A 65 years female reported to outpatient department of Periodontology, Rajarajeswari Dental College and Hospital, Bangalore with a chief complaint of swelling in right upper front tooth region for past 1 year. Lesion started as small painless nodule from attached gingiva with respect to upper left central incisor and gradually increased to the present size with complains of pus discharge and bleeding for initial 6 months the bleeding gradually subsided as the lesion was enlarged and became fibrotic in consistency. On examination revealed well defined pedunculated firm in

consistency and well defined growth on labial aspect of 11, 12, and 21 measuring 2 x 1.3x 0.7 cm extending from mesial side of 12 to distal side of 22, upper border extending till the level of mucogingival junction and lower border completely circumscribing the tooth. Grade I mobility was detected with respect to right lower lateral incisor - 42. Grade II mobility seen with respect to upper right central incisor -11, right lower central incisor - 41, left lower central incisor and lateral incisor - 31, 32. Generalized attrition was noted. 11 was tender on percussion. Oral hygiene status was poor and patient had habit of chewing betel nut from past one and half year. No significant findings was noted on complete hemogram analysis. Radiographic examination revealed periapical radiolucency with well-defined borders and widening of lamina dura with respect to right upper central incisor - 11. Diagnosis of fibrosis was made. Excisional biopsy was planned to rule out cancerous lesion. After adequate anaesthesia the lesion along with 1mm circumscribing the normal tissue was excised and periodontal dressing was applied. Patient was advised antibiotics and painkiller for 5 days and chlorhexidine mouthwash was prescribed twice daily for 15 days. Patient responded well to the treatment. 10 days recall visits showed, postoperative healing was uneventful and oral prophylaxis was done.

## 3. Histological Findings

Microscopic examination (4x and 40x) revealed that polypoidal lesion lined by stratified squamous epithelium with elongated rete ridges and focal ulcer by granulation tissue. Subepithelium shows fibrous stroma with focal myxoid change and sparse chronic inflammatory cell infiltrate. There is no evidence of pyogenic granuloma, dysplasia and malignancy. Based on clinical and histopathological examination diagnosis is suggestive of fibroma.

### Differential Diagnosis

Traumatic fibroma, pyogenic granuloma, peripheral ossifying fibroma, irritational fibroma, peripheral giant cell granuloma.

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#### 4. Discussion

Fibroma is the most common connective tissue tumour in oral cavity. It is also described with a term “inflammatory hyperplasia” representing inflamed fibrous and granulation tissue<sup>[8]</sup>. These proliferative benign connective tissue tumour size varies from small to large depending on the degree to which one or more of the components of the inflammatory reaction and healing response are exaggerated in the particular lesion<sup>[9]</sup>. If a similar lesion is present on gingiva it is been referred as “epulis”. Fibroma is also known as irritational fibroma, focal fibrous hyperplasia or fibromatous fibroma. Fibroma occurs more frequently in females than in males between third, fourth and fifth decade of life. In this case report fibroma occurred in 65 years old female.

Most commonly fibroma occur in maxillary anterior region with 55-60% presenting in incisor- cuspid region<sup>7</sup>. In this case lesion was in maxillary anteriors. Foci of radiopaque material, bone formation or dystrophic calcification may be seen, particularly in large lesions or lesions with overt mineralization. Irritation Fibroma can produce migration of teeth with interdental bone destruction<sup>[10]</sup>. Histopathologically, fibroma exhibit as an intact or ulcerated stratified squamous epithelium along with shortening and flattening of rete pegs. Treatment of fibroma consist of removal of causative factors, scaling and root planning and complete excision of the involved periodontal ligament and periosteum to minimize the chances of recurrence.

#### 5. Conclusion

Fibroma clinically resembles as traumatic fibroma, pyogenic granuloma, peripheral ossifying fibroma, irritational fibroma, peripheral giant cell granuloma so clinical, radiographical and histological examination is very important for accurate diagnosis and treatment.



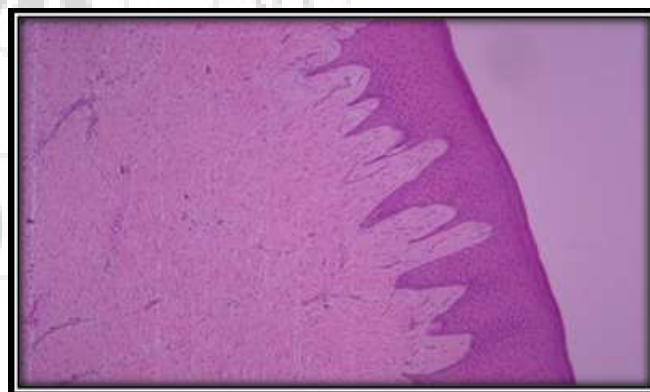
Fibroma after Excision



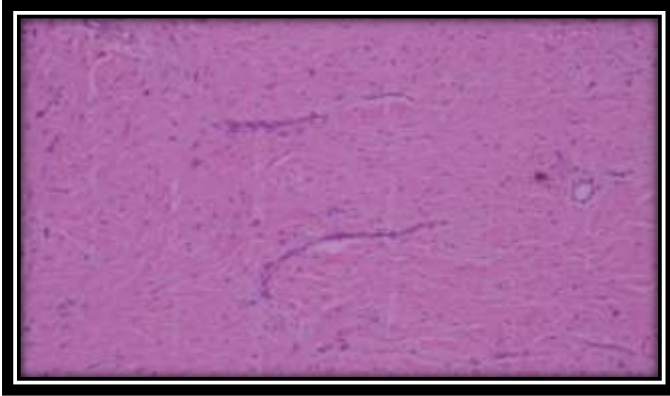
Postoperative



Fibroma in Anterior Aspect of Maxillary Central Incisors



Histological Specimen- Low Magnification Showing Stratified Squamous Epithelium



Histological Specimen under High Magnification – Fibrous Stroma With Multinucleated Giant Cells

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