

**Case Report****Is ignorance a bliss??****Traumatic fibroma: A case report***Arpeet Krantikar¹, Praneeta Kamble²*¹Dental Surgeon, Department of Conservative Dentistry and Endodontics, Government Dental College, Mumbai²Associate Professor, Department of Periodontics, Nair Hospital Dental College, Mumbai**How to cite:** Arpeet K et al, *Is ignorance a bliss? Traumatic fibroma: A case report*, *Int J Perio Rehab* Volume 2022, Article ID 22154006, 5 pages

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Abstract

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. Irritation fibroma is most commonly prevalent in anterior region and usually associated with interdental papilla. Treatment consists of surgical excision in toto. This case report presents surgical management of a case of traumatic fibroma in relation to lower anteriors.

Keywords: Irritational fbroma, Traumatic fibroma, gingival growth, soft tissue growth

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INTRODUCTION

Traumatic or irritation fibroma is a local reactive growth and proliferation of mucosa of the oral cavity in retort to injury or irritation. The most common benign tumors of soft tissue in the oral cavity are Irritational fibromas [1]. It is characterised with a growth, which is asymptomatic and gradually increases in size. It is also called by terms such as Traumatic fibroma, oral polyp, or focal fibrous hyperplasia etc. The etiology of irritational fibroma includes constant trauma, and irritants like cheek or lip biting, overhanging restorations, over contoured crowns, calculus, sharp cusps, and bony spicules [2]. It shows slow growth, and is firm and nodular in consistency. Rarely it is soft and vascular in nature [3]. On histologic examination, bundles of organised collagen fibres, with abundant fibrocytes and moderate vascularity was evident. [4] Removal of irritating factors along with conservative excision of the lesion with 1 to 2 mm safety margins is treatment of choice. Laser and electrocautery are some of the modern approaches. Recurrence is uncommon, but the lesion may recur if the irritation persists.[5] In this current report, surgical management of a traumatic fibroma, measuring around 2 X 2 cm is illustrated.

CASE REPORT

A 28 year old male patient reported to the department with the chief complaint of swelling in lower front region of jaw. He had history of trauma in childhood when he was 12 years old which caused loss of his lower front teeth. A swelling was developed in the same region. Patient had cut the same swelling with help of blade by himself and was left untreated. The swelling recurred after some days and was left unattended over 14 years. Patient now wants to get the swelling removed as it is now interfering in occlusion and he is having difficulty while eating (Figure 1).

On examination there is no gross facial asymmetry. On intraoral examination the enlargement is present in the region of 31, 41 area and is soft, pedunculated, non-tender and has rough borders. It is irregular in shape and measures 2x2 cm in size (Figure 2).

After phase 1 therapy, surgical excision of the fibroma was planned with the use of no. 15 surgical blade. Consent was obtained followed by blood investigations such as complete blood count, haemoglobin estimation, bleeding time, clotting time were evaluated. Blood parameters were optimum for performing surgery. Local anaesthesia of the mandibular anterior region was obtained by administration of local anesthetic agent Lignocaine (2%) with Adrenaline in concentration of 1:200000. After anesthesia was found to be effective, excision of fibroma was done with no. 15 surgical blade. Swelling was excised in toto. A root piece was embedded in the overgrowth which was extracted (Figure 3). Bleeding was controlled by applying pressure using gauze pieces. Once bleeding was controlled the area was inspected for any granulation or fibrous tissues, tissue tabs, etc (Figure 4). The area was secured with sterile aluminium foil, over which a non eugenol based wound dressing was placed (Figure 5). Following the procedure, the patient was instructed about post operative maintenance.

Excised tissue was sent for histopathological analysis. The H & E stained slide section showed hyperplastic Para-keratinized stratified squamous epithelium with areas of arcading pattern. The underlying connective tissue stroma showed collagen fibres, endothelial lined blood vessels and inflammatory cell infiltrate with areas of ossification. The overall features are suggestive of Fibro-epithelial hyperplasia with ossification. (Figure 6)

Patient was re-evaluated after 1 week and 1 month. Healing was uneventful and there was no patient discomfort (Figure 7 and 8). Patient is now sent for prosthetic rehabilitation as the healing of tissues is completed and there is no signs of recurrence.



Fig 1: Pre-operative presentation



Fig 2: Pre-operative dimensions



Fig 3: root extracted



Fig 4: Growth excised



Fig 5: Bleeding controlled

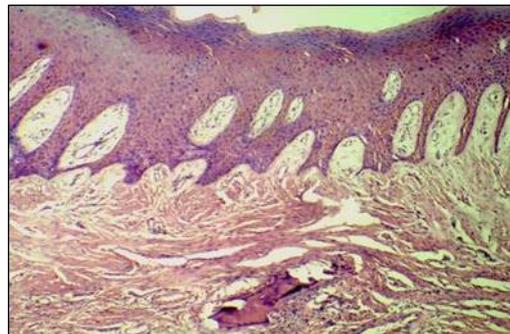


Fig 6: Histopathologic picture



Fig 7: 1 week post-operative presentation



Fig 8: 1 month post-operative presentation

DISCUSSION

Among all the oral mucosal lesions, localized fibrous overgrowths are considered to be most common, with the etiology being chronic irritation. Based on the classification given by Baker and Lucas, two main histologic patterns of irritational fibromas have been reported, that includes radiating pattern, or circular pattern. The radiating pattern is commonly seen in palate, with higher degree of irritation. Whereas, circular pattern is seen in more flexible areas like buccal mucosa with lesser degree of irritation. In this case, as the growth was present in the alveolar mucosa, it is considered as radiating pattern of traumatic fibroma.

Several etiologic factors are involved in the pathogenesis of irritational fibroma which includes low grade injuries like, cheek or lip biting, overhanging restorations, over contoured crowns, calculus, sharp cusps, and bony spicules calculus, etc. The above mentioned conditions will increase the inflammatory response of the tissues, leading to formation of granulation tissue, and excessive proliferation of fibroblasts, which manifests as an overgrowth [6].

The management of traumatic fibroma includes, elimination of the etiological factors, followed by surgical excision of the overgrowth using no.15 scalpel or Laser or electrocautery. Irritants like root stumps should be extracted, coronoplasty of the sharp cusps, to reduce the chances of recurrence. Wide excision of the growth should be performed along with the underlying periodontal ligament and periosteum. Since traumatic fibroma has incidence rate of around 8 to 20%, it is mandatory to follow up the patient to regular reassessment. [7]. This lesion does not have a risk for malignant transformation [8].

CONCLUSION

Traumatic fibroma, which makes up around 7.4% of oral soft tissue diseases, occurs as a result of chronic irritation. However, 2/3 of the patients neglect their dental care and do not disclose it to the dentist. Clinically, it resembles other tumours like peripheral giant-cell granuloma and pyogenic granuloma. Therefore, appropriate examinations are required for a precise and conclusive diagnosis. These types of lesions can lessen the possibility of dentoalveolar consequences with early detection and treatment.

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CONFLICT OF INTEREST

No conflict of interest of relevant to this article was reported.

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