



Peripheral Ossifying Fibroma: A Case Report

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ABSTRACT: Peripheral ossifying fibroma (POF) represents a rare separate entity of reactive inflammatory lesion of connective tissue origin. The present article is a case report related to peripheral ossifying fibroma in a 35-year male who reported with a painless growth in the left mandibular posterior region of jaw. Its diagnosis, satisfactory clinical management along with brief review of literature is discussed.

KEYWORDS: fibroma, peripheral ossifying fibroma, peripheral cemento-ossifying fibroma

I. INTRODUCTION

Gingival enlargement, particularly those belonging to the reactive group is frequently encountered in oral cavity in daily practice [1]. Reactive lesions such as pyogenic granuloma, irritational granuloma, or traumatic fibroma and peripheral ossifying fibroma (POF) are innocuous in nature, rarely presenting with aggressive clinical features [2]. POF is a non neoplastic enlargement of gingival that is classified as a reactive hyperplastic inflammatory lesion, a common gingival growth, which is typically seen on the interdental papilla and is believed to compromise about 9% of all gingival growth [3].

POF appears as a slow growing solitary mass which is usually sessile or pedunculated with

smooth or ulcerated surface [4]. The colour ranges from red to pink [5]. The present article highlights a case report of POF in a 35 year old male patient, its diagnosis, clinical management along with discussion.

II. CASE REPORT

A 35 year old male patient reported to the out patient department of C.S.M.S.S. dental college, with a chief complaint of a painless growth in lower left back region of jaw since 4-5 months. There was no history of ulceration or trauma. Growth was gradually increased, due to which he was having discomfort white speaking and chewing food.

On inspection of oral cavity revealed a single, oval, well defined, lobulated growth seen on attached gingiva of left posterior region of mandible which was horizontally extending from mesial aspect of 36 tooth till distal aspect of 37 tooth and vertically from left buccal vestibule till occlusal surface of 36,37 teeth. It was having size of approximately 3cmx2cm. The overlying surface was pale pink in colour with having erythematous patches on it (**figure 1**)

On palpation, the lobulated, oval, growth was pedunculated, a febrile and non tender. It was firm in consistency with irregular borders. The teeth adjacent to the growth were firm and non tender.



Figure 1: A single, oval, well defined, lobulated growth seen on attached gingiva of left posterior region of mandible.

Provisional diagnosis made on the clinical findings was a simple fibroma. The differential diagnosis considered were peripheral giant cell granuloma, irritational fibroma, peripheral odontogenic fibroma.

For radiological consideration, a panoramic radiograph was taken. The radiographic examination

showed generalized loss of alveolar crestal bone in both maxillary and mandibular arch (**figure 2**). The patient was then subjected to excisional biopsy under local anaesthesia and then the excised mass was sent for histopathological examination (**figure 3,4**).



Figure 2: The panoramic radiographic examination showed generalized loss of alveolar crestal bone in both maxillary and mandibular arch.



Figure 3,4: During and after surgical excision done of the lesion.



Figure 5: Lesion after surgically removed.

The histopathological reports revealed that, parakeratotic stratified squamous epithelium with extensive arcading and forking. The connective tissue core showed numerous spindle shaped fibroblasts. Areas of ossification were evident in the present sections. Fibrous tissue was also seen.

Correlating the clinical and radiological findings with histopathological features, a final diagnosis of peripheral ossifying fibroma was made.

III. DISCUSSION

Fibromas of the gingival arise mainly from the connective tissue or periodontal ligament. Ossifying fibroma is a benign neoplasm which arises mainly in the craniofacial bones. Ossifying can be broadly divided into two types: central and peripheral. The central type lies in the endosteum or the periodontal ligament adjacent to the apex of the root which over a period causes expansion of medullary spaces producing associate extraoral swelling where as the soft tissue in the tooth bearing areas of the jaw [6].

Peripheral ossifying fibroma is also known as peripheral ameloblastic fibrodentinoma, calcifying fibrous epulis, peripheral fibroma with calcification. It is believed that, it is associated with irritation like over extended margin of faulty

restoration or deposits of calculus [7]. It usually occurs in between 5 to 25 years of age and female affects more [8]. In our case the patient was of 35 years male.

Clinically, POF appears as a solitary nodular mass that is either pedunculated or sessile. The mucosal surface colour ranges from red to pink depends on duration of the growth. The surface may or may not be ulcerated. The mass usually arises from interdental papilla. Lesions occur slightly more frequently in maxillary arch (60%) and the incisor cuspid area (15%) where as in our case, the lesion was associated with left mandibular posterior region of jaw [9].

Radiologically, there may be a presence of some radiopaque foci within the tumour mass which occurs due to calcification within tumour [8]. In our case, there was generalized loss of alveolar crestal bone seen in both maxillary and mandibular arch. The histopathology provides confirmatory diagnosis with the presence of parakeratinized stratified squamous epithelium and also areas for ossification were evident in our case.

Treatment includes surgical excision and scaling with adjacent teeth. The rate of recurrence has been reported in some cases hence follow up is required [10].



IV. CONCLUSION

POF is a slow growing lesion with a limited growth potential. Many cases will progress for a long period before patients seeks treatment due to its asymptomatic nature as in our case. It requires complete removal of the lesions down to the periosteum and periodontal ligament along with regular post excision follow-ups to minimize the possible chances of recurrence.

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