



CASE REPORT

Irritation fibroma / Peripheral Ossifying Fibroma: A Case Report

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ABSTRACT

Peripheral ossifying fibroma (POF) is a benign oral soft tissue tumor. It is a non-malignant tumor. It is a localized reactive lesion that primarily occurs on gingiva and may also appear on the buccal mucosa. It is most commonly found in the maxilla than mandible and has a female predilection, mostly seen in the second and third decades. In case of gingival involvement, it originates from the cells of periodontal ligament and associated factors like plaque, calculus, chronic trauma, cheek biting, irritation from dental appliances and faulty restoration. Traumatic fibroma occurs on the buccal mucosa along the line of bite. It requires elimination of irritants, proper treatment and periodical follow-up. Incidences of recurrence have been put at 16-20%. This case report describes a case of POF in an adult female patient having irritation fibroma which was treated with surgical excision, resulting in an uneventful healing.

Keywords- irritation fibroma, reactive benign lesion, calcification.

INTRODUCTION

Peripheral Ossifying Fibroma is a reactive lesion. It is solitary, slow growing nodular mass that shows clinically benign behavior. It is also called 'Ossifying Fibrous Epulis', 'Peripheral cemento-Ossifying Fibroma' with calcifications. It is non-neoplastic in nature, primarily involving the gingiva or soft tissue overlying alveolar process and rare case of buccal mucosa.

Etiology like plaque, calculus, microorganisms, cheek biting habit, chronic trauma or irritation, faulty restorations, dental appliances all these act as irritational factors.

Clinically, it appears as a nodular mass. The growth is firm and non-tender on palpation, either sessile or pedunculated lesion, exhibits a smooth surface and has a similar color as buccal mucosa or is pink-red to the surrounding area. It mainly occurs on gingiva in second or third decades, shows a female predilection and is slightly more common in maxilla than in mandible. But it may appear on buccal mucosa along the line of bite. Its occurrence on buccal mucosa is rare but may exist depending on the irritant factor; called as 'irritation fibroma' and 'traumatic fibroma'.

Radiographically, it may or may not show calcifications otherwise no changes were observed.

The treatment required is the elimination of the causing factors, followed by surgical excision, suturing and oral prophylaxis so that uneventful healing can occur during the postoperative period. It may be recurrent. This case reports an atypical location, of POF on the posterior region of buccal mucosa.

CASE PRESENTATION

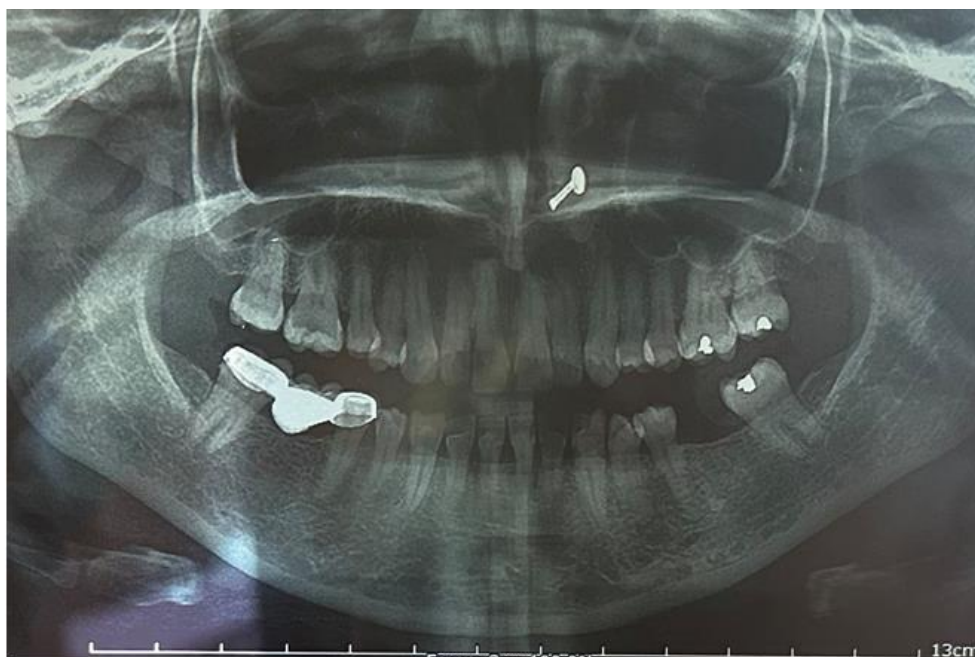
A 36-year old female patient reported to the Department of Oral and Maxillofacial Surgery, in the hospital with chief complaint of a soft tissue 'overgrowth' on lower left side of buccal mucosa posteriorly. The patient complained of difficulty in mastication, discomfort because of swelling and no other symptoms. During history taking she revealed that initially it was small in size, slowly it got enlarged over a period of time, it was present from last two years. In past dental history, the patient told that she had surgical extraction of grossly decayed third molar three years ago and a chronic cheek bite. The patient had no medical history and no other personal habits.



Caption

Extra-oral examination revealed non- palpable and non-tender lymph nodes, and no facial asymmetry. Intra-oral examination revealed the presence of firm, non-tender smooth surface nodule with pedunculate base, and a soft tissue growth of size 1.5 X1cm. It had a similar colour as the buccal mucosa extending from lower left posterior region to occlusal surface of 37.

Preoperative and Radiographic View of the lesion on the lower left buccal mucosa in the posterior region where radiographically no changes were seen.



Caption

Provisional diagnosis- on the basis of clinical findings we arrived on the irritational fibroma.

Differential diagnosis- peripheral giant cell granuloma, irritational fibroma, peripheral odontogenic fibroma.

Investigations - complete blood count test, viral markers and blood glucose test were performed. Viral markers are negative and other values were within normal physiological limits.

Treatment- after explaining the procedure, post-operative care and about its reoccurrence, an informed consent was taken. The procedure started under the local anesthesia and the lesion was excised by surgical excision and was sent for histological examination. Suturing was done with 3-0 black braided silk suture.

Post-operative care- the patient was prescribed antibiotics, analgesics and chlorhexidine mouthwash rinses for 3-4 times a day.

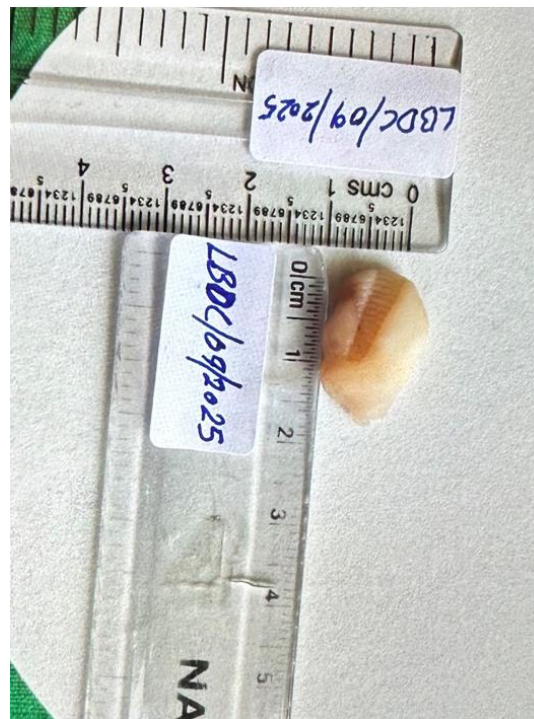


HISTOPATHOLOGY REPORT

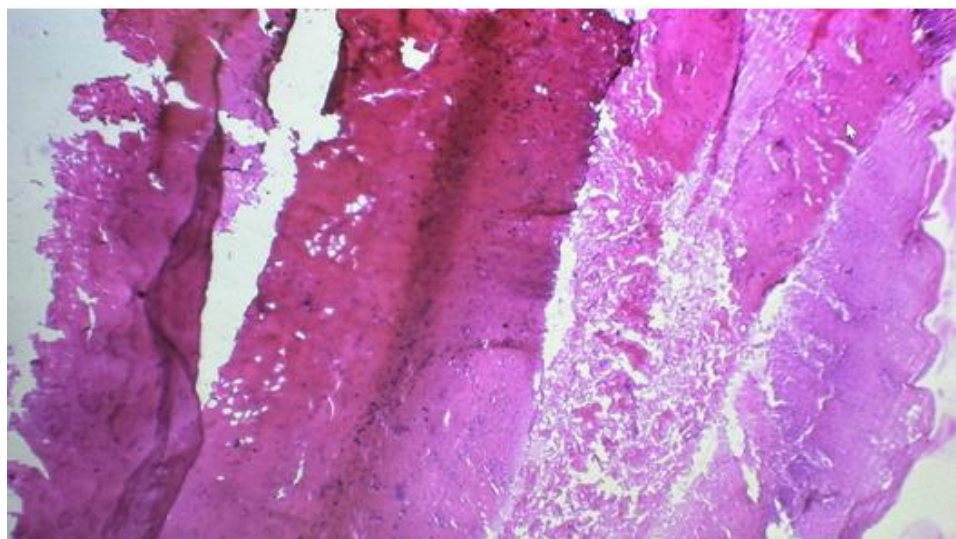
Macroscopic appearance: pinkish growth measuring 1.5X1cm in color and firm in consistency.

Microscopic examination: the given section shows a lesion composed of fibrous connective tissue stroma composed of numerous plump of fibroblasts containing calcified structures. The overlying surface shows Ortho keratinized Stratified Squamous epithelium. The clinical and histological findings indicate, the case of Peripheral Ossifying Fibroma as FINAL DIAGNOSIS.

During the post-operative period of seven days, uneventful healing was observed and suture removal was done. The patient was kept on regular follow-ups for past three months and no recurrence was observed.



Caption





Post-operative view



Caption

DISCUSSION

Peripheral ossifying fibroma is a localized reactive lesion that contains numerous plumps of fibroblasts in the connective tissue with calcifications and minimal vascularity. Menzel first described the lesion as ossifying fibroma in 1872, but its terminology was given by Montgomery in 1972. POF is a painless swelling that has firm consistency and color which is similar to surrounding structures, either sessile or pedunculated base. Its common site of occurrence is gingiva, it is more female predilection and is slightly more common in the maxilla. It is a benign soft tissue tumor. Traumatic fibroma may occur on buccal mucosa along the bite line. When bone and cementum like tissues are seen the lesions are referred to as cemento-ossifying fibroma.

It is categorized as central and peripheral. The central arise from endosteum and peripheral type occurs on the soft tissues overlying alveolar process. It is a non-neoplastic lesion but can cause difficulty in mastication and discomfort .

Radiographically it may or may not show calcifications. Its differential diagnosis are pyogenic granuloma, peripheral giant cell granuloma ,peripheral odontogenic fibroma. The treatment plan involves surgical excision followed by histological examination of tissue to confirm the diagnosis and then post-operative care and follow-up. Other treatment options like electrosurgery, scalpel excision depending upon the size and location of the lesion. Complete removal or excision is necessary to avoid its recurrence, it may also recur if irritant factors are not removed or there is incomplete removal.

CONCLUSION

Peripheral ossifying fibroma is a soft tissue overgrowth, if left untreated swelling can get enlarged and cause destruction of the alveolar process. All the chronic mechanical irritant must be removed and to avoid its recurrence it should be completely excised.

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