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Case Report

PERIPHERAL OSSIFYING FIBROMA- A RARE CASE REPORT

Bhuvaneswari P., Amuthavalli E and Jenapriya R

Department of Periodontics, Tamilnadu Government Dental College, Chennai

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ABSTRACT

Peripheral ossifying fibroma is a non- neoplastic growth of gingiva which is relatively rare reactive lesion. It is thought to arise from periodontal ligament constituting 9% of overall gingival growth. They usually occur in young adults in 2nd and 3rd decade of life with female predominance. Pathogenesis of peripheral ossifying fibroma is uncertain .Here we report a case of peripheral ossifying fibroma of a 27 year old female.

INTRODUCTION

Gingival growth is one of the most frequently encountered lesions in the oral cavity. Many of these growths are localised reactive lesions including focal fibrous hyperplasia, pyogenic granuloma, peripheral giant cell granuloma and peripheral ossifying fibroma. Of the above infrequently occurring lesion is peripheral ossifying fibroma. It is typically solitary slow growing nodular mass which is either sessile or pedenculated with smooth surface or ulcerated with colour which is pink to red. It can cause migration of the teeth with interdental bone loss. Etiology is chronic irritation such as dental plaque, calculus, ill-fitting dentures and traumatic restorations (Miller *et al*, 1990). It usually manifests as a well defined slow growing gingival mass located in interdental region (Farquhar *et al*, 2008).

CASE REPORT

A 27 year old systemically healthy female patient reported to the department of periodontics, tamilnadu government dental college, Chennai, with a chief complaint of painless gingival growth in relation to left lower anterior teeth region for the past three months. Patient did not give history of any previous swelling or any history of trauma, injury.

An intra oral examination revealed sessile growth measuring approximately 8 mm *8mm in size which arise from marginal gingiva of 32 extended interdentally between 31 and 32 region. Thelesion was non tender, firm in consistency, and easily movable and the surface of the growth was lobulated and ulcerated. The colour of the growth was similar to adjacent area with upper half being more reddish in colour and positive sign of bleeding on probing (fig 1,2,3,4). An intra oral periapical radiograph showed crestal bone loss between 31 & 32(fig 5). The clinical differential diagnosis for the growth were pyogenic granuloma ,peripheral ossifying fibroma, peripheral odontogenic fibroma and the provisional diagnosis of pyogenic granuloma with respect to 31,32 was made for gingival growth.

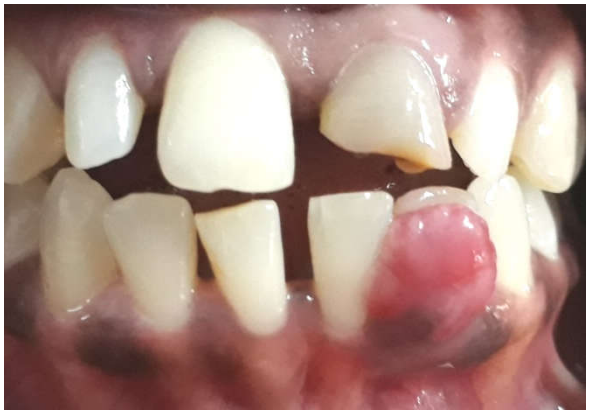

Figure 1 a

Corresponding author:* **Bhuvaneswari P
Department of Periodontics, Tamilnadu Government Dental College, Chennai

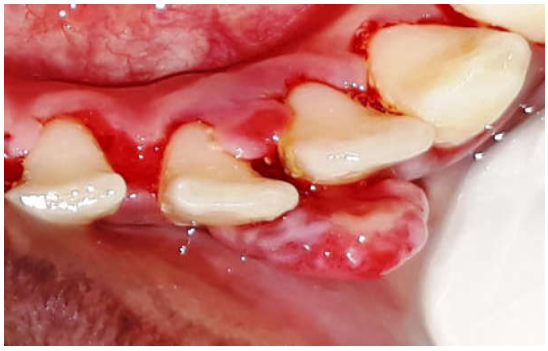

Figure1 b

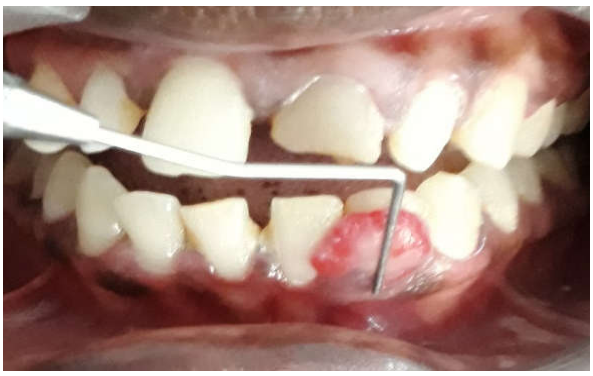

Figure 2

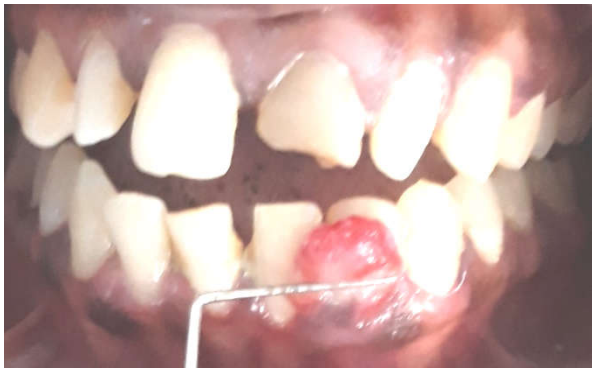

Figure 3

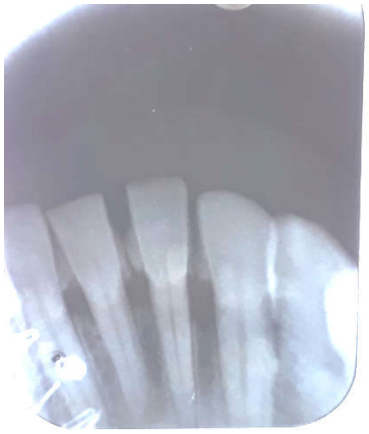

Figure 4

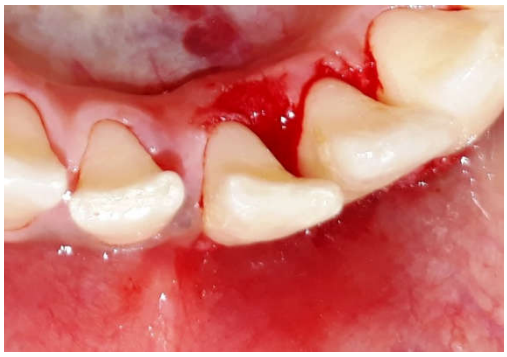

Figure 5

After routine haematological investigation excisional biopsy was done under local anaesthesia. Complete debridement and deep curettage done in relation to 31 & 32region (Fig 6,7).coe pack was given (Fig 8).

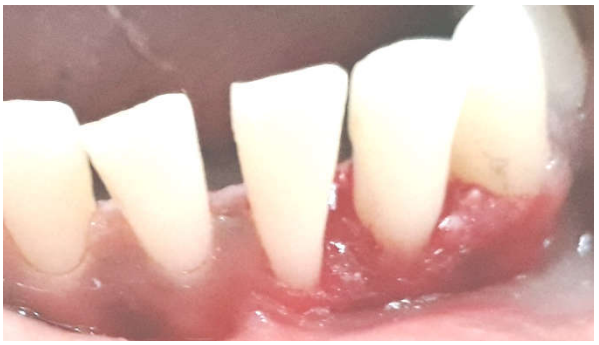

Figure 6

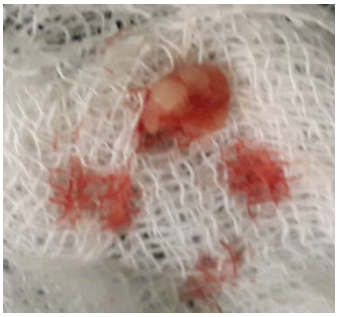

Figure 7

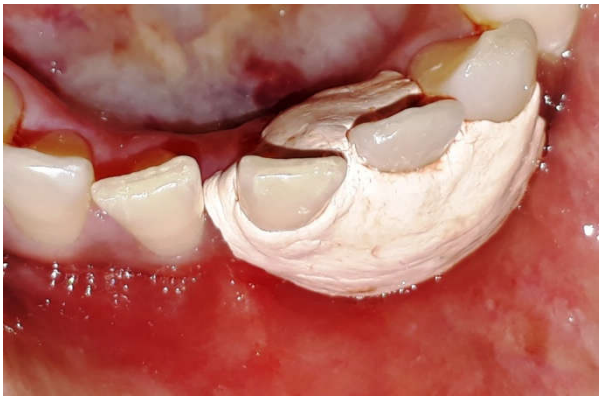

Figure 8

The specimen was put in 10 % formalin solution and sent for histopathological examination. Histopathology report showed non keratinized stratified squamous epithelium characterized by hyperplasia ulceration .The underlying connective tissue show bland spindle cells admixed with bone formation and

elsewhere vascular in nature. Histopathology diagnosis was peripheral ossifying fibroma.post operative healing was uneventful. (Fig 9,10)

Post operative –after 1 week

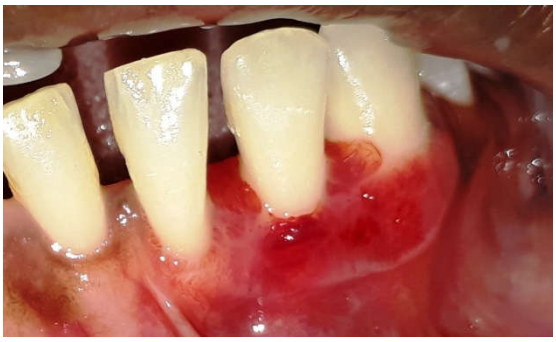

Figure 9

Post operative –after 3 months

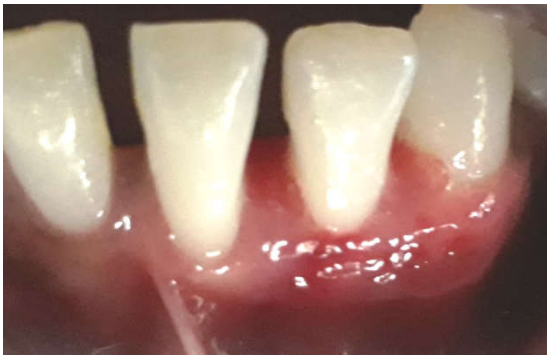

Figure 10

DISCUSSION

In 1982, Gardner coined the term peripheral ossifying fibroma for a lesion that is reactive in nature and is not the extra osseous counterpart of a central ossifying fibroma (COF) of the maxilla and mandible (Gardner, 1982). Many terms have been given to similar lesions such as peripheral ossifying fibroma, epulis or peripheral fibroma with calcifications, Peripheral cemento ossifying fibroma, Calcifying fibroblastic granuloma , peripheral cementifying fibroma, peripheral fibroma with cementogenesis (Kumar *et al* 2006)

Peripheral ossifying fibroma commonly occurs in interdental area and it is thought to arise from periodontal ligament. It occur at any age but peak incidence between 2nd and 3rd decade of life with female predilection 5:1, (Effiom *et al*,2011).

According to Buchner and Hansen 1987, clinically the lesion was sessile or pedenculated, unusually ulcerated, erythematous or exhibit colour similar to surrounding gingiva. It leads to resorption of alveolar crest, separation of adjacent tooth with pathological migration (Buchner *et al* 1987)

Gardner (1982) reported with cellular connective tissue of peripheral ossifying fibroma was so characteristics by the presence of collagenous connective tissue, proliferative endothelial cells and formation of mineralized products Farguhar *et al* (2008) reported that mineralised component vary from 23% to 75%.

Widely accepted etiopathoenesis for peripheral ossifying fibroma is inflammatory hyperplasia of the cells of the periosteum and periodontal membrane causes metaplasia of connective tissue and results initiation and formation of bone or dystrophic calcification. peripheral ossifying fibroma has to be differentiated from peripheral odontodenic fibroma which is an uncommon neoplasia arise from odontogenic epithelial cells n periodontal ligament or attached gingiva histopathology show odontogenic epithelium dysplastic dentin which are not seen in peripheral ossifying fibroma (Gardner, 1982).

Peripheral ossifying fibroma is also differentiated from pyogenic granuloma which is soft friable nodules, small in size with bleeding tendency and may or may not show calcifications, but tooth displacement and resorption of alveolar bone are not obscured. Peripheral giant cell granuloma has clinical features similar to peripheral ossifying fibroma butperipheral ossifying fibroma lacks purple or blue discoloration, radiographically shows flecks of calcification and alsohistopathologically peripheral giant cell granuloma contain giantcalls. In precise peripheral ossifying fibroma is definitely diagnosed through histopathology , it shows a) benign fibrous connective tissue with varying fibroblast, myofibroblastand collagen b)sparse to profuse endothelial proliferations c)mineralised material that may represent mature lamellar, woven, osteoid, cementum like material and calcification (Kumar *et al* 2006). It has high rate of recurrence due to incomplete removal of lesion, failure to eliminate localirritants and difficulty in accessing the lesion during surgical manipulation.

CONCLUSION

Peripheral ossifying fibroma is progressive reactive lesion with high recurrence rate and many times clinically diagnosed as pyogenic granuloma. Radiology & histopathological diagnosis are required for confirmation because of highest rate of recurrence. Peripheral ossifying fibroma need complete debridement with close post-operative follow up which is mandatory.

References

Buchner A, Hansen LS, (1987). The histomorphologic spectrum of peripheral ossifying fibroma. *Oral Surg Oral Med Oral Pathol.* Apr; 63(4):452-61,

Effiom OA, Adeyemo WL, Soyele OO. Focal reactive lesions of the Gingiva: An analysis of 314 cases at a tertiary Health Institution in Nigeria. *Niger Med J.* 2011; 52:35-40.

Farquhar T, Maclellan J, Dyment H, Anderson RD (2008). Peripheral ossifying fibroma: a case report. *J Can Dent Assoc;* 7-:809-12.

Gardner DG (1982). The peripheral odontogenic fibroma: an attempt at classification. *Oral Surg Oral Med Oral Pathol*; 54:40.

Kumar SK, Ram S, Jorgensen MG, Shuler CF, Sedghizadeh PP, (2006). Multicentric peripheral ossifying fibroma., *J Oral Sci*;48:239-43

Miller CS, Henry RG, Damm DD. Proliferative mass found in the gingival (1990). *J Am Dent Assoc*; 121:559-60.

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