**Florid Semento-Osseos Displazi: Vaka Raporu**

**Florid Cemento-Osseous Dysplasia of The Mandible: A Case Report**

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**Introduction**

The classification of cemento-osseous lesions of the jaws has long been a matter of discussion for pathologists and clinicians.† Literature review shows a wide range of terminology used by authors to describe what seem to be similar lesions. The current classification of cementomatous lesions, formulated in 1992 by the World Health Organization (WHO) is based on age, sex, and histopathologic, radiographic, and clinical characteristics, as well as location of the lesion. This classification includes cemento-ossifying fibroma, benign cementoblastoma, and the group of the cemento-osseous dysplasias.1

Cemento-osseous dysplasias, based on clinicopathologic features, are divided into three categories: Periapical cemento-osseous dysplasia, florid cemento-osseous dysplasia (FCOD) and focal cemento-osseous dysplasia.3,4 Periapical cemento-osseous dysplasia and focal cemento-osseous dysplasia are two different terms for the same reactive lesions.5

FCOD mainly affects middle-aged or elderly black women and the posterior mandible is the site of predilection.3,6,7 Clinically FCOD is an asymptomatic lesion and discovered by chance on routine radiographs.1,2 FCOD typically bilateral and may affect all four quadrants.7 The most common radiographic presentation consist of densely sclerotic lobular masses that appear in association with less well-defined areas of mixed radiolucent/radiopaque patterns.2

Histologically, the lesion consists of masses of densely calcified material resembling secondary cementum. They contain few lacunae and are sometimes fused to the root of teeth.3

The treatment is dependent upon symptoms. Asymptomatic forms motivate therapeutic abstention. When inflammatory, infectious or morphological complications appear, treatment relies on surgery in combination with long term antibiotic regimens.8 Although supervision of infection in FCOD can cause chronic osteomyelitis, this should not be confused with chronic diffuse sclerosing osteomyelitis.

FCOD appears in middle-aged or elderly black women. However, in this paper, we present clinical, radiographic and histologic features of a case of FCOD which affected a 30-year-old white woman.

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Case Report

The patient, a 30-year-old woman was referred to our clinic with a complaint of carious right second molar in the mandible. Clinical examination revealed no abnormality except for the symptomless carious right second mandibular molar and a slight buccal expansion at the same site. The overlying mucosa was normal. The first right mandibular molar was missing. There were no other clinical symptoms.

On radiographic examination, multilobular, irregular sclerotic mass which had surrounding area of ill-defined radiolucency in the right first mandibular molar area was observed. This radiopaque mass was seen solely in the tooth bearing area which replaced the missing first molar (Figure 1). Besides, irregular periapical radiolucency containing small sclerotic bodies was observed around left first mandibular molar apices (Figure 2).

The lesion on the right was surgically removed under the local anesthesia (Figure 3). On histopathologic examination, multiple foci of cemento-osseous tissue lying in a cellular fibrous stroma were noted (Figure 4). The diagnosis of focal cemento-osseous dysplasia was made. Our patient did not reveal a family history.

Discussion

FCOD is an uncommon disease of the jaws which is generally asymptomatic and it typically involve multiple sites and frequently symmetric in distribution. It can also present itself as extensive lesions in all posterior segments of the jaws, locating in the premolar-molar region. In our patient, the lesions were symmetrically located in the mandibular molar region and they were asymptomatic.
FCOD is classically described as a condition occurring almost exclusively in middle-aged black women. In an analysis of 54 Japanese patients who had cemento-osseous dysplasia, Kawai et al. found that forty-nine (91%) of the 54 patients were women. Our patient was a woman and she was 30 years old. FCOD affecting multiple family members appears to be quite uncommon. There are only a few reports in which the hereditary nature of the lesion could be demonstrated. Our patient did not reveal a family history.

Radiographically FCOD appears as radiopaque, irregular or lobulated masses without radiolucent borders interspersed with ill-defined radiolucent/radiopaque areas. In the past, these calcifications have been interpreted as chronic diffuse sclerosing osteomyelitis. In their study, Ariji et al. observed a low-density thin layer or cystlike area around the high-density masses in the tooth-bearing areas in seven cases studied on CT images. Expansion of the buccal and lingual cortical plates was observed in association with cystlike areas, as was the case with ours, but was infrequently observed in FCOD. Most of FCODs display predominantly an opacity, or a mixed lucency-opacity, with an ill-defined radiographic border. About one third of FCODs show a radiolucency with a demarcated outline. These findings correlate well with the lesion's progress as described histopathologically. A well-defined radiolucency is frequently seen in the early stage. A mixed or pure radiodensity with a sclerotic border, sometimes characteristic displaying a radiolucent rim around radiopacity is seen in the intermediate stage. About half the cases at this stage, however, show an ill-defined mixed radiodensity without a lucent rim. At the more mature stage, it becomes mainly sclerotic with an ill-defined border. On the whole, the radiopaque appearance in FCOD is irregular or diffuse. In our case, the lesion on the right mandible was seen as multilobular, irregularly shaped radiopaque sclerosis which had surrounding area of ill-defined radiolucency indicating the mature stage. However, the lesion on the left mandible was predominantly radiolucent with little sign of calcification indicating the early to intermediary stage.

Cemento-osseous dysplasias resemble cemento-ossifying fibromas histologically and consist, in early stages, of cellular fibrous tissue containing foci of cementum-like tissue. Progressive calcification leads to the formation of a solid, bone-like mass. The four progressive stage of cemento-osseous dysplasia are recognizable histopathologically. The early stage is osteolytic process, the intermediary stage is the cementoblastic process, the mature stage is the cementosclerotic process, as was the case with the lesion on the right in our case, and the end stage is necrotization of the cemental mass, on histological grounds.

In the diagnosis of FCOD, cemento-ossifying fibroma and dental infections should be excluded in the differential diagnosis. The nature of the lesion is confirmed by biopsy. In the treatment of FCOD, complete surgical removal is unnecessary after a diagnosis is made, though a periodic follow-up is recommended. In our case we removed the lesion on the right under local anesthesia for diagnostic purposes. It was not necessary to remove lesion on the left after the final diagnosis.

References:


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