

**FROM DIAGNOSIS TO TREATMENT- AN ADUMBRATION  
UNRAVELLING A CASE OF FIBROUS EPULIS**

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**ABSTRACT**

Fibrous epulis is a reactive overgrowth of the gingiva that mimics a benign neoplasm. It is the most common reactive oral cavity lesion. Local irritation due to calculus, overhanging restorations, sharp tooth margins, and poorly contoured restorations are the causes of its occurrence. Since they look like benign neoplasms, histopathological evaluation is mandatory to confirm the diagnosis. Excision of the lesion along with the normal tissue is the treatment modality of choice for this lesion. This case report describes a case of fibrous epulis, from diagnosis to treatment.

**KEYWORDS:** Fibrous epulis, Epulis, Reactive lesion, Irritational fibroma.

**INTRODUCTION**

Epulis is a term applied for exophytic processes originating from the gingiva. The term is non-specific, and histopathology is used to make a more specific diagnosis. These are non-neoplastic proliferations which clinically appears very similar to benign neoplastic proliferations.<sup>[1]</sup> They are usually painless and represent as an exaggerated response of tissue to local irritants or trauma. According to the 2017 world workshop classification of periodontal diseases and conditions, these reactive processes or epulides are classified under the category of non-plaque- induced gingival diseases.<sup>[2]</sup>

They are further classified into Fibrous epulis, Calcifying fibroblastic granuloma, Pyogenic granuloma (vascular epulis), Peripheral giant cell granuloma (or central) according to their histopathological appearance.

Fibrous epulis is coded as K06.8 as per ICD-10 (International Classification of Diseases by WHO). Fibrous epulides, also known as irritation fibroma or focal fibrous hyperplasia, are pink, smooth-surfaced, exophytic masses with fibrous consistency that are affixed to the gingiva. The size varies from small to large tumorlike processes with a diameter of several cm.<sup>[3,4]</sup>

This case report describes a case of 'Fibrous epulis' which was successfully treated without complications and recurrence.

## CASE REPORT

### Case description

A 20 years old male reported to the Department of Periodontology with the chief complaint of painless growth in gums of lower left front teeth region. It has progressively increased in size to the present size over a period of one year. He has no relevant habit, drug, medical and family history.

### Clinical findings

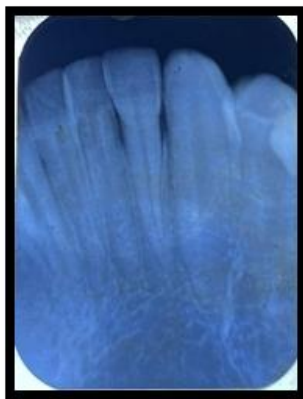
On intraoral examination, a painless gingival growth, about 11mm×11mm×9mm in size involving marginal gingiva and the interdental papilla was seen in relation to 32 and 33 region [Figure 1]. It was firm in consistency, pink in color, pedunculated and did not bleed on palpation and probing. The surface was slightly ulcerated. 32 and 33 were not mobile. Considerable deposits of plaque and marked gingival inflammation was present in the mandibular anterior region. No regional lymphadenopathy was seen.



**Figure 1: Pre operative clinical view.**

### Radiographical Examination

The Intraoral periapical radiographic examination did not reveal any bone involvement [Figure 2].



**Figure 2: Preoperative IOPA radiograph.**

### Management

Routine blood investigations were done. Subsequently, Phase I therapy (Scaling and Root planing along with oral hygiene reinforcement) was carried out [Figure 3]. The patient was apprised of the surgery and informed consent was obtained. Under LA (2% lidocaine with adrenaline 1:80,000), excision of the mass was done up to the stalk using 15c scalpel in relation to 32 and 33 region [Figure 4,5]. The excised mass was immersed in 10% formalin and the fixed specimen was sent to the department of oral pathology for histopathological evaluation. Thorough curettage and root planing was done using Gracey's curettes after the excision of the mass. Gingival contouring was done using Kirkland knife and Orban's knife. The surgical site was covered with a periodontal dressing [Figure 6]. Postoperative instructions were given. The patient was prescribed suitable antibiotics [Cap. Amoxicillin 500 mg TID and Tab. Metronidazole 400 mg TID] and analgesics [Tab. Paracetamol 500 mg TID] for 3 days and 0.12% Chlorhexidine mouth rinse twice daily from the 2<sup>nd</sup> postoperative day for 2 weeks. After one week, the patient was asked to come back for periodontal dressing removal and follow-up.



**Figure 3: After scaling and root planning.**



**Figure 4: After excision and gingival contouring.**



**Figure 5: Excised mass.**



**Figure 6: After periodontal dressing placement.**

### **Histopathological Evaluation**

Haematoxylin and Eosin-stained sections revealed hyperplastic para-keratinized stratified squamous epithelium. The underlying connective tissue shows dense fibrous tissue with a foci of ossification [Figure 7]. After a thorough histopathological evaluation, the diagnosis was made as “FIBROUS EPULIS”.



**Figure 7: Histopathology.**

### Post operative follow up

A week after surgery, periodontal dressing was removed. Clinical examination revealed uneventful healing of the surgical site. The patient was followed up postoperatively at regular intervals [Figure 8].



**Figure 8: After 1 month follow up.**

### DISCUSSION

The fibrous epulis, commonly present as a painless, firm, nodular mass with smooth surface, normal coloured mucosa and a sessile or pedunculated base.<sup>[4,9]</sup> It is located mostly in the interdental papilla of maxillary anterior region<sup>[5,6,7,10,11]</sup> and it has more female predilection.<sup>[8,12,13]</sup> In the oral cavity, it usually occurs in response to local irritation like restorations with irregular margins, caries, or subgingival calculus.<sup>[1]</sup> The aetiology of fibrous epulis, in this case, may be chronic irritation from subgingival calculus. Fibrous epulis in the current case was appeared in 20 years old male patient in mandibular anterior region, which is found to be contrast to the common features of fibrous epulis reported in various literatures.

### CONCLUSION

Although the exact aetiology is not known, fibrous epulis probably originated due to chronic irritation from the subgingival calculus in the interdental region of 32 and 33 region in this case. Since, fibrous epulis, clinically appears similar to other reactive lesions like peripheral ossifying fibroma/ pyogenic granuloma. Histopathological evaluation of the specimen was considered to be mandatory for the confirmatory diagnosis. Surgical excision along with the stalk followed by adequate oral hygiene maintenance and regular follow up to prevent recurrence is the treatment of choice for fibrous epulis.

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