Ameloblastoma is a locally aggressive tumor of jaws. It can be seen both sexes equally. The lesion can occur anywhere in mandible or maxilla especially posterior body and angulus of mandible (1). Ameloblastomas can be asymptomatic and may be detected accidentally on radiological examination. In late cases, slow-growing lesions can cause some symptoms like swelling, pain, paresthesia or malocclusion in both jaws. Radiological investigations are valuable in diagnosis of the ameloblastomas. Odontogenic cysts should be considered in differential diagnosis of unicystic ameloblastoma because of similar clinical behavior and radiological appearance. Histopathological examination is necessary for definitive diagnosis (2). Follicular, plexiform, desmoplastic, acanthomatous, basaloid and papilliferous types are the described histopathological patterns for the ameloblastomas (3). Various surgical techniques such as enucleation, curettage, marsupialization and resection can be performed for the treatment of ameloblastomas.

In this case report we presented an acanthomatous ameloblastoma located in mandibular premolar region, and detected accidentally on the panoramic radiograph.

Case
31 years old patient was referred to our clinic because of a radiolucent lesion detected in radiological examination. The lesion was placed in right second premolar region and the patient has no complaints about it. The dental history showed that the second premolar and first molar teeth were extracted because of local inflammation about five years ago. Radiological evaluation has performed on orthopantomograph (Figure 1). The differential diagnosis considered about keratocystic odontogenic tumor, ameloblastoma and residuel odontogenic cyst. Residuel cyst was the most compatible diagnosis because of the detecting lesion after years teeth extracted. Border of the lesion had not radioopaque cortical character that we thought it may be cystic ameloblastoma. Surgical procedure was performed under local anesthesia. Enucleation and curettage was applied which is a confirmed technique for treatment of unicystic ameloblastoma. The ameloblastoma epithelium with a cystic lumen had been seen in histopathological examination. The presence of the epithelial islands which has central squamous differentiation was detected (Figure 2).

Figure 1. Radiological view of the ameloblastoma placed in the body of the mandible.
Figure 2. Epithelial islands of the ameloblastoma demonstrating central squamous differentiation (arrows, H&E, X100)

Discussion

Ameloblastomas are the common seen lesions in oromaxillofacial region and represents 1% of the all cysts and tumors of the jaws (4). Diagnosis of the 10% of the maxillofacial tumors is ameloblastoma (5). Epithelium of odontogenic cysts, epithelial remnants, dental lamina, enamel organ, oral mucosa epithelium may be the origin of the ameloblastomas (6). Caries, inflammation, trauma, malnutrition, irritations from extractions or Human Papilloma Virus can play role in pathogenesis (7, 8).

Ameloblastomas are classified in 3 forms based on anatomical location, clinical behavior and radiological appearance: multicystic, unicystic and peripheral (extraosseous) (9). The mostly seen and the most aggressive and recurrent variant is multicystic ameloblastoma (nearly 85% of all ameloblastomas) (9). The peripheral ameloblastoma is the rare and extraosseous type of ameloblastoma (10). The unicystic ameloblastoma is the less aggressive variant and characterized by single cystic cavity lined by epithelium (11). Firstly, Robinson and Martinez described the unycistic ameloblastoma (12). Various treatment options were suggested in the literature such as enucleation and curettage, resection and reconstruction. The main reason is recurrence rate to determine the surgical treatment technique. The histopathologic subtypes of unycistic ameloblastoma have different recurrence rates. Mural infiltrations by epithelial cells can raise the recurrence risk to 35.7%. The other subtypes have 6.7% recurrence rate after conservative treatment (13). The suggested treatment for unycistic ameloblastoma is enucleation or curettage because of less recurrence rate (11). In our case, the lesion was the unicystic ameloblastoma and it has been enucleated with epithelium as described in the literature. The patient has been taken under follow-up in case of recurrence possibility.

Plexiform, acanthamatous, granular and follicular types are the histopathologic subtypes of ameloblastoma. Acanthamatous ameloblastoma is a locally aggressive benign tumor and cause swelling, pain, loose teeth, malocclusion. Generally, in asymptomatic cases, it is detected by radiological examination accidentally. Lesion has a slow growing pattern, so bone resorptions and extension to other adjacent tissues can be seen in untreated acanthomatous ameloblastoma (14). In our patient, the lesion was seen accidentally in orthopantomograph and there were no swelling, trismus, pain or malocclusion. We thought that the lesion was detected in early stage. Histopathological examination showed that the ameloblastoma has acanthomatous specifications mostly.

Conclusion

Although unicystic ameloblastoma is uncommon lesion of the jaws, it may be seen in the body of the mandible. In radiologic examination, the unicystic ameloblastoma should be evaluated in differential diagnosis. If a conservative treatment method will be chosen like enucleation and curettage, the patient should be taken under long term follow up.

References

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