

Fibrous Epulis: The Reactive Gingival Enlargement to Excise or Not to Excise

Rahim Omar

Doctor in Periodontology, Faculty of Medicine at Algiers University, Medical Dentistry Department – Algiers, Algeria

*Corresponding author

Rahim Omar, Doctor in Periodontology, Faculty of Medicine at Algiers University, Medical Dentistry Department – Algiers, Algeria

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Abstract

The volume thickening of soft tissue covering the alveolar ridges, designed gingival enlargement, is one of the frequent findings in clinical practice. However, they fail under varied presentations and their distinction allows a clinical diagnosis and defines an appropriate treatment to reduce recurrence. Among the diverse types of enlargement, fibrous epulis is the most common one. It is a localized uniform gingival overgrowth caused by tissue oedema and inflammatory hyperplasia in response to local irritations.

This report outlines a case of fibrous epulis concerning a 56 years old male patient, in our periodontology department. A careful medical history, examination of the gingival, periodontal health status, and its reevaluation were assessed. Conventional periodontal treatment has been sufficient to minimize the gingival size. After an excisional biopsy, the histopathological examination was the determinants tool to accurate the diagnosis of fibrous epulis.

Patient motivation and compliance during and after therapy has been a critical factor in the success of periodontal treatment and a key to prevent the recurrence of such lesions.

Keywords: Gingival enlargement, Fibrous Epulis, Histological examination, Motivation

Introduction

Gingival enlargement is one of the frequent features of gingival disease. It is characterized by an increase in the size of gingiva. According to location or topography, enlargements can be localized or generalized when the gingiva adjacent to almost all the teeth present is involved. Fibrous epulis represents the most common localized entity. It is a reactive fibrous hyperplasia related to local irritation from bacterial plaque, calculus, caries or restorations with irregular margins [1].

The prime approach to manage the fibrous epulis involves obtaining a detailed medical history and non-surgical periodontal therapy. Surgical excision of the lesion with histological analysis of the removed tissue is provided secondary to retain esthetical and functional demands [2,3]. Furthermore, the use of laser treatment is a valid alternative to traditional surgical intervention [4,5].

In this report, we describe a typical presentation of localized gingival overgrowth identified histologically as fibrous epulis only after surgical excision of the lesion.

Case Description

A 56 years old male patient, without any background medical history, was referred to our periodontology department for a painless gingival mass in relation to #42 and #43. His clinical history began 4 months ago with apparition of gingival tumefaction which increased

insidiously and progressively in size. He had some difficulties in speaking, eating and closing her mouth. Laboratory evaluation revealed full blood count within normal limits.

An intraoral examination showed a pedunculated gingival growth adjacent to #42 and #43. The mass measured approximately 2 cm × 1.5 cm in size and was firm in consistency. The surface was pinkish red in colour and without bleeding when touched. No tooth mobility in this region was noted. Gingivitis and poor oral hygiene were observed (Figure 1).



Figure 1: Fibrous epulis: firm pink nodule adjacent to #42 and #43

A complete excision of the lesion was performed two weeks after the initial non-surgical periodontal therapy and motivation (Figures

2 and 3).



Figure 2: After motivation, thorough scaling and root planning



Figure 3: Complete excision of the lesion

A histopathological examination revealed features of fibrous epulis; connective tissue stroma with dense collagen fibres, covered by hyperkeratinised stratified squamous epithelium and chronic inflammatory infiltrate. The patient was seen at 1 and 4 weeks postoperatively. The wound healing was uneventful and satisfactory (Figures 4 and 5).



Figure 4: Postoperative control after 1 week



Figure 5: Postoperative control: after 1 month

Discussion

Fibrous epulis, also designed peripheral fibroma or focal fibrous hyperplasia, represents the most common reactive gingival lesions and accounts for 41% to 61% of the localized enlargements [6,7]. This epulis affects both genders but occurs at a higher rate in females

[6,7]. While Ramu and Rodrigues showed a male predominance [8]. It may occur at various ages, but exhibits a peak incidence between the second and third decade [6,7,9].

About the pathogenesis, the periodontal ligament has been considered as the origin of the lesion because of the exclusive occurrence of the fibrous epulis in the gingiva (interdental papilla) and the possible presence of oxytalan fibers within the mineralized matrix [9]. The chronic irritation by dental plaque, microorganisms and calculus has been implicated in the metaplasia of the connective tissue or the dystrophic calcification seen in some lesions.

The histopathological examination is the only way to achieve definitively the diagnosis. The treatment of choice of the fibrous epulis is the complete surgical excision. Recurrence can occur if oral hygiene maintenance is not followed [6-9]. None clinical signs of recurrence were seen in our case after one month of follow-up.

Conclusion

In this study, a careful medical history, the clinical presentation and a presence of local irritants (bacterial plaque) have been helpful to arrive at a diagnosis of fibrous epulis.

An excisional biopsy and histological examination are needed to confirm the diagnosis. Patient motivation and compliance during and after therapy is a critical factor in the success of periodontal treatment.

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