



CASE REPORT

OSSIFYING FIBROMA OF MAXILLA- A CASE REPORT

¹Dr. Surej Kumar, L.K., ^{1,*}Dr. Dilna, S. and ²Dr. Jacob, M.M.

¹ Trainee, Department of Oral and Maxillofacial Surgery, KIMS Hospital, Trivandrum, Kerala, India

²Department of Plastic, Reconstructive, Microvascular Surgery Archives, Kims hospital, Trivandrum, Kerala, India

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ABSTRACT

Ossifying fibroma is considered to be a rare benign fibro-osseous neoplasm of the jaw. Patients generally report with a history of painless expansion of a tooth bearing portion of the mandible, but the lesions of the maxilla are less common. We hereby report a 56-year-old female patient who presented with a painless swelling in the left maxillary alveolar region since 6 months. An incisional biopsy was carried out and the report was suggestive of ossifying fibroma of the maxilla. The excision of lesion was carried out under general anesthesia.

Key Words:

Ossifying Fibroma

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INTRODUCTION

Ossifying fibroma has been put with in various nosologic categories since its first description by Menzel in 1872. Menzel considered this entity as a form of osteoma. The transformation of ossifying fibroma from a simple group of osteomas to the broad classification of fibro osseous lesion is mainly due to its behavioral diversity. The specific term ossifying fibroma was coined in 1927 by Montgomery (Montgomery, 1927). According to World Health Organization (WHO) classification in 1992, an ossifying fibroma is defined as "demarcated or rarely encapsulated neoplasm consisting of fibrous tissue containing varying amounts of mineralized material resembling bone and/or cementum" (Kramer *et al.*, 1992). Now it is recognized as a part of benign fibro osseous lesions of the jaw that are characterized by replacement of normal bone by fibrous tissue containing newly formed mineralized product. Here we are presenting a case of an unusual occurrence of ossifying fibroma in anterior maxilla and its surgical management.

CASE REPORT

A 56 year old female presented with a swelling in left anterior maxilla for six months. History reveals a small swelling on left maxillary alveolar region for more than a year, which was

having a gradual progression in size and reached to the present state. On examination there was a well round smooth swelling on left maxillary alveolar region involving 23 and 24. The 22 was found to be missing. On Palpation there was a firm bony hard swelling of size 3×4 cm in size and it was non mobile in nature. Incisional biopsy was performed and the histopathology report was suggestive of ossifying fibroma. Wide excision was planned under GA. Intra operatively the lesion showed a mixed nature of ossifying lesion. Lesion was separated from the bone and the bone was smoothed till the spongy pattern disappears. We had taken a 3 to 5 mm safe margin to prevent any chance of further recurrence. Hemostasis was achieved. Wound was left opened, with antiseptic packing. Post operative rehabilitation with an obturator will be considered, if required.

DISCUSSION

Lack of a standardized terminology and classification for cemento-osseous lesions of the jaws have evoked a challenge for clinicians in both diagnostic and curative aspects. The etiology of ossifying fibroma is unknown, but suggested etiologies are odontogenic or developmental. Trauma induced stimulation is also considered to be one of the etiological factors (Wenig *et al.*, 1984). The capacity to produce cementum and osteoid material are supportive of periodontal ligament origin also (Swami *et al.*, 2015). Recent genetic studies have revealed a mutation in tumor suppressor gene HRPT2, a protein product known as parafibronin which leads to tumor formation (Swami *et al.*, 2015). Lesion is common in second to fourth decade of life with a distinct female

*Corresponding author: Dr. Dilna, S.,
Trainee, Department of Oral and Maxillofacial Surgery, KIMS Hospital,
Trivandrum, Kerala, India
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Figure 1. Pre operative view



Figure 2. Intra operative view



Figure 3. Excised specimen

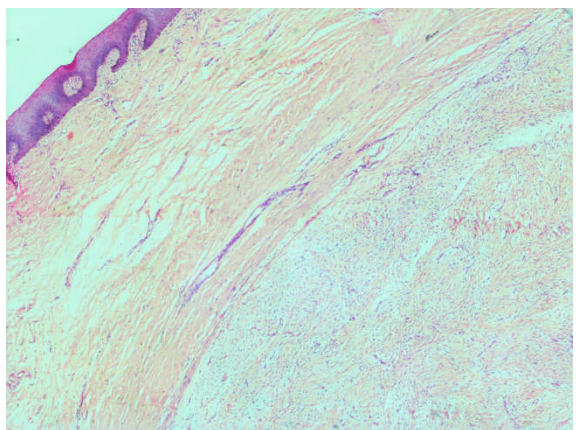


Figure 4. Microscopic Histopathologic image

predilection and the mandible is involved far more often than the maxilla, especially the premolar and molar region (Khan *et al.*, 2011). Clinically Ossifying fibromas are asymptomatic until a noticeable swelling is observed. Massive expansion of both buccal and or lingual cortical plates is the most common clinical signs of ossifying fibroma. The overlying mucosa and skin are invariably intact as it exhibits a slow growth pattern. We also came across the same clinical scenario. Until 1948 it was thought that fibrous dysplasia and ossifying fibroma were either the identical entity or variant of one same lesion (Walter *et al.*, 1979). Both lesions may show alike clinical, radiographical and microscopic features. Traditionally, differentiating the two lesions were based primarily on histological criteria. Fibrous dysplasia was reported to contain only woven bone, without evidence of osteoblastic rimming of bone. The presence of more mature lamellar bone was considered to be characteristic of ossifying fibroma. But the reliability of that criteria is questionable. Differential diagnosis of ossifying fibroma depends on the radiographical features of the lesion (Chang *et al.*, 2008). Early lesions are small and radiolucent. As they mature, they become mixed radiolucent and radiopaque lesion and finally to a radiopaque lesion (Mintz and Velez, 2007). In our case the presentation was mixed radiolucent and radio opaque. Other lesions to be considered in differential diagnosis are cemento-osseous dysplasia, adenomatoid odontogenic tumor, rarefying and condensing osteitis, cementosseous dysplasia and calcifying epithelial odontogenic tumor. Surgical curettage or enucleation are the initial treatment of choice for small ossifying fibromas (Philipsen and Reichert, 2004). Larger lesions may need surgical resection and bone grafting. Recurrence after removal of the tumor is considered to be rare. But there have been literatures suggestive of high recurrence rate with surgical enucleation (Eversole *et al.*, 1985).

REFERENCES

- Chang CC, Hung HY, Chang JY, Yu CH, Wang YP, Liu BY, Chiang CP. 2008. Central ossifying fibroma: a clinicopathologic study of 28 cases. *Journal of the Formosan Medical Association*, 107(4):288-94.
- Eversole LR, Leider AS, Nelson K. 1985. Ossifying fibroma: a clinicopathologic study of sixty-four cases. *Oral surgery, oral medicine, oral pathology*, 60(5):505-11.
- Khan SA, Sharma NK, Raj V, Sethi T. 2011. Ossifying fibroma of maxilla in a male child: Report of a case and review of the literature. *National journal of maxillofacial surgery*, 2(1):73.
- Kramer IR, Pindborg JJ, Shear M. 1992. The WHO histological typing of odontogenic tumours. A commentary on the second edition. *Cancer*, 15;70(12):2988-94.
- Mintz S, Velez I. 2007. Central ossifying fibroma: an analysis of 20 cases and review of the literature. *Quintessence International*, 38(3).
- Montgomery, AH. 1927. Ossifying fibromas of the jaw. *Archives of Surgery*, 1;15(1):30-44.
- Philipsen HP, Reichert PA. 2004. Ossifying fibroma, odontogenic tumors and allied lesions.
- Swami AN, Kale LM, Mishra SS, Choudhary SH. 2015. Central ossifying fibroma of mandible: A case report and review of literature. *Journal of Indian Academy of Oral Medicine and Radiology*, 1;27(1):131.
- Walter JJ, Terry BC, Small EW, Matteson SR, Howell RM. 1979. Aggressive ossifying fibroma of the maxilla: review of the literature and report of case. *Journal of oral surgery (American Dental Association: 1965)*. 37(4):276-86.
- Wenig BL, Sciubba JJ, Cohen A, et al. 1984. A destructive maxillary cemento-ossifying fibroma following maxillofacial trauma. *Laryngoscope*, 94 :810- 815