ABSTRACT
A typical case of 10 yrs. old girl visited to the Department of pediatric and preventive dentistry with Anterior palatal Peripheral ossifying fibroma. The current report discusses on early and correct diagnosis with proper treatment planning in pediatric patient followed by prevention of reoccurrence.

Keywords: Peripheral Ossifying fibroma, Palatal lesion in child

Introduction
Amongst all the reactive gingival lesions Peripheral ossifying fibroma has number of cases in adults but only few cases are addressed to pediatric population. It’s a reactive lesion of oral tissues which emerge due to factors such as local trauma, calculus or orthodontic appliances. POF can be called by names such as peripheral cementifying fibroma, peripheral fibroma with calcification and ossifying fibroid epulis (1). The condition mostly affects women population and that too in anterior region of jaw in teenagers or young adults. The POF accounts for 20% all non-neoplastic oral proliferative with same amount of recurrence rate. So, it’s important to focus on removal of irritating local factors or surgical management of such lesion. The subsequent case report put forward a case of POF in a female, which was surgically excised and it discusses about how its management in children is different.

Case report
A healthy 10 yrs. old girl visited with her father to our department of pediatric and preventive dentistry with complaint of lump behind her front tooth and unable to bite. Parents thought that it’s a normal swelling which will go eventually and noticed before approximately 4-5 months before. Later on, when that lump was visible from front and when it interfering lump came between the bite (figure1 &2) they reported to our department. Also, girl said that occasionally lump starts bleeding while brushing. Her medical and personal

Figure 1 and 2: Visible lump from front view and it’s interference between the bite
histories were insignificant. During throughout the clinical examination and consultation the father was concerned and anxious about the condition as he had this in mind that lesion being a cancerous lesion.

**Clinical Examination**

Intra-oral examination revealed erythematous maxillary central and lateral incisor papilla with visible part of lesion from frontal aspect. An irregular, ulcerative, pedunculated, exophytic and nodular lesion was present palatally (Figure 3) Grossly it appeared as an exophytic mass which arrived on hard palate of jaw. It was measured approximately 15 mm laterally 12 mm antero-posteriorly with thickness around 8 mm. Lesion was extended 4 mm left to palatal midline up-to the middle part of right primary canine teeth. The lesion appeared as reddish-pink areas with slight of white tint. It had rubbery consistency and it was non-tender to slight firm pressure without any discharge. No secondary changes were seen related to ulceration and fungation. Patient was also referred to oral and maxillofacial surgery for further consultation.

**Radiographic examination**

After consultation patient was undergone radiographic examination. Radiographic images of 11 12 21 22 and 23 was within normal limits with finding regarding maxillary exophytic lesion of unilocular ill-defined faint radio-opacity. (Figure 4)

**Diagnosis**

Based on clinical examination differential diagnosis made were irritation fibroma, pyogenic granuloma and peripheral giant cell granuloma. Before excision and histological analysis this diagnosis was discussed with patients’ father in attempt to calm them and reduce their fear regarding cancerous tissue.

**Treatment**

Surgical excision was planned under Nitrous oxide sedation and local anesthesia to calm anxious patient. Lesion was excised completely with help of scalpel without any harm to adjacent periosteum. Before surgery impression was taken and acrylic plate was made with help of cold cure acrylic in case of any perforation in palatal bone happens. The tissue was submitted to the oral pathology division for histopathologic diagnosis.

**Histopathological Analysis**

Oral pathology department was supplied with excised soft tissue in 10% formalin. As per microscopic features, largest bit measured 2.4x1.4 meter approximately (Figure 5). Analysis also stated that tissue was whitish-brown in color, firm in consistency, irregular in shape and surface. Further evaluation shows covering of Para keratinized stratified squamous epithelium with evidence of slight ulceration. Connective tissue stroma was comprised with fibroblastic proliferation along with ossification with vascular spaces. Based on the details final diagnosis was made i.e., Peripheral ossifying fibroma.

**Figure 4:** Maxillary radiograph showing ill-defined Radiopacity.

**Figure 5**

**Figure 3:** Palatal view of the lesion.
Discussion

Since 1940, intra-oral POF has been described by authors. POF shows highest appearance at anterior maxillary region of jaw that can be associated with tooth mobility or migration or bone destruction. Authors stated that excessive proliferation of mature fibrous connective tissue is a response to irritating local factors which causes connective tissue metaplasia with bone formation and dystrophic calcification (2).

On clinical examination patient had grade II calculus and which could be reason behind it. In this case lesion appeared to gingival lesion so one should make differential diagnosis precisely and we decided dd to be irritation fibroma, pyogenic granuloma and peripheral giant cell granuloma. Discussion with family members should be tactful to prevent undue distress during the waiting period between provisional diagnosis and definitive histopathologic diagnosis. In few cases POF shows 16-20% of reoccurrence (3) so its close post-operative follow-up is mandatory. Reoccurrence of lesion due to incomplete excision and/or due to persistence of local factors (4).

Depending on the degree of ulceration, discomfort and interference with function pediatric dentists should decide treatment plan for child accordingly (5). But before start of any treatment lesions rare clinical and radiographic features should be considered with various differentials. The case Scented is of 10-year-old female with usual and differentiating clinical presentation at palate. This case report of POF completes the purpose of successful management. As per author Cuisia ZE s.at al 2001, POF has special management considerations compared to the adult (6).

Follow up

The patient presented for a follow-up examination 3 days and 20 days postoperatively. On 3rd day subsequent scaling of adjacent teeth was carried out (Figure 6). The surgical site appeared to be healing well (Figure 7). There was no evidence of recurrence of the lesion till the day 20th and the child was asymptomatic. Child was instructed with oral hygiene maintenance and follow up for at-least after a year was suggested to examine its reoccurrence.

Conclusion

Many of such lesions can progress and persists for long years without any treatment but it is important to put a light on pediatric significance of such lesions requires early recognition and treatment by the dentist. Further cases and studies require to diagnose such lesions and for its prevention.
References