ODONTOGENIC MYXOMA OF MAXILLA – A RARE CASE REPORT

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ABSTRACT

Odontogenic myxoma is a slow growing benign and locally invasive tumor seen exclusively in the jaws. It is most commonly seen in second and third decade of life with predominantly female predilection. These lesions arouse special interest as they pose a diagnostic challenge. Here we present a rare case of odontogenic myxoma in a 22 year old female patient and clinical, radiographical and histopathological features are discussed in this paper.

KEYWORDS: Odontogenic myxoma, radiographical, histopathological features.

INTRODUCTION

Odontogenic myxomas are benign tumors derived from embryonic mesenchymal elements of a developing tooth including the dental follicle, dental papilla or periodontal ligament.[1] The evidence for its odontogenic origin arises from its almost location in the tooth bearing areas of the jaws and occasional association with missing or unerupted teeth.[2]

Odontogenic myxomas are usually painless slow growing lesion. Most commonly involved site is mandible than maxilla with marked female predilection. Pain and paraesthesia are uncommon and these lesions can reach considerable size before the patient becomes aware of its presence and seeks treatment.[3] Loosening and displacement of the teeth are likely to occur in time, but root resorption is less frequently seen.[4] Certain lesions spread with progressive pain involving maxillary sinus and nasal cavity and severe cases may result in exophthalmos, nasal obstruction and neurological disturbance.

Here in we report a case of odontogenic myxoma of the right maxilla in a 22 year old female patient.

CASE REPORT

A 22 year old female patient reported to the Department of Oral medicine, Oral Diagnosis and Radiology, Vishnu Dental college. (Bhimavaram, Andhra pradesh, India) with a chief complaint of swelling in the right upper back jaw region since one year. Patient had undergone for excision for the same type of lesion at private clinic before 2 years. Since then, patient was normal but the swelling recurred 1 year back spontaneously which was initially small and gradually increased to attain present size without any pain or any other associated symptoms. Her past medical history and family history were not significant. No history of pain, fever or trauma was found.

Extraoral examination revealed mild asymmetry due to a diffuse swelling involving the right middle third of the face.(Figure 1). On palpation, the swelling was non-tender, hard in consistency without any discharge. Overlying skin was normal in color with regional lymphadenopathy. Intraoral examination revealed well defined solitary swelling involving the alveolar ridge in the region of 16,17 (Figure 2). The surface of the swelling was smooth, color similar to adjacent mucosa and no secondary changes were observed. On palpation, the swelling was hard in consistency, non-tender and with buccal cortical plate expansion.
On the basis of these findings, provisional diagnosis of fibrous dysplasia involving maxilla in the region of 16, 17 was made. Benign odontogenic tumor, odontogenic myxoma, calcifying epithelial odontogenic tumor were included in the differential diagnosis.

Radiographic investigations included Intra oral periapical radiograph and orthopantomograph which revealed ill-defined radiolucency associated with an impacted 18. Maxillary Occlusal radiograph showed a mixed radiolucent and radiopaque with a granular appearance and ill-defined boundaries, with evident expansion of the buccal cortex in the region of 16,17. (Figure 3 and 4)

Incisional biopsy was performed and the specimen was subjected to histopathologic examination. On gross examination of the cut surface of the specimen were glistening with gelatinous substance oozing out (Figure 5). Histopathological examination of incisional biopsy of excised specimen showed classic features of Odontogenic myxoma consisting of loosely arranged spindle shaped and stellate cells with long fibrillar processes in a background of myxomatous stromal tissue. (Figure 6). A final diagnosis of odontogenic myxoma was established on the basis of histopathology report.

Figure 1: Extra oral picture showing swelling over right cheek.

Figure 2: Intra oral picture showing lesion involving right maxilla.

Figure 3: Orthopantomograph depicting the lesion involving right maxilla.

Figure 4: Occlusal radiograph depicting the lesion in right maxilla with evident expansion of the buccal cortex in the region of 16,17.

Figure 5: Gross specimen of the lesion with glistening gelatinous substance.
DISCUSSION

Myxoma was the term coined by Rudolf Virchow in 1871 when he first observed that tumors showed histopathological features similar to umbilical mucinous tissue. Myxomas can be found in various body parts such as skin, subcutaneous tissues and heart. Myxomas of head and neck region are rare. They are further classified into two types those derived from facial bones and they are either osteogenic myxoma or odontogenic myxoma and those derived from soft tissue like perioral soft tissue, parotid gland, ear or larynx.

Odontogenic maxillary myxomas were first mentioned in the literature by Thoma and Goldman. It represents uncommon benign neoplasms comprising of 3-6% of all odontogenic tumors. Odontogenic myxomas are commonly presented as slowly growing tumor which is generally symptomless. Some patients present with pain in lesions involving maxilla and maxillary sinus seen with neurological disturbance. Our case presented with painless swelling in the maxilla which is conformity with that reported in the literature.

Odontogenic myxoma mainly occurs in the second and fourth decade of life with marked female predilection. The mandible appears to be more frequently affected than the maxilla and mainly involved site is the posterior region. In our case the lesion is involved in the posterior region of maxilla. These tumors show variable radiographic features ranging from unilocular to multilocular radiographic appearances as reported in the literature. Varying radiographic presentation reported in the literature are honey comb, soap bubble, tennis racket, Wispy, and Spider –web appearance. In the present case the radiographic presentation of the lesion showed granular septa associated with an impacted tooth.

Microscopically it resembles the mesenchymal portion of the tooth in development. The lesion is not encapsulated and exhibits the abundant extracellular myxomatous stroma of ground substance and thin fibrils characterized by few proliferation of few stellate cells and spindle shaped cells. Small islands of odontogenic epithelial tissue can be found scattered in stroma.

The treatment depends on the size of the lesion and on its nature and behaviour and can vary from conservative curettage, enucleation to radical resection. The aggressive nature of OM is well documented in the literature. The nonencapsulated nature and infiltrative growth pattern is responsible for high rate of recurrence when conservative enucleation and curettage performed. So, complete removal of the lesion by enbloc resection was planned.

CONCLUSION

Histopathological diagnosis of odontogenic myxoma becomes a necessity as it is very difficult for a diagnosis of OM to be made based on clinicoradiological parameters. At the same time, recurrence rate of OM is high and mandates a follow-up in all the cases. The present report attempts to throw a light for proper understanding and knowledge on OM.

REFERENCES