Florid Semento-Osseos Displazi: Olgu Sunumu

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**ABSTRACT**

Florid cemento-ossifying dysplasia (FCOD) is a very rare condition presenting in the jaws. FCOD refers to a set of radiolucent-radiopaque periapical and interradicular lesions involving the mandible bilaterally and sometimes the maxilla. The affected area undergoes changes from normal vascular bone to bone containing avascular cementum-like lesions. A screening dental panoramic radiograph is usually adequate for initial diagnosis. Although in most situations the lesion is not treated, treatment is required when infection of the lesion occurs. This secondary infection usually results from trauma to the area. In edentulous areas, minor irritation from a denture may cause serious consequences. This clinical report demonstrates the treatment of a secondary osteomyelitis of a FCOD lesion with surgical procedures.

**ÖZET**


**KEYWORDS**

Florid cemento-osseous dysplasia, Osteomyelitis, Denture trauma, Radiology

**ANAHTAR KELİMELER**

Florid Semento-Osseos Displazi, Osteomyelit, Dental travma, Radyoloji
INTRODUCTION

FCOD appears with multifocal involvement on the posterior portions of the jaws. These lesions are most commonly seen in middle-aged black women, although they also occur in Caucasians and Asians and have been designated as sclerosing osteitis, multiple enostoses, diffuse chronic osteomyelitis and gigantiform cementoma1. The lesion shows a marked tendency for bilateral and often symmetric involvement. The disease may be completely asymptomatic and in such cases discovered only when radiographs are taken for some other purpose. Radiographs show large radiolucent mixed or most often dense radiopaque masses limited to the periapical alveolar bone1. In this case report treatment of an FCOD with secondary osteomyelitis was presented.

CASE REPORT

A 51 year-old woman presented to a private clinic with pain and swelling in the mandibular left posterior region associated with her denture. The patient was referred to the Oral Surgery Clinic at the Hacettepe University with fistulisation and pus drainage from the left mandibular molar area. The patient reported that she had her left mandibular first molar extracted by a practitioner three years ago and the socket healing was uneventful. She had a partial denture constructed after the extraction healing and she had used the same denture since then. The patient stated that she had some complaints from her denture one year ago and also pain and swelling in the left mandibular posterior area during chewing and biting with the denture. She was unable to use her mandibular denture for three months and was also using antibiotics for last month which was prescribed for her by the practitioner. Extraoral examination revealed facial asymmetry corresponding to the palpable swelling on the left mandibular posterior region. Intraoral examination revealed mucosal dehiscence and sequestra formation on the left mandibular molar region with pus drainage (Figure 1).

Panoramic radiograph showed large and diffuse radiopaque masses surrounded by radiolucent borders limited to the mandibular periapical alveolar bone. The images of the lesion were more lobular, diffuse and irregular-shaped with larger radiolucent borders on the left mandibular region (Figure 2).

Complete blood count and other laboratory data were within normal limits. The microbiological examination of the pus revealed normal flora. On the basis of the radiological and clinical findings, the patient was diagnosed with “florid cemento-osseous dysplasia”. Initial conservative treatment was performed using antibiotic therapy, surgical debridement and removal
of sequestra. Histopathologically the lesion was composed of cementum-like substances characterized by islands of calcified deposits and irregular trabeculae of bone which showed evidence of proliferation with necrosis and resorption of the bone and cementum-like structures. Varying numbers of polymorphonuclear leukocytes with dense infiltrations were associated with the necrotic bone. The microscopic features were compatible with the diagnosis of “florid cemento-osseous dysplasia with chronic osteomyelitis”. The 6 and 12 months postoperative panoramic radiographs showed uneventful healing and on intraoral examination complete soft tissue closure was observed (Figure 3,4).

**DISCUSSION**

FCOD previously called gigantiform cementoma, multiple cemento-ossifying fibroma, sclerosing osteitis, multiple enostosis and sclerotic cemental masses of the jaws, was first comprehensively described by Melrose et al\(^2\).

FCOD is the most dramatic and extensive expression of the cemento-osseous lesions, manifesting as a diffuse, multiquadrant distribution of mixed lucent-opaque osseous changes in the mandible and maxilla\(^1\). The etiology of the disorder is unknown. Histopathologic examination shows that it may be due to reactive or dysplastic changes of the periodontal ligament. FCOD is a very rare condition but the true incidence of the lesion is unknown. Many individuals may be either undiagnosed or misdiagnosed.

A screening dental panoramic radiograph is usually adequate for initial diagnosis. Radiographically the lesion varies depending on the stage\(^3\). The lesion is poorly circumscribed and initially radiolucent. FCOD opacifies progressively as it becomes more mature\(^4\). The classic appearance includes diffuse, lobular, irregular-shaped radiopacities throughout the alveolar process of the maxilla and mandible\(^5\).

FCOD is usually a benign asymptomatic disorder; therefore no treatment is necessary\(^6\). For the asymptomatic patient the best management consists of regular recall examination with prophylaxis and reinforcement of good oral hygiene in order to control periodontal disease and prevent tooth loss. Because the onset of symptoms is usually associated with exposure of the sclerotic masses to the oral cavity, biopsy or elective extraction of teeth should be avoided. In other instances, symptoms begin after exposure of the sclerotic masses to the oral cavity as a result of dental trauma\(^7^8\). The avascular nature of the lesion usually complicates exposure to microorganisms. This can lead to bone necrosis, which may be treated difficultly conservatively with antibiotic therapy. At this stage, there is an inflammatory component to the disease and the pro-

![FIGURE 3](image1.png)

*The 6 month postoperative radiographic appearance after the surgical debridement and removal of sequestra in the region*

![FIGURE 4](image2.png)

*The 12 month postoperative panoramic radiograph which shows complete healing with normal bone formation*
cess is basically a chronic osteomyelitis involving dysplastic bone and cementum. Saucerazation of dead bone and cementum is the treatment recommendation in the literature\(^3,6,7\). Benczur et al reported an aggressive secondary infection of FCOD patient which was treated by a combination of complex surgical and prostodontic procedures. They concluded that the prevention of denture irritation is the most important postoperative care for FCOD patients\(^3\).

Groot et al analyzed 16 patients with sclerotic jawbone lesions associated with symptoms of infection and considered the clinicopathologic spectrum of diffuse sclerotic lesions containing cementum-like material is complicated by their predisposition to secondary infection\(^7\). These lesions are considered to present secondarily infected FCOD.

Panoramic radiographs are very important for the diagnosis of FCOD because of the characteristic radiopaque-radiolucent appearance. Efforts must be made to prevent the bone exposure and secondary infections after tooth extraction. Secondary infection of FCOD can become aggressive and difficult to treat as reported in the present case. This case report describes treatment of a patient requiring removal of the necrotic bone and infected tissue, and the importance of proper prostodontic management for FCOD patients.

**REFERENCES**


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