TJPRC: International Journal of Oral Medicine Pathology and Radiology (TJPRC: IJOMPR)
Vol. 1, Issue 1, Jun 2017, 7-10

TRANS STELLAR
•Journal Publications •Research Consultancy

AMELOBLASTOMA OF THE MANDIBLE - A CASE REPORT

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ABSTRACT

Ameloblastoma is the second most common odontogenic neoplasam. It is considered as true neoplasam of an epithelial origin. Its incidence accounts to approximately 1% of oral neoplasam and 18% of all other odontogenic neoplasams. Ameloblastoma grows slowly without much of clinical signs in early stages[1] and asymptomatic in most of the conditions.

KEYWORDS: Ameloblastom, Odontogenic Tumor

Received: Jan 21, 2017; **Accepted:** Feb 15, 2017; **Published:** Feb 19 2017; **Paper Id.:** TJPRC: IJOMPRJUN20172

INTRODUCTION

Ameloblastoma is unicentric,non functional, intermittent in growth anatomically benign locally invasive polymorphic neoplasam consisting of proliferating odontogenic epithelium which usually has a follicular plexiform pattern lying in fibrous stroma .It is categorised broadly into three variants as unicystic, solid (multicystic)and peripheral.Histologically classified into plexiform pattern acanthomatous pattern, granular pattern, desmoplastic pattern ,basal cell pattern. The majority of the tumor (83.5%-88%) occurs in the mandible where 61% of total tumour involve the third molar region and ascending ramus[2] of the mandible. Recently it has been shown that the desmoplastic ameloblastoma has a greater tendency to occur in the anterior region of the jaw and characteristically shows a mixed radiolucent and radiopaque pattern[4,5].Recurrence rate in ameloblastoma is high a 50% recurrence rate [3]has been reported when the maxillary sinus is involved. It is imperative that oral physicians understand the presentation of various forms of ameloblastoma diagnosis and surgically treated promptly. The tumour commonly has long term recurrence hence all the patients require long term followup. As an oral physician wide knowledge about odontogenic tumours is very important.

CASE REPORT

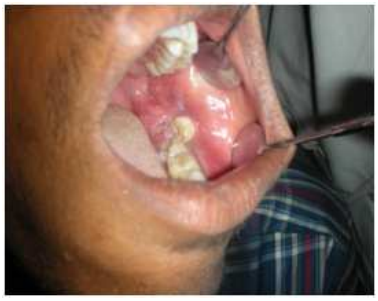

Figure 1

Original Article

Figure 2

A 24 year old male patient reported to department of oral medicine and radiology of Thaimoogambigai dental college Chennai presented with pain and swelling in the left mandibular region since 6 months. The swelling started 6-7 months ago which has been progressively enlarging to attain the current size. Initially there was mild pain which was intermittent in nature as the swelling increased in size there was lack of significant pain. There was no history of similar swelling anywhere in the body . Patient doesnot have any other systemic diseases there is no recent history of significant wt loss extraoral examination reveals facial asymmetry due to diffuse swelling on the lower left side of the face extending anteriorly 2cm away from the left commisure of the mouth and towards the pinna of the ear posteriorly superior-inferiorly it was extended from middle third of thecheek till 1cm below the border of the mandible .swelling was measuring 4x4cm in size approximately overlying skin was normal no visible pulsation was sewen there was no secondary changes. On palpation the swelling was non compressible non reducible there was no typical tenderness the swelling was firm in consistency no cervical lymphadenopathy was present .intraoral examination reveals expansion of the buccal and lingual sulcus extending from 36 to retrromolar region.buccaly placed impacted 38 was present. With gingivalg inflammation around the impacted tooth.

Imaging

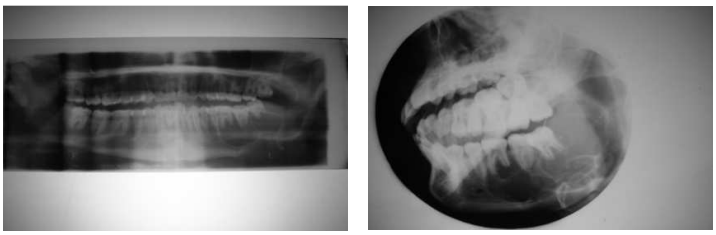

Figure 3

The opg reveals multilocular radiolucency in the left side of the mandible extending from mesial root of 36 to anterior border of ramus of mandible surrounded by radiopaque sclerotic border with radiopaque septae seen within the radiolucency .mandibular canal slightly displaced downward in the posterior aspect the opg showed a typical soap bubble appearance PA reveals multilocular aradiolucency in ythe left side of the mandible considering the rate of growth of the swelling the site predilection and clinical feauteres associated with impacted tooth a provisional diagnosis of ameloblastoma (odontogenic tumor)was given.

The histopathology report shows epithelium that proliferates in chord like fashion: Plexiform pattern which contains basal cells arranged in anastomosing strands with an inconspicuous stellate reticulum. The patient was treated with surgical resection.

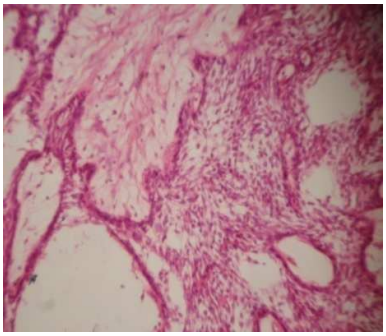

Figure 4

DISCUSSIONS

Many benign lesions cause multilocular radiolucencies in mandible and these can be divided into those of odontogenic and nonodontogenic origin lesions which may include ameloblastoma,radicular cyst,dentigerous cyst, odontogenic keratocyst, centralgiant cellgranuloma, fiboosseous lesion and osteoms . The most common tumour is ameloblastoma, it develops from epithelial cellular elements and dental tissue .In the present case, considering the nature and location of the lesion scalloped margins and presence of bony septae aprovisional diagnosis of ameloblastoma was given.In the diferential diagnosis of the current tumour various other cysts and tumours which have multilocular radiographic appearances were considered.. The most common is odontogenic keratocyst which was ruled out because of expansion of buccal and lingual plate. OKC generally does not cause expansion of the cortical plates to this extent. central giant cell granuloma occurs in the mandibular anterior region and radiographically has a multilocular appearancewith ill defined wispy septae hence it was ruled out. lesion of hyperparathyroidism occurs with systemic involvement, in our case there was no evidence of systemic involvement .Cherubism[6] is more commonly seen in children and present as a bilateral multilocular radiolucency, hence cherubism was ruled out in the present case ,odontogenic myxoma presents as multilocular radiolucency presenting tennisracket appearance due to presence of straight thin etched septa, there was no evidence of tennis racket appearance in this case..Intrabony metastatic jaw tumors [7]cause various radiographic appearances including multilocular radiolucencies and the patient usually gives a history of primary malignancy elsewhere in the body, no such evidence was recorded in our case. Hence after carefully considering all the above lesions in differential diagnosis, a provisional diagnosis of Ameloblastoma was give. The diagnosis was later confirmed after biopsy, where the histopathology reveals an ameloblastoma of plexiform type. In choosing a treatment for ameloblastoma the clinical type, localization, size of tumour age of the patient should be assessed. Resection should be as wide as possible to include healthy tiisues, since recurrence is fairly common with this disease. Hence correct diagnosis, and long term follow up are very important aspects while considering odontogenic tumours like ameloblastoma.

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