Irritational Fibroma of anterior mandible: A case report

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Abstract

Irritational fibroma is a reactive lesion that is among the most common oral soft tissue tumor, caused due to local trauma or irritation by plaque, overhanging margins, and dental restorations. It is most commonly present on buccal mucosa along with the line of occlusion in third to fourth decade of life. The colour of irritational fibroma is usually same as the surrounding mucosa with soft ot firm consistency. Here is a case report of 72 years old male patient with irritational fibroma in lower anterior teeth region.

Keywords: Benign, fibroma, mandible, oral mucosa.

Introduction

In oral cavities most frequently found overgrowths are local benign tumours. Different types of reactive lesions may occur on gingiva.[1-3] Fibroma is considered the most common benign growth in the oral cavity.[4] Irritational fibroma is a common, benign, slow growing, soft tissue tumour. It usually presents as an asymptomatic mass which gradually increases in size.[5] The etiological factors for these lesion can be impute to the irritants like plaque, calculus, overhanging margins and dental restorations.[3,6] Irritational fibroma represents a reactive focal fibrous hyperplasia due to trauma or local irritation.[7,8]

Irritational fibroma can occur at any age and from almost any soft tissue sites, the tongue, gingiva and buccal mucosa. The color is usually same as the surrounding mucosa and consistency is soft to firm. It is usually managed by complete surgical excision with excellent prognosis once the source of irritation is completely eliminated. Here is a case of irritational fibroma in a 72 years old male patient in mandible anterior region.

Case Report

A 72 years old male patient reported to the Department of Oral Medicine and Radiology at with a chief complaint of growth in lower front teeth region since 4 months. The patient was apparently well 4 months back when he noticed gingival growth in the right mandibular front tooth region. The growth was slowly progressing and with time has increased to the present day size. There was no associated bleeding and pain. Patient was under medication for hypertension since 2 years. On intra oral inspection, a pale pink, pedunculated, well defined and smooth surface growth was seen on the labial mucosa in relation to 41, 42, 43 and 44.It measures approximately 3x2 cm in diameter and extends antero-posteriorly from distal surface of 41 to distal surface of 45, and superior-inferiorly from 0.5 cm above the occlusal plane with respect to 41,42,43and 44 and extends till the right buccal mandible vestibule.[Figure-1] On palpation the growth was found to be firm in consistency and non pulsatile. Hard tissue examination revealed generalised attrition of teeth.

Figure 1: Intraoral view showing the growth in relation to 41, 42, 43 and 44 region

On the basis of clinical presentations a provisional diagnosis of irritational fibroma was made. Differential diagnosis included chronic fibrous hyperplasia, pyogenic granuloma, peripheral ossifying fibroma and peripheral giant cell granuloma. Intra oral periapical radiogrpah and

haematological investigation was advised to the patient. Intra oral per apical radiograph reveals interdental bone loss in relation to 31 and 41. [Figure-2]

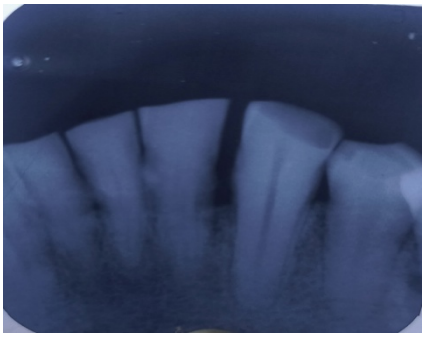

Figure 2: Intra oral periapical radiogrpah showing interdental bone loss wrt 31, 41

The routine blood and urine investigations were within normal limit. Patient underwent surgical excision with placement of sutures and sent for histopathological examination. Subsequent histopathological examination showed the presence of hyper plastic par keratinized stratified squamous epithelium with underlying connective tissue stroma. The stroma is highly cellular. Numerous proliferated and dilated blood capillaries, fibroblast, collagen fibres are seen. Presence of chronic inflammatory cells, predominantly being lymphocytes are evident suggestive of final diagnos of irritational fibroma. [Figure- 3]

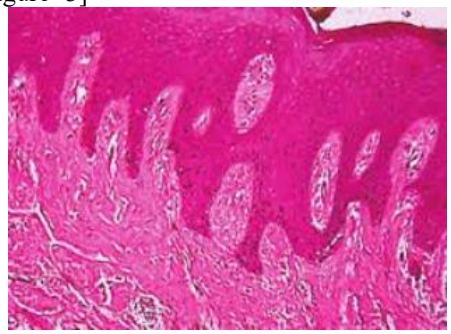

Figure 3: Histological picture of irritational fibroma showing hyper plastic par keratinized stratified squamous epithelium

Discussion

Irritational fibroma also known as focal fibrous hyperplasiaor fibromatosis fibroma.[8,9]It usually occurs more in females than in males. The high female predilection and a peak occurrence in the first and second decade and declining incidence after the third decade of life suggested hormonal influences. Our case presented a male patient with fibroma which is rare occurrence.

The frequency of irritational fibroma is found to be more in maxilla than the mandible and more often in incisor cuspid region, ranging between 55-62%. [10] In our case, lesion was present in relation to 41, 42, 43 and 44 tooth region, which is a rare presentation. The surface of tumour may be ulcerated in 66% of cases and intact in 34% of cases.[9] Clinical presentation comprise sessile or pedunculated masses with smooth or injured surfaces and are seen in different colours ranging from pale to bright pink to red.[5] In our case the tumour growth was pedunculated, smooth and bright pink in colour.

Irritational fibroma can also produce migration of teeth with destruction of the interdental bone.[5] Bone formation or dystrophic calcification may be seen with foci of radiopaque material, especially in large lesions or lesion with veraciously mineralization. Fibroma can produce interdental destruction of bone with migration of teeth. Histopathologically, irritational fibroma can be seen as an stratified squamous epithelium which can be intact or ulcerated along with atrophy. Thin, finger-like rete ridges extend into underlying fibro-cellular connective tissue stroma. Solid nodular mass of dense hyalinized fibrous connective tissue arranged in haphazard fascicles with moderate chronic inflammatory cell infiltrate can also be seen at a few sites.[4, 5] Treatment of irritation fibroma aims at elimination of etiological factors followed by scaling of adjacent teeth and total aggressive surgical excision along with involved periodontal ligament and periosteum to minimize recurrence. Any identifiable irritant should be removed. [4]

Conclusion

Irritational fibroma is one of the most common oral fibromas. A thorough history, clinical, and radiographic examination should be carried out to rule out other oral lesions and arrive at an accurate diagnosis. Early detection, elimination of the irritations and the treatment of the lesions is of utmost importance.

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