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Peripheral ossifying fibroma - an uncommon occurrence in mandible

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Abstract

Peripheral ossifying fibroma (POF) is relatively common reactive lesion. POF can occur at any age, although it is common in young adults. It comprises about 9.6% of all gingival growths. It arises from periodontal ligament cells and is frequently misdiagnosed as pyogenic granuloma or fibroma. It exclusively occurs on gingiva. POF commonly occurs in maxillary anterior region. However, in this case report, POF in mandibular anterior region is presented.

Keywords: Peripheral ossifying fibroma; reactive lesion; pyogenic granuloma

Introduction

Peripheral ossifying fibroma (POF) is also known as ossifying fibroid epulis; peripheral fibroma with calcification; calcifying fibroblastic granuloma^[1]. POF is relatively common gingival growth comprising about 9.6% of all gingival growths^[2]. POF is reactive rather than neoplastic in nature. POF is associated with periodontal ligament and originates from cells of periodontal ligament^[2]. Pathogenesis is uncertain. However POF is associated with trauma or local irritants, such as subgingival plaque and calculus, dental appliances, and poor-quality dental restorations^[3]. It occurs predominantly in 25 to 35 years of age^[1, 4] and is two to four times more frequent in females^[1, 4]. POF has predilection for maxillary anterior region and occurs especially in incisor-cuspid region⁵. It occurs exclusively on gingiva^[6]. It appears as sessile or pedunculated nodular mass. POF arise from interdental papilla and is reported to induce migration of teeth^[7]. Colour ranges from red to pink. Surface is frequently but not always ulcerated. POF is composed of a cellular fibroblastic connective tissue stroma associated with the formation of randomly dispersed foci of mineralized product consisting of bone, cementum-like tissue, or dystrophic calcification⁸. POF are more cellular than fibroma and less vascular than pyogenic granuloma. POF is frequently mistaken for fibroma or pyogenic granuloma. POF has high rate of recurrence of approximately 20%^[1, 2]. So complete excision of lesion including periosteum and periodontal ligament becomes important.

Case Report

A 40 year old female reported to outpatient department of Periodontics with chief complaint of swelling in lower anterior region since 4-5 months. Patient consulted private practitioner and got her teeth extracted in relation to swelling 3 months back. After extraction, swelling continues to increase with time. On intraoral examination, reddish inflamed nodular mass was present on alveolar ridge in mandibular anterior region. Teeth number #31, #41 were missing. Growth was reddish in appearance, pedunculated and non-tender. There was presence of calculus and plaque. Scaling and root planing was done to remove local factors contributing to POF. Growth was then excised and full thickness mucoperiosteal flap was raised to completely debride bone. Open flap debridement was continued on adjacent teeth to remove source of irritation. Excised mass was sent for histopathological investigation.

Histopathology section revealed parakeratinized stratified squamous overlying epithelium, hyperplastic in some areas and ulcerated in other. Underlying connective tissue stroma was fibrocellular with presence of osteoid tissue surrounded by intense chronic inflammatory cell infiltrate. Small and large blood capillaries and extravasated RBCs were also evident.

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Pre-Operative Photograph



Photograph of Excised Tissue



At Follow Up

5. Buchner A, Hansen LS. The histomorphologic spectrum of peripheral ossifying fibroma. *Oral Surg Oral Med Oral Pathol.* 1987; 63:452-461.
6. Kenney JN, Kaugars GE, Abbey LM. Comparison between the peripheral ossifying fibroma and peripheral odontogenic fibroma. *J Oral Maxillofac Surg.* 1989; 47:378-382.
7. Poon CK, Kwan PC, Chao SY. Giant peripheral ossifying fibroma of the maxilla: report of a case. *J Oral Maxillofac Surg.* 1995; 53:695-698.
8. Neville BW, Damm DD, Allen CM, Bouquot JE. *Oral and maxillofacial pathology.* Philadelphia: Saunders, 1995, 374-376.

Conclusion

Based on clinical and histopathologic appearance, diagnosis of peripheral ossifying fibroma was made.

References

1. Bhaskar NS, Jacoway JR. Peripheral fibroma and peripheral fibroma with calcification: report of 376 cases. *JADA.* 1966; 73:1312-1320.
2. Lay field LL, Shopper TP, Weir JC. A diagnostic survey of biopsied gingival lesions. *J Dent Hyg.* 1995; 69:175-179.
3. Gardner DG. The peripheral odontogenic fibroma: an attempt at clarification. *Oral Surg Oral Med Oral Pathol.* 1982; 54:40-48.
4. Eversole LR, Rovin S. Reactive lesions of the gingiva. *J Oral Pathol.* 1972; 1:30-38.