

Peripheral Ossifying Fibroma in Maxillary Arch in 6 Year Old Male Child : A Case Report

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Introduction : Focal Gingival overgrowths are present which are similar morphologically but differ histologically.

Clinical Presentation : This article describes a case of Peripheral Ossifying Fibroma in a six year old male child in anterior maxilla with significant growth and interference with occlusion. Clinical, radiological and Histological features are discussed.

Conclusion : Surgical treatment should be emphasized as soon as possible due to high recurrence rate and irreversible bone loss affecting masticatory apparatus permanently. The importance of excellent communication with the patient for better prognosis is emphasized.

Key Words: Peripheral Ossifying Fibroma, Focal Reactive Hyperplasia, Gingival Overgrowth

Introduction

A diverse group of the pathologic process can produce the enlargement of soft tissues in the oral cavity and often present a diagnostic challenge. This soft tissue enlargement may represent a variation of the normal anatomic structure, inflammatory reaction, cyst, neoplasm, and developmental anomalies. A group of reactive hyperplasia, which develops in response to chronic recurring tissue injury, stimulates an excessive tissue repair response.¹

Peripheral ossifying fibroma (POF) and pyogenic granuloma (PG) belong to the group of 'focal reactive overgrowths', having different histological representations but same morphologic appearances. The pathogenesis of POF remains controversial. It has been suggested that the POF represents separate clinical entity rather than a transitional form of PG, peripheral giant cell granuloma (PGCG) or irritational fibroma (IF).²

It is widely considered that this lesion is often associated with trauma or local irritants such as subgingival plaque and calculus, dental appliances and poor quality restorations.³ POF are sessile or pedunculated, usually ulcerated and erythematous or exhibit a color similar to surrounding gingiva.⁴ It may occur at any age range. Females are most frequently affected with anterior maxilla as a common site. In the majority of cases, there is no apparent bone loss on radiograph. The definitive diagnosis of POF is based on histological examination with the identification of cellular connective tissue and the focal presence of bone or other calcifications.⁵ After elimination of local etiological factors, local surgical excision of peripheral ossifying fibroma is the preferred treatment.

Case Report

A six year old male child presented to the department with the chief complaint of soft tissue mass in the upper right region and bleeding during mastication for approximately four months. Initially, the lesion was small in size but increased gradually. Patient's parents were disturbed due to its appearance of a malignancy as told by local Quack in their neighbourhood. Intra oral examination revealed a well circumscribed, sessile, firm, gingival growth, located between Maxillary Primary Lateral Incisor and distal aspect of primary first molar. The surface was slightly ulcerated and erythematous. Poor oral hygiene with Plaque and calculus was found. (Fig. 1) Radiographic examination revealed no significant change in underlying bone architecture. (Fig. 2) The patient's past medical and dental history were non-contributory.

Clinically the diagnosis was made of PG with a differential diagnosis of IF, POF and PGCG. Under local anesthesia, the lesion was completely excised and was sent for histological examination. It revealed non-keratinized stratified squamous epithelium which was discontinuous and ulcerated in some areas. Underlying fibrous connective tissue showed intense infiltration by chronic inflammatory cells. Fibro-cellular connective tissue revealed spicules of bone formation and high degree of cellularity where the cells were found to be plump and active. All these findings were suggestive of POF. (Fig. 3) Patient was motivated and educated to maintain his oral hygiene. Oral hygiene instructions were reinforced.

Discussion

Reactive Gingival lesions as reported in this case, is often produced by trauma or local irritating agents like plaque and calculus.³ The diagnosis is usually established on the basis of the clinical findings, with few clinical differences noted among the different disorders included under this term; these disorders include POF, peripheral fibroma, PGCG and PG. The latter condition could represent an early, immature form of POF. POF is firmer and less friable than the rest of the lesions and typically shows a longer course. This explains the calcification and/or ossification secondary to fibroblast

maturation to collagen tissue.⁶ The POF has a peak incidence in young and teenaged females. But in our case, it was a male child. Cundiff reported that the lesion is prevalent between ages of five and twenty five years, with a peak incidence at thirteen years of age.⁷ The recurrence rate of peripheral ossifying fibroma has been considered high for reactive lesions. It probably occurs due to incomplete initial removal, repeated injury or persistence of local irritants.⁸ So, Complete removal and motivation of patient to maintain oral hygiene should be done to prevent recurrence.

Conclusion

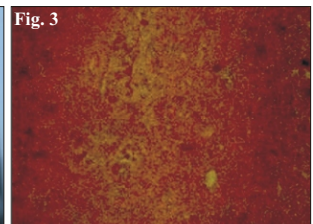
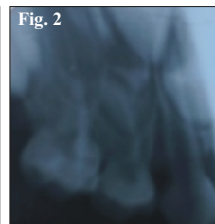
Each and every growth in the oral cavity should be checked by a professional. Many cases progress for long periods before patient seeks treatment because of the lack of symptoms associated with the lesion. Treatment consists of surgical excision and motivation of the patient to maintain proper oral hygiene.

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Legendsm of Figures

1. Intra Oral Examination showing gingival overgrowth in relation to upper right primary lateral incisor and primary 1st molar.
2. Radiological Examination showing normal teeth and bone without any involvement.
3. Histological Picture showing stratified squamous epithelium with connective tissue containing inflammatory cells.



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