

EPULIS INVOLVING ANTERIOR MAXILLARY GINGIVA: A CASE REPORT

Kirti Saharan*, Shivaprasad S., Ashok L and Poornima R

Department of Oral Medicine and Radiology, Bapuji Dental College and Hospital Davangere, Karnataka, 577004

ARTICLE INFO

Article History:

Received 5th April, 2018
Received in revised form 24th
May, 2018 Accepted 20th June, 2018
Published online 28th July, 2018

Key words:

Peripheral ossifying fibroma, Epulis, Maxillary gingiva.

ABSTRACT

Gingiva is often the site of localized growths that are considered to be reactive rather than neoplastic in nature. Peripheral Ossifying Fibromas (POFs) are benign reactive gingival overgrowth; comprising about 9% of all gingival growths which can occur in response to trauma or irritation. It occurs mainly in the anterior portion of maxilla in young adults, predominantly among females. In this article, we are presenting a case of peripheral ossifying fibroma occurring in a 60 year old female patient as a solitary painless growth in the anterior maxillary gingiva.

Copyright©2018 Kirti Saharan et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Peripheral ossifying fibroma (POF) is a non-neoplastic entity, which occurs on the gingiva in response to trauma or irritation.^[1] POFs consist of one or more mineralized tissues, including bone, cementum-like material, or dystrophic calcification within a matrix of cellular fibroblastic tissue.^[2] Synonyms of POF are peripheral cementifying fibroma, calcifying or ossifying fibroid epulis, and peripheral fibroma with calcification. These lesions may arise as a result of irritants such as trauma, microorganisms, plaque, calculus, faulty restorations, and dental appliances. It is typically seen as a gingival growth on interdental papilla and comprises about 9% of all gingival growths. Females are more commonly affected, and anterior maxilla is the most prevalent location.^[3]

Case History

A 60 year old female patient has reported to the department with the chief complaint of painless swelling in the right upper front gum region since 1 year. HOPI revealed that the swelling was gradual on onset, slowly progressing, initially smaller in size and later increased to the present size. No history of trauma or any discharge was present. On inspection, a noval shaped reddish pink swelling with 1.5 cm diameter at the right anterior maxillary gingiva involving interdental and marginal w.r.t 11 extending from mesial aspect of 21 till mesial aspect of 12 mesiodistally and from 2mm below the mucogingival junction till the cervical third of 11 superioinferiorly, having a smooth surface with well-defined borders. On palpation, swelling was non-tender, firm with sessile base. 11 was grade I mobile and spacing was evident w.r.t 11 and 12.

Based on the history and clinical features provisional diagnosis of benign localized epulis involving attached and marginal gingiva w.r.t 11. Differential diagnosis given were, pyogenic granuloma, peripheral ossifying fibroma and peripheral giant cell granuloma. IOPA was taken w.r.t 11 which revealed shift of alveolar crest 2-3 mm apical to CEJ w.r.t 11 on mesial and distal aspect. Widening of PDL space at cervical third on mesial and distal aspect of 11. Excisional Biopsy was advised and the specimen was sent for histopathological examination which revealed fibro-cellular connective tissue interspersed with plump fibroblasts in between the collagen bundles, surfaced by parakeratinized stratified squamous epithelium. Stroma showed large trabeculae of lamellar bone which was suggestive of Peripheral Ossifying Fibroma. Patient was followed up after excision and post-operative healing was satisfactory and no recurrence was noted.

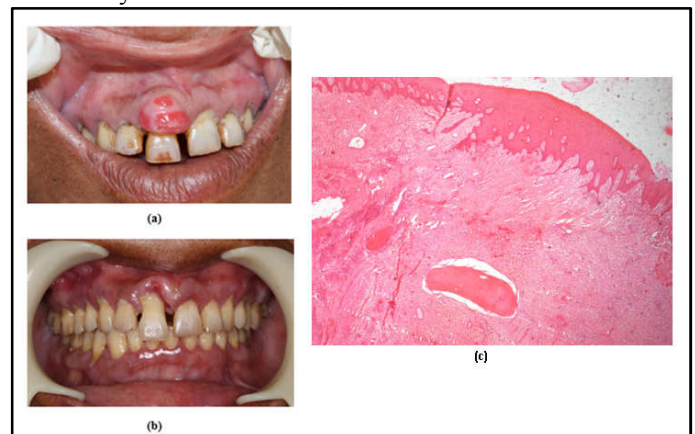


Figure 1 (a) Clinical view of the lesion. (b) Post-operative view. (c) Histopathology of the lesion.

*Corresponding author: **Kirti Saharan**

Department of Oral Medicine and Radiology, Bapuji Dental College and Hospital Davangere, Karnataka, 577004

DISCUSSION

POF was first reported by the Shepherd in 1844 as alveolar exostosis. Eversole and Robin in 1972, later coined the term peripheral ossifying fibroma.^[4] This lesion is predominantly noted to affect teenagers and young adults, but can occur in any age group. Almost two-third of all cases were reported to occur in females and a total of 80% of the lesions occur anterior to the molar area and over 50% of the lesions occur in the incisor and canine regions.^[5] Maxillary involvement is more commonly noted than the mandible. The lesion usually measures to a size of <2 cm in diameter, but lesions of 6 cm or as large as 9 cm have also been reported.^[6] It appears as a slow growing, solitary, nodular mass and can be either sessile or pedunculated. The surface is usually smooth or ulcerated and pink to red in color. If complicated by trauma and local irritants the surface appears red and ulcerated.^[5]

Though the etiopathogenesis of POF is uncertain, origin from cells of periodontal ligament has been suggested. The reasons for considering periodontal ligament origin include excessive occurrence of POF in the gingival interdental papilla, the proximity of the gingival to periodontal ligament, the presence of oxytalan fibres within the mineralized matrix of some lesion, and the fibrocellular response in periodontal ligament.^[3] Multicentric POF can also occur in oral and maxillofacial region and is observed in genetic associated conditions like:

- Nevoid basal cell carcinoma syndrome
- Multiple endocrine neoplasia-type II
- Neurofibromatosis
- Gardner syndrome.^[7]

Differential diagnosis includes traumatic fibroma, peripheral giant cell granuloma, pyogenic granuloma, and peripheral odontogenic fibroma. The following features are usually observed:

- Intact or ulcerated stratified squamous epithelium
- Benign fibrous connective tissue with varying number of fibroblasts
- Sparse to profuse endothelial proliferation
- Mineralized material consisting of mature lamellar or woven osteoid
- Acute and chronic inflammatory cells.^[8]

The basic microscopic pattern of the POF is fibrous proliferation associated with the formation of mineralized components. Mineralized component varies from 23 to 75%.^[7] Treatment includes local surgical excision and oral prophylaxis.^[9] Follow-up is essential because of the recurrence rates, which ranges from 8% to 45%.^[8,9] Recurrence is due to incomplete excision and/or due to persistence of local factors.^[9]

CONCLUSION

POF represents a reactive benign lesion of connective tissue which occurs frequently in anterior part of jaws of young females, exclusively on gingiva. It can easily be confused with similar looking entities like pyogenic granuloma, peripheral giant cell granuloma. Therefore, thorough history, clinical, radiological & histological examination should be carried out to rule out differential diagnosis. Management of such a case needs a multidisciplinary approach to prevent the recurrence and with regular long time follow-up.

References

1. Mohiuddin K, Priya NS, Ravindra S, Murthy S. Peripheral ossifying fibroma. *J Indian Soc Periodontol.* 2013;17(4):507-509.
2. Mergoni G, Meleti M, Magnolo S, Giovannacci I, Corcione L, Vescovi P. Peripheral ossifying fibroma: A clinicopathologic study of 27 cases and review of the literature with emphasis on histomorphologic features. *J Indian Soc Periodontol.* 2015 Jan-Feb;19(1):83-7.
3. Bhasin M, Bhasin V, Bhasin A. Peripheral Ossifying Fibroma. *Case Rep Dent.* 2013;497234:1-3.
4. Reddy GV, Reddy J, Ramlal G, Ambati M. Peripheral ossifying fibroma: Report of two unusual cases. *Indian J Stomatol.* 2011;2:130-33.
5. Neville BW, Damm DD, Allen CM, Bouguot JE. Soft tissue tumors. In: Text book of Oral and Maxillofacial Pathology. 2nd ed., Ch. 12. Philadelphia: Saunders; 2002. p. 451-2.
6. Choudary SA, Naik AR, Naik MS, Anvitha D. Multicentric variant of peripheral ossifying fibroma. *Indian J Dent Res.* 2014;25:220-24.
7. Jain A, Deepa D. Recurrence of peripheral ossifying fibroma: A case report. *People's J Sci Res.* 2010;3:23-5.
8. Cuisia ZE, Brannon RB. Peripheral ossifying fibroma - A clinical evaluation of 134 pediatric cases. *Pediatr Dent* 2001;23:245-8.
9. Farquhar T, MacLellan J, Dymont H, Anderson RD. Peripheral ossifying fibroma: a case report. *J Can Dent Assoc.* 2008;74(9):809-12.

How to cite this article:

Kirti Saharan *et al* (2018) 'Epulis Involving Anterior Maxillary Gingiva: A Case Report', *International Journal of Current Advanced Research*, 07(7), pp. 14095-14096. DOI: <http://dx.doi.org/10.24327/ijcar.2018.14096.2543>
