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Olgu Sunumu/ Case Report

A CEMENTO-OSSIFING FIBROMA IN THE MANDIBLE

MANDİBULADA SEMENTO-OSSİFYİNG FİBROMA

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ABSTRACT

Cemento-ossifying fibroma is an uncommon, benign fibro-osseous lesion, which may occur at any age but is most often diagnosed in adulthood, typically during the third or fourth decades of life. This report describes a case of cemento-ossifying fibroma associated with right mandible lateral, canine and first premolar teeth in a 56-year-old female.

Key Words: Cemento-ossifying fibroma, mandible, surgical treatment

ÖZET

Semento-ossifying fibroma herhangi bir yaşta meydana gelebilen fakat en sık erişkin dönemde, yaşamın üçüncü veya dördüncü dekatlarında teşhis edilen iyi huylu yaygın olmayan fibroosseöz lezyonlardır. Bu raporda 56 yaşında bayan olan sağ mandibular lateral, kanin ve birinci premolar dişler ile ilişkili semento-ossifying fibroma vakası sunulmuştur.

Anahtar Kelimeler: Semento-ossifying fibroma, mandibula, cerrahi tedavi.

INTRODUCTION

The fibro-osseous lesions are a numerous and heterogeneous group of tumours of the jaws.[1] The fibro-osseous lesions include fibrous dysplasia, ossifying fibroma, cemento-ossifying fibroma (COF), or cementifying fibroma.[2] COF is described by the World Health Organization (WHO) classification of odontogenic tumors to be more of bony origin than related to the odontogenic tissues because of the presence of cemeticles as a characteristic feature.[3] Among these lesions, the COF is probably the most frequent fibro-osseous lesion that is tumors of odontogenic origin seen by oral pathologists and, perharps, it has had more synonymous than any other jaw lesion. The calcified material contain bony trabeculae, osteoblastic rimming, and occasional osteoblasts with interspersed cementum-like material.[1,3] COF manifest themselves as slow growing, asymptomatic, most frequent in women between 35 and 40.[4,5] In this article we present a cases of COF manifested as asymptomatic mandibular lesions, the diagnosis of which, based on clinical manifestations and pathologic findings.

CASE REPORT

A 56-year-old female was referred to the clinics of Oral and Maxillofacial Surgery department with a chief complaint with a about 1.5 cm size, painless gingival growth associated canine tooth in the right mandible. Clinical examination revealed a solitary swelling visible intraorally (Figure 1). Radiologically, there was not any radiolucency in the mandibular region, but there was a cystic radiolucency lesion in the periapical area of the right mandibular lateral tooth (Figure 2). His health was very good and his medical history showed that there were no previous systemic disease and prior trauma to the area. An excisional biopsy was performed with the patient under local anesthesia resecting the attached gingival

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(Figure 3,4). The histological examination of biopsy specimen (protocol number of biopsy: 6868) was performed at the Department of Pathology, Medical Faculty of Cumhuriyet University. The histology was consistent with COF of the oral cavity (Figure 5). The right mandibular lateral tooth was performed root canal treatment. The patient was followed up one year and it was observed not recurrence that gingival tissue was very healthy (Figure 6).

Figure 1. Intraoral view of the patient

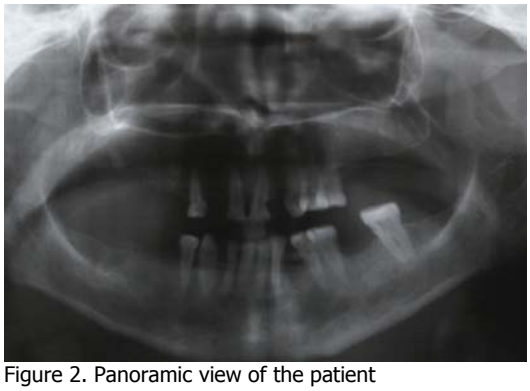

Figure 2. Panoramic view of the patient

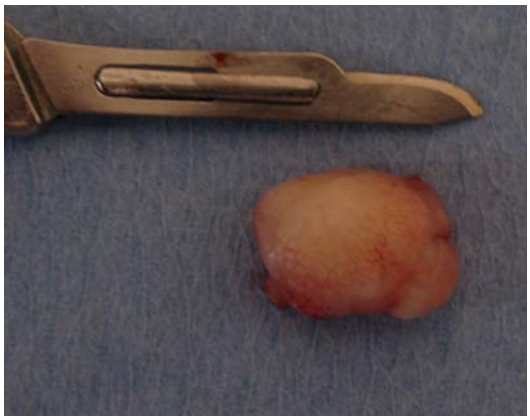

Figure 3. The lesion

Figure 4. Surgical area after excision

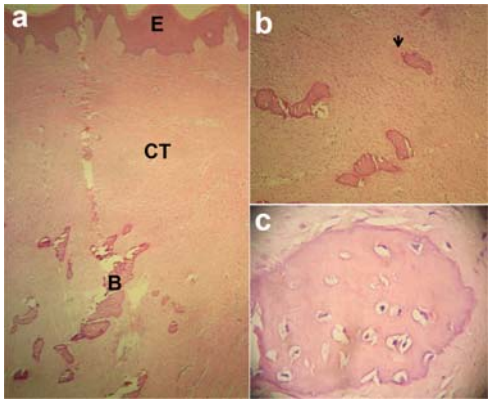

Figure 5. Histopathological examination of the lesion (H & E stain)

a: E: Surface epithelium; CT: cellular fibrous connective tissue; B: New anastomosing bone trabeculae in stroma (H & E stain, X40).

b: In the periphery new bony trabeculae in the fibrous stroma of tumor and cement-like material at the top of the picture (marked with an arrow) (H & E stain, X100).

c: Osteocytes with a new bone trabecula (H & E stain, X200).

Figure 6. Regressed lesion with normal edentulous ridge one year after surgery.

DISCUSSION

Fibro-osseous lesions of the jaws continue to present problems in diagnosis and classification to clinicians and pathologists, despite the advances in our understanding of this entitie. COF is a relative rare lesion considered as an osteogenic tumor (non odontogenic) with variable expressiveness. Cemento-ossifying fibromas two histologic types (cementfying fibroma and ossifying fibroma) that may be clinically and radiographically undistinguishable.[6]

COF is a relatively uncommon condition which may occur at any age but is most often diagnosed in adulthood, typically during the third or fourth decades of life, with female more frequently affected than male. Clinically, the lesion is usually asymptomatic but can lead to an asymmetric swelling with noticeable deformity.[7] In this case report, lesion was asymptomatic and caused asymmetric swelling. COF can show diffuse radiopaque calcification but not all lesions exhibit these radiographic characteristic. Most lesions are not associated with bone destruction.[8]

Treatment is surgical, consisting on resection of the lesion by curettage, with the specimen being sent for histopathological examination.[6,8] Histologically it is described as a fibroblastic connective tissue stroma with great cellular variability. The calcified structures consist on rounded or lobulated basophilic masses (cementumlike), trabecuale of osteoid or bone or combination of the two, which is the most frequent presentation.[6] In our case, the histology showed bone calcified structures.

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