

## Case Report

### Traumatic fibroma: A Case Report

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#### ABSTRACT

Fibromas are benign tumors of connective tissue common in the oral cavity. Traumatic or irritation fibroma can be seen at any oral site and characteristically appears as an elevated nodule of normal color with a smooth surface occurring most commonly in third to fifth decades with more predilection for females. It is the healed end product of the inflammatory hyperplastic lesion. Sites most commonly involved are buccal mucosa, any soft tissue site, tongue, gingiva. It is the most common reactive lesion, and the treatment of choice is surgical excision. A 58-year-old female was examined for a six-month-old solitary swelling measuring approximately 2.5x1.2x1 cm in the anterior gingival region of maxillary arch. Histopathological and radiographic examination are essential tools in diagnosis accurately as it clinically resembles various lesions such as peripheral giant cell granuloma, pyogenic granuloma or odontogenic tumors.

**Key words:** Fibroma, Case report

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#### INTRODUCTION

Localized inflammatory hyperplasia of oral mucosa is subjected to continuous irritation by internal or external stimuli. The term Fibro epithelial hyperplasia was coined by Deley et al in 1990. The benign tumors of the fibrous connective tissue are called fibromas. Affecting almost all age groups at but usually seen in 3rd-6th decade with 66% of female predominance, fibromas are generally slow growing, painless, solitary, sessile or pedunculated growths. Causative factors are mostly thought to be trauma or irritation. Irritation fibroma is an exophytic soft tissue mass in the oral mucosa. Indeed, it is not a real neoplasm but a focal hyperplasia of fibrous connective tissue induced by local trauma or chronic irritation. An earlier population-based epidemiological analysis showed that irritation fibroma was the second common benign oral lesion in Caucasians over 35 years of age. The predilection sites were the buccal mucosa, labial and lingual surfaces. However, data may vary from country to country regarding the occurrence of oral diseases in subsequent retrospective studies. Most of

the fibromas of the oral cavity are reactive hyperplasia in response to local irritation or trauma. Traumatic irritants include faulty prosthesis, restorations, calculi, foreign bodies, margins of caries, overhanging margins, chronic biting, sharp spicules of bones etc. They are common on gingiva, tongue and buccal mucosa. However, although fibromas are common in the oral cavity, their incidence on the hard palate is rare, mainly because of fewer chances of trauma or irritation.

#### CASE REPORT

A 58-year-old female was examined for a six-month-old solitary swelling measuring approximately 2.5x1.2x1 cm in the right anterior gingival region of maxillary arch. Intraorally, on palpation it was ovoid and firm in consistency. Radiographic examination revealed no calcifications. Routine hematological examination was done and reports came out to be normal. Patient gave relevant dental history of replacement of missing 12 eight months ago with no relevant medical history. Irritation fibroma,

neurofibroma, peripheral ossifying fibroma, and benign tumors of nerve and muscle origin were provisionally diagnosed. In the first visit the fixed partial denture wrt 1 1 ,1 2,13, where the lesion was circumscribed, was removed and complete scaling and root planing was performed under local anaesthesia. Patient was recalled after one week. After a week, the encapsulated lesion, noted to be located between periosteum and alveolar mucosa, was excised under local anaesthesia and sent for histopathological evaluation. A soft tissue specimen, pinkish white in colour, irregular in shape, and firm in consistency. The cut surface of the gross specimen was whitish in colour. Difficulty in sectioning the specimen prompted that the tumour was fibrous in nature.

Histopathology revealed The sections from the given gingival tissue show benign squamous epithelium with acanthosis and rete elongation and ulceration. The ulcerated area exhibits unhealthy granulation There is an intense chronic + acute inflammatory infiltrate in the underlying subepithelial stroma, consisting of lymphocytes, plasma cells, neutrophils and histiocytes No kind of atypia, malignancy seen with an impression of acute on chronic inflammatory pathology.

Thus, a diagnosis of "Traumatic or Irritation Fibroma" was arrived at, eliminating lesions like peripheral giant cell granuloma, peripheral ossifying fibroma, giant cell fibroma, Fissuratum, neurofibroma, and pyogenic granuloma.

**Figure 1: Preoperative before prosthesis removal**



**Figure 2: after prosthesis removal**



**Figure 3: after one week of prosthesis removal and SRP**



**Figure 4: excision of fibroma**



**Figure 5: gross specimen**



**Figure 6: just after excision and bleeding control**



**Figure 7: healed site after 1 month**



## DISCUSSION

It is said that the majority of the fibromas occurring in the oral cavity are reactive in nature and represent a reactive hyperplasia of fibrous connective tissue in response to local irritation or trauma rather than being a true neoplasm. They are generally slow growing lesions. The occurrence of irritation fibromas among the South Indian population was found to be 39.1 Stout said that "it is exceedingly difficult to decide whether or not there is true benign neoplasm composed of fibroblasts". Since true fibromas of oral and maxillofacial areas are infrequent, the case below is one of a kind.

A 58-year-old female was examined for a two-month-old solitary swelling measuring approximately 2.5x1.2x1 cm in the right anterior gingival region of maxillary arch. Intraorally, on palpation it was ovoid and firm in consistency. Radiographic examination revealed no calcifications. Irritation fibroma, neurofibroma, peripheral ossifying fibroma, and benign tumors of nerve and muscle origin were provisionally diagnosed. The encapsulated lesion, noted to be located between periosteum and alveolar mucosa, was excised under local anaesthesia and sent for histopathological evaluation. Thus, a diagnosis of "Traumatic or Irritation Fibroma" was arrived at, eliminating lesions like epulis fissuratum peripheral giant cell granuloma, peripheral ossifying fibroma, giant cell fibroma, neurofibroma, and pyogenic granuloma. Approximately 60% of irritation fibromas occur in the maxilla and they are found more often in the anterior region, with 55–60% presenting in the incisor-cuspid region, rare in posterior region, but in our case the fibroma is present in posterior region of mandible. It is usually reported with the diameter of 1.5 rarely reaching 3 cm; very few case reports are present in the literature with the lesion measures about 6–9 cm. The differential diagnosis in such lesions should include PG, POF, metastatic cancer, fibroma, hyperplastic gingival inflammation, hemangioma and angiosarcoma. Depending on its duration, PG will vary in texture from soft to firm and can be suggestive of fibroma, and also, peripheral odontogenic or ossifying fibroma may be another consideration, although these tend to be much lighter in color. Like PG, it is commonly encountered among pregnant women; but unlike PG, this lesion is found exclusively on the gingiva and has minimal vascular component. Although metastatic tumors of the oral region are uncommon, the attached gingiva is the most common affected soft tissue site followed by the tongue. In nearly 30% of cases, the metastatic lesion in the oral region is the first indication of an undiscovered malignancy at a distant site and so the microscopic appearance should resemble the tumor of origin.

## CONCLUSION

Majority of the intraoral localized lesions are slowly progressing, the growth of which is generally limited.

Traumatic or irritation fibroma usually occurs due to a local irritating factor that can be managed by surgical excision and removal of the irritant. Many cases progress for long periods before the patient seeks treatment for them as they are asymptomatic. Recording a thorough history, radiographic and histopathologic examination are important key tools to rule out other lesions with similar clinical presentations.

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