

Unicystic ameloblastoma of maxilla in elderly patient : A case report.

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Abstract

Ameloblastoma is a true neoplasm of enamel organ type tissue which does not undergo differentiation to the point of enamel formation. Unicystic Ameloblastoma is a well defined single cystic sac lined by ameloblastomatous epithelium. Clinically is associated with swelling, intermittent pain, in the posterior mandibular region. Treatment may be conservative or radical depends on the histological pattern. An unusual case of 56 yr old male diagnosed by clinical, radiographic and histological evaluation as unicystic ameloblastoma of anterior maxilla is presented. The management was carried out by enucleation and curettage.

Keywords- unicystic ameloblastoma

Introduction :

Ameloblastoma is a true neoplasm of enamel organ type tissue which does not undergo differentiation to the point of enamel formation. Described by Robinson as being a tumour that is usually unicentric, nonfunctional, intermittent in growth, anatomically benign and clinically persistent^[1]. Based on clinical features and behavior it can be distinguished into three types:

- 1) the conventional or classical, intraosseous, solid or multicystic ameloblastoma.
- 2) the unicystic ameloblastoma.
- 3) peripheral ameloblastoma.^[2]

Unicystic Ameloblastoma is a well defined, single cystic sac lined by odontogenic (ameloblastomatous) epithelium. Clinically unicystic ameloblastoma is most common in young age group. Mean age for unilocular, impaction associated unicystic ameloblastoma is 22 yr, whereas for multilocular lesions unrelated to an impacted tooth it is 33 yrs. Majority of ameloblastomas are located in the maxillo-mandibular complex (Mandible : Maxilla = 3 to 13 : 1). It is most common in posterior region of mandible. 40% of the cases are associated with unerupted tooth, often the mandibular third molar.^[2] It shows equal sex predilection, with no specific racial predominance. There are conflicting

evidences on incidence rates in different races. Some reports claim an increase incidence of ameloblastoma in black individual, while other identifies the Asian population with the greatest number of affected patients.⁷ Unicystic Ameloblastoma remains asymptomatic until facial swelling develops.^[3] Robinson and Martinez described three histological types of Unicystic Ameloblastoma which was later modified by Ackermann. 1) unilocular cystic lesion lined by ameloblastic epithelium. 2) mural nodules of plexiform ameloblastomatous epithelium and focal areas of ameloblastic epithelium may be present in cyst lining. 3) epithelial lining is similar to group 1 & 2 but in addition the epithelium invades the fibrous tissue of the cyst wall in a follicular or plexiform pattern^[4]. On conventional radiograph Unicystic ameloblastomas appear as unilocular or multilocular corticated radiolucency resembling a cyst. Bony septa may result in honeycomb appearance.³ Bony expansion of buccal and lingual plates are common. Once the clinical and radiographic evaluation is done, the diagnosis must be confirmed by microscopic examination. The decision for excisional and incisional biopsy depend, on the size of the lesion and its clinical features. Before choosing surgical approach it is essential to define the extent of the lesion and infiltration to adjacent structure. Computed tomography scans help to determine three dimensional macroscopic boundaries of the tumour. Soft tissue borders at the time of resection should be confirmed by systematic examination of frozen section. For hard tissue resection with adequate margins of normal bone (minimum 1.0 to 2.0 cm) must be carried out.^[4]

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Treatment depends on histologic type and location site:^[5]

1) Group 1 and 2 are less aggressive. Treatment Plan includes enucleation, curettage, cryotherapy or a combination of these techniques

2) Group 3 is more aggressive. Treatment plan includes resection, radiotherapy and Chemotherapy.

A long period of post operative follow up and examination of multiple histologic sections for all unicystic ameloblastomas is essential as recurrence rates are very high.^[6]

Case Report :

A 56 yr old man reported to Department of Oral and Maxillofacial surgery with the History of intermittent pain, swelling with pus discharge from the anterior region of the maxilla of 15 days duration. The swelling was soft and fluctuant and extended from left central incisor to right premolar. Patient had completely edentulous upper arch with no impacted teeth. Radiographically a well circumscribed corticated radiolucency extending from 15-21 region (Figure 1 and Figure 2) was seen. Histologically luminal ameloblastomatous proliferation was seen.

Treatment was done by conservative method - Enucleation and Curettage.(Figure 3)

Since the recurrence rate is very high follow up is done every 6 months for two years and then annually.

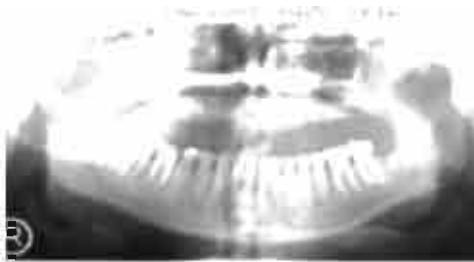


Figure 1 : Preoperative Orthopantomogram showing radiolucency in anterior maxillary region.



Figure 2 : Preoperative C.T.Scan showing radiolucent lesion in anterior maxillary region.



Figure 3 : Intraoperative Photograph showing hollow bony cavity in maxillary anterior region after enucleation and curettage.

Discussion:

Unicystic Ameloblastoma is common in younger age group, however in above mentioned case it was found in an elderly patient. Unicystic Ameloblastoma is more common in mandibular posterior region, in above case it is seen in maxillary anterior region. Most of the cases (40%) are associated with impacted tooth, while in the above case the maxillary arch is completely edentulous without any impacted tooth. Treatment was the same and was done by conservative method.

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