CASE REPORT

Fibrous Dysplasia of Maxilla – A Case Report

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ABSTRACT: Fibrous dysplasia is a developmental tumour like condition that is characterised by replacement of normal bone by an excessive proliferation of cellular fibrous connective tissue intermixed with irregular bony trabeculae. Fibrous dysplasia is a sporadic condition that results from a post zygotic mutation in the GNAS 1 (guanine nucleotide-binding protein, alpha-stimulating activity polypeptide-1) gene. We report a case of fibrous dysplasia of maxilla in a 22year old female patient.

Key words: *Fibrous dysplasia, tumour, guanine nucleotide-binding protein.*

Fibrous dysplasia is a skeletal developmental anomaly of the bone-forming mesenchyme that manifests as a defect in osteoblastic differentiation and maturation. Virtually any bone in the body can be affected. Fibrous dysplasia presents itself in four disease patterns. They are monostotic form, polyostotic form, craniofacial form and cherubism.

Monostotic fibrous dysplasia, though less serious than polyostotic fibrous dysplasia, is of greater concern to the dentist because of the frequency with which the jaws are affected. Monostotic fibrous dysplasia of the jaws occurs with apparently equal predilection for males and females, although some reports show a mild predominance of females.

CASE REPORT

A 22 year old female patient reported to the department of oral pathology, IGIDS, with chief complaint of painless swelling in the left side of the face for past one year.

On extra oral examination a diffuse swelling was noticed in the left maxillary region, causing asymmetry of the face (Fig-1). Skin above the swelling was normal, without any secondary changes. On palpation, swelling was non tender and hard in consistency.

Intra oral examination revealed bony expansion in the buccal aspect of left maxillary alveolar ridge extending antero-posteriorly from mesial aspect of 22 to distal aspect of 28. The swelling was hard in consistency with a smooth surface and the patient did not complain of any of pain and discomfort (Fig-2).

Orthopantomogram revealed a diffuse radio opacity in relation to 23,24,25,26,27,28 involving maxillary tuberosity causing obliteration of left maxillary sinus (Fig-3) Maxillary occlusal view revealed buccal cortical

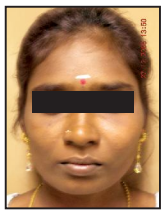

Fig 1: Photograph of patient with facial asymmetry.

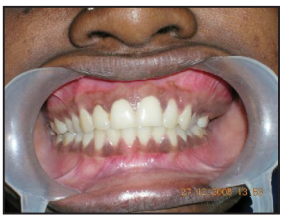

Fig 2: Intra oral bony swelling in the left maxilla

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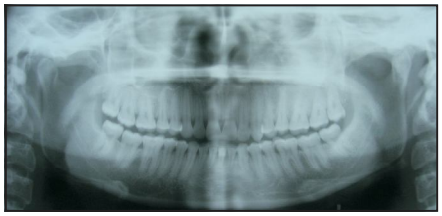

Fig 3: OPG shows mixed radiolucency in left maxillary region.

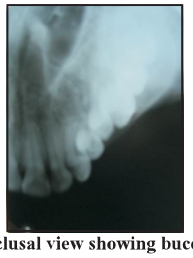

Fig 4: Occlusal view showing bucco-lingual bony expansion.

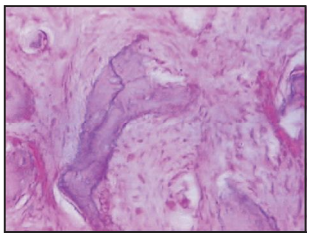

Fig 5: High power view showing bony trabeculae without osteoblastic rimming

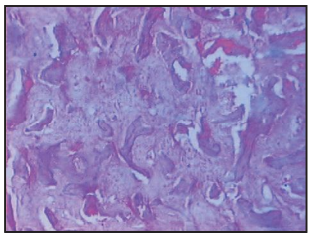

Fig 6: Low power view showing Chinese letter pattern in cellular stroma.

expansion seen from 24 to maxillary tuberosity region with increased radio opacity. Incisional biopsy was done under local anaesthesia and the specimen was fixed and prepared for further histopathologic evaluation (Fig-4).

Histopathological section consisted of dense fibrous stroma associated with irregular trabeculae of bone. There were no osteoblast rimming noticed in this section. The bony trabeculae were slender having curvilinear pattern. The histopathology of the lesion correlating with the clinical feature was suggestive of Fibrous dysplasia (Fig-5,6).

DISCUSSION

Fibrous dysplasia of the maxilla is a disease with marked predilection for occurrence in children and is almost impossible to eradicate without radical, mutilating surgery. These lesions are not well circumscribed, commonly extending to involve the maxillary sinus, the zygomatic process and the floor of the orbit, and sometimes even extend back toward the base of the skull. Severe malocclusion, bulging of canine fossa, extreme prominence of the zygomatic process and marked facial deformity, are typical sequelae of this disease.[1,2]

Fibrous dysplasia are a diverse group of processes that are characterized by replacement of normal bone by fibrous tissue containing a newly formed mineralized product. The designation fibro-osseous lesion is not a specific diagnosis but describes only a process. Clinical, radiographic, and histopathologic correlation is usually most beneficial in establishing a specific diagnosis.[3,4]

CONCLUSION

In our case, patient reported with swelling of the face and was evaluated clinically, radiographically and histopathologically based on which diagnosis of Fibrous dysplasia was made. Later patient was referred to the department of oral maxillofacial surgery for further management.

REFFERENCE

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