

## **WHAT'S THE LUMP IN HER MOUTH? – A CASE REPORT OF TRAUMATIC FIBROMA**

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### **ABSTRACT**

Epulis is a localized enlargement which is considered to be exaggerated response to any minor trauma, hormonal changes, irritation to the gingiva, plaque or calculus, traumatic bite etc. Presenting here a case of a female patient aged 33 years reported with chief complaint of swollen gum on the upper left front region 2 years back which gradually increased in size with no pain. Patient gave no relevant medical history nor reported any abnormalities in hormone levels. On extraoral examination, no swelling was seen on left side. On intraoral examination, pedunculated gingival overgrowth was seen on the buccal aspect of 23,24 region extending on occlusal and palatal aspect. The colour of the gingiva was pale pink with melanin pigmentation with consistency of firm and resilient with absence of stippling. Dimension of lesion was 12 x 13 mm. Clinical diagnosis based on the examination was Pyogenic granuloma. Periodontal therapy included scaling and root planing was carried out followed by excision by undisplaced flap technique. The tissue was sent for histopathological examination which diagnosed as Fibroma. Based on etiological factor, clinical and histopathological examination the final diagnosis is Traumatic fibroma. Patient was placed on maintenance therapy for a period of 6 months to assess for any recurrence.

**KEYWORDS:** Epulis, Trauma, Undisplaced flap technique, Fibroma, Pyogenic granuloma

**INTRODUCTION**

Oral fibroma is a benign scar like reaction to persistent long standing irritation or trauma and dental appliances as the main causative factor.<sup>1,2</sup>Fibroma is a result of a chronic repair process that includes granulation tissue and scar formation resulting in a fibrous submucosal mass.<sup>3</sup> Most of these lesions are mild and rarely present with aggressive features, also with local irritating factors like plaque, calculus, overhanging margins, trauma and dental appliances the main causative etiological factors.<sup>1,2</sup>Fibroma may be because of the injury or local inflammation of a focal fibrous hyperplasia.Traumatic fibroma is a frequent, benign, slow-growing tumor of soft tissues which is typically an asymptomatic mass that increases slowly in size.<sup>4</sup>

The term “focal fibrous hyperplasia,” as suggested by Daley et al 1990,<sup>6</sup> implies “a reactive tissue response, is preferable to the term, fibroma” which implies incorrectly, a benign neoplastic proliferative fibrous connective tissue.<sup>5</sup>

Within this article we present a case of a 33 year old female with traumatic fibroma in the upper right labial surface of gingiva.

**CASE REPORT**

A female patient aged 33 year reported to the Department of Periodontics and Oral Implantology, D Y Patil School of Dentistry, Nerul, Navi Mumbai, India with chief complaint of swollen gum on the upper left front region 2 years back which gradually increased in size with no pain or bleeding on trauma. She gave no relevant medical history nor reported any abnormalities in hormone levels. On extraoral examination, no swelling was seen on left side. On intraoral examination, pedunculated gingival overgrowth was seen on the buccal aspect of 23,24 region extending on occlusal and palatal aspect. The colour of the gingiva was pale pink with melanin pigmentation.On palpation, consistency was firm and resilient with absence of stippling. Dimension of lesion was approximately 12 x 13 mm in relation to its greater length extending along 23,24 region.

After phase 1 therapy, Excision was planned by using undisplaced flap technique under local anaesthesia as shown in the figure 4. After Excision, residual calculus was removed and root planning was performed. The excised tissue was transferred to a container containing 10% neutral buffered formalin. The flap was sutured using non absorbable 4-0 silk (Ethicon, Jhonson and Jhonson, India) sutures as shown in figure 6.

Clinical diagnosis based on the examination was Pyogenic granuloma. The tissue was then sent for histopathological examination where it was diagnosed as Fibroma. The histological report revealed Para keratinized stratified squamous epithelium and connective tissue stroma. Connective tissue stroma is dense collagenous & shows chronic inflammatory cells infiltration with numerous blood vessels seen (Figure 7)

On clinical examination, malpositioned canine was seen in the opposing arch leading to traumatic bite. Patient was explained about the possible reason of the lump in her mouth and was informed about the treatment plan accordingly. Based on etiological factor, clinical and histopathological examination the final diagnosis is Traumatic fibroma. Patient was placed on maintenance therapy for a period of 6 months to assess for any recurrence as the patient was unwilling for orthodontic treatment.

## **DISCUSSION**

According to the literature, some of the oral lesions, such as irritational fibroma are caused by oral habits such as lip biting / sucking, those associated with traumatic occlusions, and local etiological factors. A study was performed by Santiago Torres Domingo et al. in 2008 to examine the occurrence and form of the most common oral mucosal benign tumors among 300 patients which revealed 153 (53.3%) histologically diagnosed as fibroma, indicating that this is the most common oral cavity benign tumor.<sup>6</sup>

This is often treated with surgical excision and recurrence is rare unless the source of irritation/trauma is completely removed. Sixty-six percent of these type of fibromas have been reported in females. The lesion may be sessile or may have a pedunculated base and usually slowly progressing to its maximum size within a couple of months. It is usually self-limiting without malignant transformation. However, long term evaluation is required to observe transformation and recurrences of such lesions.<sup>7</sup>

In the present case, excision was carried out by using undisplaced flap technique to maintain the gingival contour. Clinical findings suggest that occlusal forces might be the cause of traumatic fibroma in this case as shown in figure 1(c)

Surgical excision is the preferred treatment of choice, with removal of local irritants to prevent recurrence. For hyperplastic lesions, a conservative approach is recommended. Local irritants should be removed. Those lesions failing to resolve should be surgically excised. Follow-up of the patient is needed as it exhibits a tendency to recur.<sup>8</sup>

For the undisplaced flap, the submarginal scalloped internal bevel incision is initiated at a distance from the tooth that is roughly one-half to two-thirds the interdental transgingival probing depth. It can be accomplished only if sufficient attached gingiva will be present apical to the incision. Therefore, the two anatomic landmarks, the transgingival interdental probing depth and the mucogingival junction, must be considered to evaluate the amount of attached gingiva that will remain after surgery. The internal bevel incision should be scalloped to create surgical papillae, which are essential to covering the interdental bone. In case of thick gingival tissue, the flap margin should be thinned with the initial incision. Proper placement of the flap margin at the alveolar crest during closure is important to prevent either recurrence or exposure of bone.<sup>9</sup>

Parkavi et al 2018 in their case report presented diagnosis, histological aspects and surgical management of irritational fibroma due to local trauma.<sup>4</sup> Another study by Prashanth et al, excisional biopsy was done of a fibroma where the patient complaint of habitual biting of cheek. The histologic findings suggested of Traumatic fibroma.<sup>10</sup>

## **CONCLUSION**

Excision of the fibroma by using undisplaced flap technique with management of the source of the trauma or irritation remains mandatory to prevent its recurrence. Undisplaced flap technique proves to be an effective alternative for minimal excision of tissue although presence of attached gingiva apical to the incision remain significant.

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### **LEGENDS**



Figure 1(a) PREOPERATIVE – LABIAL VIEW



Figure 1(b) – PREOPERATIVE OCCLUSAL VIEW



Figure 1(c) PREOPERATIVE – OCCLUSION WHERE TRAUMATIC BITE CAN BE APPRECIATED



Figure 2 MEASUREMENT OF THE FIBROMA USING UNC 15 PROBE



Figure 3 PREOPERATIVE IOPA



Figure 4 INCISION



Figure 5 REFLECTION



Figure 6 POST OPERATIVE

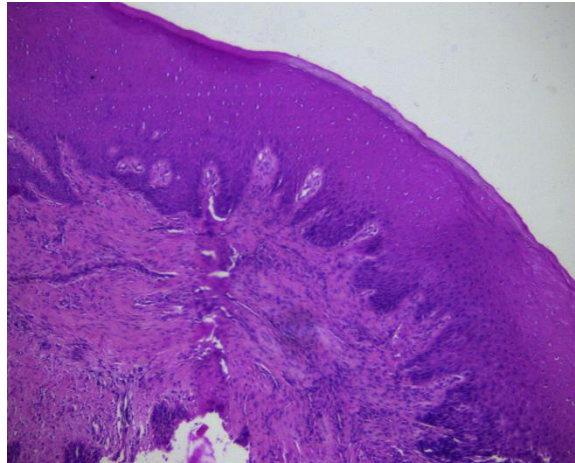


Figure 7 HISTOPATHOLOGICAL VIEW



Figure 8- FOLLOWUP AFTER 2 WEEKS  
(a) Labial view (b) Occlusal view



Figure 9 FOLLOWUP AFTER 3 MONTHS





Figure 10 FOLLOWUP AFTER 6 MONTHS