Cumhuriyet Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi

Mandibulada Lokalize Ameloblastoma

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Özet: Ameloblastoma, odontojenik kökenli, nadir bir epitelyal tümördür. İyi huylu bir tümör olarak kabul edilsede, klinik davranışı neticesine göre benign veya malign olduğu düşünülebilir. Tümöral doku yavaş ve sürekli bir büyüme eğilimindedir ve komşu dokulara infiltrasyon ile karakterizedir. Bu olgu sunumunda, 44 yaşında ameloblastomalı bir hastanın teşhis ve tedavisi sunulmaktadır.

Anahtar Kelimeler: Ameloblastoma, Mandibula, Odontojenik tümör

Ameloblastoma Localized in the Mandible

Abstract: Ameloblastoma is a rare epithelial tumor of odontogenic origin. Although it is accepted as a benign tumor, it can be thought to be benign or malignant due to its clinical behavior. The tumoral tissue tends to grow slowly and continuously and is characterized by infiltration into adjacent tissues. In this case report, the diagnosis and treatment of a 44-year-old patient with ameloblastoma is presented.

Keywords: Ameloblastoma, Mandible, Odontogenic tumor

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INTRODUCTION

Ameloblastoma is a benign epithelial neoplasm and accounts for up to 10% of odontogenic tumors (1). This neoplasm, seen in both the mandible and the maxilla, originates from the dental epithelium. As potential epithelial sources are; enamel organ, odontogenic residues (malignant epithelial residues), the epithelial layer of odontogenic cysts (especially dentigerous cyst) (2,3).

Ameloblastoma can be seen at all ages, although they are usually seen at 3. and 5.decade of life (4). This tumor does not show any sex trends. Although it is mostly seen in the mandibular molar and ramus region, it can be seen in every region in the maxilla or mandible (5).

Ameloblastomas are asymptomatic and detected by routine radiographic follow-up. They cause asymptomatic jaw expansion. Dental mobility and malocclusion are rare findings of ameloblastoma, which can be diagnosed first. Radiographically, ameloblastomas are seen as osteolytic formations (6,7). In addition, the radiographic borders of ameloblastomas are clear and sclerotic, they are seen as unilocular or multilocular. Usually slow the growing tumor is the cause of mobility in the teeth, and resorption in the tooth roots can be seen (6,7).

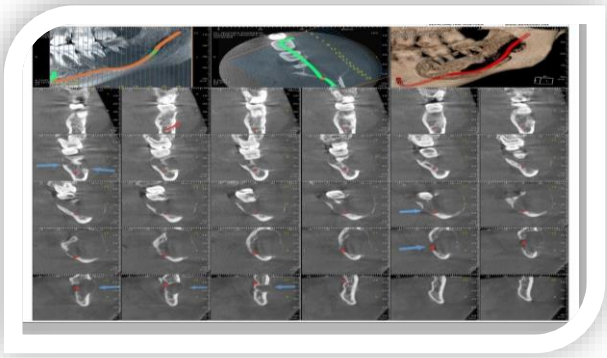
There is no single defined treatment type for ameloblastoma cases. Each case is evaluated with its own characteristics. Treatment methods include surgical excision, segmental resection, enucleation, curettage and cryotherapy (8,9).

We present a case of mandibular ameloblastoma for which treatment of enucleation and curettage.

CASE REPORT

A 44-year-old male patient who admitted to our clinic with the complaint of painful swelling in his left mandible was taken for clinical and radiological examination for diagnosis, treatment for the following. The patient reported a slow-growing, painful swelling in his left lower jaw for several months when he applied to Oral and Maxillofacial Surgery Department at 18.09.2017. The patient had no systemic disease and had a complaint only swelling region on the left side of the mandible. When we examine the radiography also tomography we recognized radiolucent site from apex of left first premolar tooth to mandible bazis, at the posterior line to angulus (Figure 1, Figure 2). It was thought that the patient may have ameloblastoma with clinical and

radiological findings. With this diagnosis, the patient was operated under local anesthesia with an intraoral approach. The lesion (multicystic) was enucleated with a bit of removing the surrounding healthy bone (Figure 3, Figure 4). After that, the Carnoy solution was applied in the operation area (Figure 5). And operation was finished succesfully. The diagnosis of the patient was confirmed histopathologically after the operation. (Figure 6). No recurrence was observed in the postoperative 18 months follow-up.



Figur 1. Preoperatif Tomography

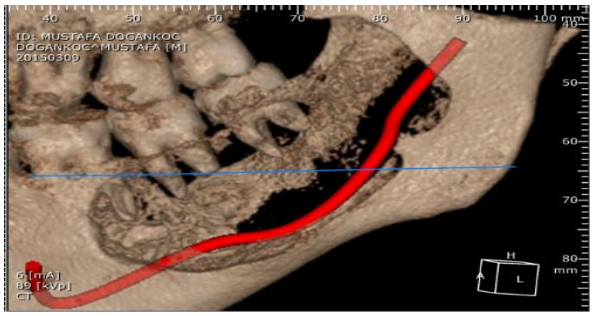


Figure 2: Preoperatif 3D Reconstruction

Figure 3: Operation Areas

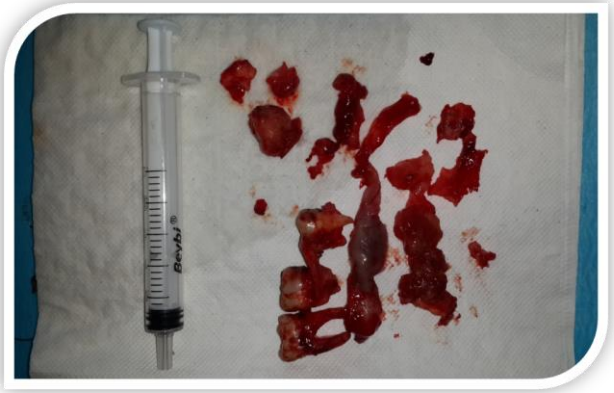


Figure 4: Pathological Issue

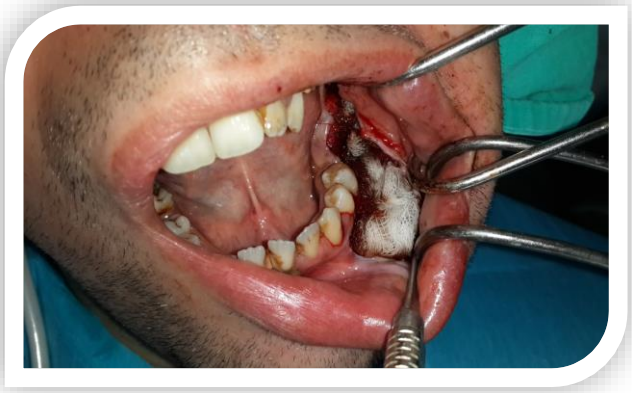


Figure 5: Operation Site with Carnoy Solution Apply

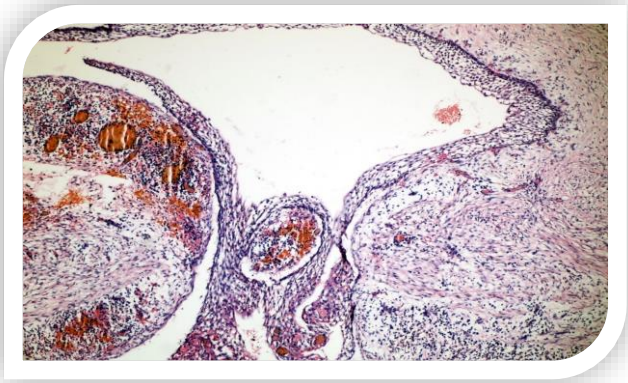


Figure 6: Cylindrical ameloblastic cells and stellate cells that extend on layer internal surface of connective tissue

DISCUSSION

The clinical symptoms of ameloblastomas in the mandible are swelling, dental mobility, malocclusion, pain, paresthesia and anesthesia on the affected side. But most patients are asymptomatic, and most patients are diagnosed for another reason during routine checks. It is important to understand the growth properties of ameloblastomas; treatment planning should include complete removal of the tumor.

Ameloblastoma is the most common clinically important odontogenic tumor. About 80% of ameloblastomas originate from the posterior mandible and 20% from the maxilla (2,5). In this case, the tumor was placed in the left mandible**.**

Very often it occurs in the 3rd and 5th decades of life. The most common symptom is slow-growing painless swelling. Less frequently, dental malocclusion, pain, paraesthesia or anesthesia can be seen (10,11). In this case report too, the patient was 44 years old and applied to our clinic with a complaint of painful swelling in the left mandible.

Computed tomography clearly shows the unicystic or multicystic structure of the lesion. This feature is important because, as biological behavior, unicystic ameloblastoma is thought to be less aggressive than the multicystic one. Furhermore, the expansive character of the tumor, the condition of the mandibular cortex and the extent of the tumor to adjacent tissues are well evaluated with computed tomography (12,13). In this case, computed tomography was used for radiological diagnosis and the lesion was determined as multicystic.

The metastatic form of ameloblastoma is called Malignant Ameloblastoma (14). In our case, a metastatic focus was not detected clinically, and it was interpreted as benign ameloblastoma at the microscopic level due to the absence of atypia evidence to indicate malignancy.

Irrespective of the histological type their treatment includes surgical excision; the main treatment method is a conservative surgical approach (enucleating and curettage) or a radical surgical approach. Recurrence rates relies on the kind of

intervention (15). In the present treatment of the patient, enucleation and curettage were preferred as the treatment module.

Recurrence following conservative management of unicystic ameloblastoma was about 60%, and it was similar to the conservatively treated multicystic type (16). In this case, no recurrence was observed after 18 months of follow-up. Pogrel et al. (17). reported that using the Carnoy solution reduced the rate of recurrence. In the treatment of this case, the Carnoy solution was applied to the bone cavity following surgical enucleation and curettage.

CONCLUSION

This case is presented because of the importance of differential diagnosis with other odontogenic lesions due to its age in the third decade, its mandibular location and its cystic appearance at the radiological level.

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