



PERIPHERAL OSSIFYING FIBROMA- CASE REPORT

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<p>Article Info Received 05/01/2015 Revised 27/01/2015 Accepted 12/02/2015</p> <p>Key words: Peripheral ossifying fibroma, Oral tumors, Gingiva.</p>	<p>ABSTRACT Gingival growths are one of the most frequently encountered lesions in the oral cavity. Most of these lesions are innocuous, but some do have malignant potential. Different lesions with similar clinical presentations make it difficult to arrive at a correct diagnosis. One of the infrequently occurring gingival lesions is peripheral ossifying fibroma (POF). Peripheral Ossifying Fibroma (POF) is a focal reactive overgrowth occurring in young adults. Here we report an unusual case of peripheral ossifying fibroma in a 54-year-old woman, who reported with a slow-growing gingival growth. The clinical presentation, radiological, histological features, treatment are discussed briefly. Clinically, the lesion appeared as a nodular swelling on the gingiva. Thus, we proposed the term peripheral ossifying fibroma for this distinct lesion.</p>
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INTRODUCTION

Gingival growths are one of the most frequently encountered lesions in the oral cavity. Most of these lesions, such as irritational fibroma, pyogenic granuloma, peripheral ossifying fibroma and peripheral giant cell granuloma, are innocuous and rarely present with aggressive features [1]. In the majority of cases, these lesions are the result of trauma or chronic irritation. One of the infrequently occurring gingival lesions is peripheral ossifying fibroma [POF]. It is a focal, reactive, non-neoplastic tumor-like growth of the soft tissue that often arises from interdental papilla [1]. Peripheral ossifying fibroma is a lesion of the gingival tissues representing up to 2% of all oral lesions that are biopsied. POF mainly affects women in the second decade of life. (50% of all patients being between 5-25 years of age) [2]. The lesions are most often found in the gingiva, located anterior to the molars and in the maxilla [2]. The purpose of this article is to present a case of peripheral ossifying fibroma, briefly review the current literature on this condition and emphasize the importance of discussion of a reasonable differential diagnosis with the patient.

CASE REPORT

A 54-year-old female patient reported to the

outpatient department of periodontics, with a chief complaint of a slow growing painless mass on the gingiva that had been present buccally and extending towards palatally in the edentulous area of right upper back tooth region. It has grown to its present size over a period of 6 months [Figure 1]. There was no history of trauma and no history of ulceration. Patient gives history that it was a small nodule approximately 6 months earlier and it has gradually increased and attained to its present size.

CLINICAL EXAMINATION

Clinical examination of the oral cavity revealed a nodular mass on the gingiva in relation to the edentulous area from upper right second premolar to third molar [Figure 1]. The mass was 15 × 15 mm in diameter, dome shaped, pedunculated, non-tender, firm in consistency and overlying mucosa was whitish pink in appearance with no bleeding tendency. It appeared to be freely movable superficially but attached to the underlying gingiva but not to bone, this indicates that it is pedunculated. On palpation the inspeactory findings were confirmed.

RADIOGRAPHIC EXAMINATION

Radiographic examination (Intraoral periapical,



and Orthopantomograph) revealed a mixed radiolucent and radio opaque lesion [Figure 2] , with a rim of peripheral radiolucency.

DIAGNOSIS

The differential diagnosis included irritation fibroma, pyogenic granuloma and peripheral giant cell granuloma (PGCG) was made. A provisional diagnosis of peripheral ossifying fibroma was given.

TREATMENT

Routine haemogram of the patient was advised. After ensuring that the results of the hemogram were within normal limits the total unencapsulated mass was removed by performing excisional biopsy under local anesthesia [Figure 3] and was sent for histopathological examination.

HISTOLOGICAL EXAMINATION

The specimen consisted of a nodular mass of soft tissue measuring about 15 mm x 15 mm in size containing

calcified tissues. [figure 5] Histopathological examination revealed a well encapsulated tumor of cellular fibrous tissue covered by atrophic epithelium i.e., stratified squamous epithelium, the connective tissue was highly cellular with large no of plum proliferating fibroblasts arranged in whorled pattern under low power. High power revealed ulcerated epithelium with haematoxyphillic masses, which proves the evidence of calcifications in the hypercellular fibroblastic stroma in the form of numerous bony trabeculae scattered in the connective tissue confirming the diagnosis of peripheral ossifying fibroma [Figure 5, 6].

FOLLOW-UP

The patient presented for a follow-up examination 30 days postoperatively. The surgical site appeared to be healing well (Figure.7). There was no evidence of recurrence of the lesion, and the patient was asymptomatic as follow up was done for 1 year. [Figure-8]

Figure 1.



Figure 2.

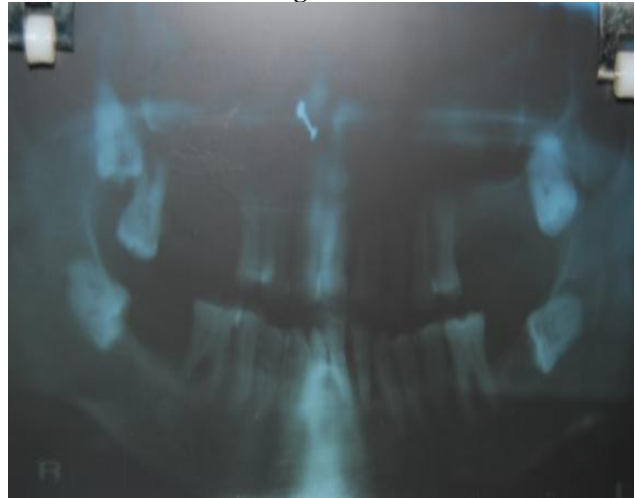


Figure 3.



Figure 4.

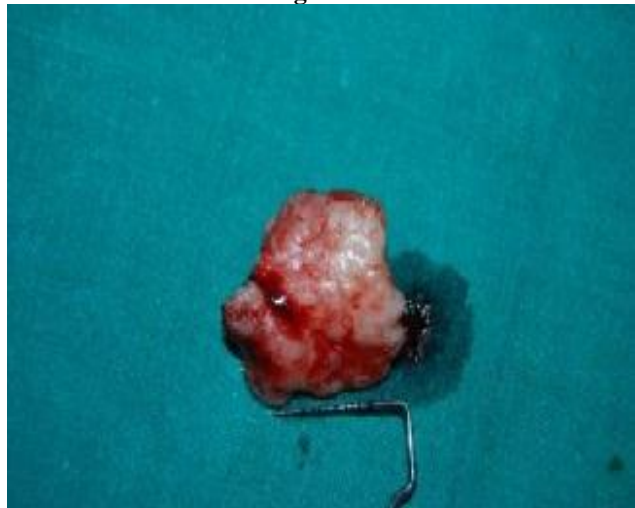


Figure 5.

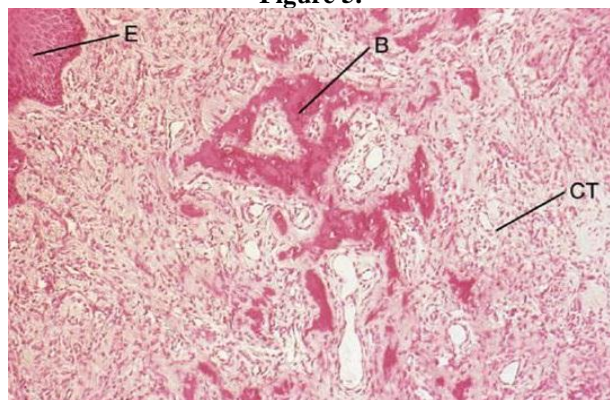


Figure 6.



Figure 7.



Figure 8.



DISCUSSION

Gingiva is often the site of localized growths that are considered to be reactive rather than neoplastic in nature. [3] The fibrous lesions of the gingiva with or without calcifications have been documented in literature under a variety of terms like fibrous epulis, fibro epithelial polyp, calcifying fibroblastic granuloma, peripheral fibroma with or without calcification, peripheral odontogenic fibroma with cementogenesis, peripheral ossifying fibroma and ossifying fibrous epulis. [4], [5] Most of these lesions are reactive chronic inflammatory hyperplasias with minor trauma and chronic irritation being the etiological factors. All these lesions have a similar clinical appearance that is a sessile or pedunculated nodule located on the interdental papilla. [2], [6].

It was first described in 1844. Bhasker et al. termed this as peripheral fibroma with calcification. [7] Arnott later described two lesions microscopically and gave the diagnosis of ossifying fibroma. The term peripheral ossifying fibroma was coined by Eversol and Robin. [6] It is a localized growth on the gingiva with a pedunculated or a sessile base. This reactive proliferative lesion is so named because it presents clinically as a solid, firmly attached gingival mass. It is slow growing and asymptomatic. [8] This is not true in our case as the lesion was fast growing and attained a size of 15 mm x 15 mm within a span of 6 months. Studies have revealed that the size of these lesions varied from 0.1-1 cm in diameter and

very few lesions were larger than 2 cm in diameter. This is most common in adolescents and young adults.

In the present case, it is reported in older age group and there is only 0.5% cases reported in older age group. [3] There is predilection for posterior maxilla as seen in our case. [9], [10] The surface is frequently but not always ulcerated. Among the patients with ulcerated lesions the male: female ratio was equal in the 2nd decade and in all other decades females predominated. [11]

Radiographic appearance of peripheral ossifying fibroma shows radio opaque flecks or patches. It frequently causes separation of the adjacent teeth and occasionally resorption of the adjacent teeth. [8] The present case revealed a mixed radio opaque and radiolucent lesion with a rim of radiolucent periphery. Treatment for these lesions is complete surgical excision as was done in the present case. Proper excision and aggressive curettage of the adjacent tissues is required for prevention of recurrence. [1], [13] Recurrence rate is approximately 16%. [13] As it can be misdiagnosed as pyogenic granuloma, peripheral giant cell granuloma or odontogenic tumors, histopathological examination is essential for accurate diagnosis. [1]

CONCLUSION

In the current case, the family experienced distress related to the suggestion of squamous cell carcinoma before referral for treatment and definitive diagnosis.



Treatment consists of surgical excision, including the periosteum, and scaling of adjacent teeth. Close postoperative follow-up was required for this case because of the growth potential of incompletely removed lesions and the 8%–20% recurrence rate. POF is a slowly progressing lesion, the growth of which is generally limited. Many cases will progress for long periods before

patients seek treatment because of the lack of symptoms associated with the lesion. A slowly growing pink soft tissue nodule in the maxilla of should raise suspicion of a POF. Discussion of the differential diagnosis should be done tactfully to prevent unnecessary distress to the patient and family.

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