FLORID CEMENTOSSEOUS DYSPLASIA –
A RARE CASE REPORT
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Abstract

Background – Florid Cementosseous Osseous Dysplasia (FCOD) is an entity belongs to the broad category of fibro-osseous lesion and can be defined as a condition of exuberant multi quadrant masses of cementum and/or bone in both jaws.

Case Report - This article presents a case of FCOD came to our institute with a chief complaint of swelling in the lower front teeth region. The lesion was eventually diagnosed as florid cementosseous dysplasia after radiographical and histopathological evaluation.

Conclusion - Florid cemento-osseous dysplasia can be diagnosed by clinical examination and its distinct radiological presentation, but in few cases for the confirmation of diagnosis biopsy may be required.

Key words: Etiology, Florid Cemento Osseous Dysplasia, Mandible.

Introduction

Cementosseous dysplasia is a fibro-osseous lesion particularly affects the jaws of orofacial region. The term Florid Cementosseous Osseous Dysplasia (FCOD) was first described in 1976 by Melrose. This entity belongs to the broad category of fibro-osseous lesion and can be defined as a condition of exuberant multi quadrant masses of cementum and/or bone in both jaws and in some cases, simple bone cavity like lesions in affected quadrant.1,2

In the field of pathology, the word 'florid' was introduced to describe the wide spread, extensive manifestations of the disease in the jaws. These lesions have a tendency to spread bilaterally, frequently presenting symmetry in the lesion. Large lesions can be associated with jaw expansion, dull pain or drainage in the involved area.3 The specific etiology for the occurrence of FCOD is still unknown, also there is no justification given for gender and racial predilections. This lesion has a striking tendency towards bilateral, often quite symmetrical, location, and it is not unusual to find extensive lesions in all quadrants of the jaws. Clinically, these lesions are often asymptomatic and may present as incidental radiological findings. Symptoms such as dull pain or drainage are almost always associated with exposure of the sclerotic calcified masses in the oral cavity. This may emerge as the result of progressive alveolar atrophy under a denture or after extraction of teeth in the affected area involved. Radiographically, appear as dense, lobulated masses, often symmetrically located in various regions of the jaws. Computed tomography (CT), because of its ability to give axial, sagittal, and frontal views, is useful in the evaluation of these lesions.3

Case Report

A 45 year old female patient presented to the department of oral pathology and microbiology, Kothiwal Dental College and Research Centre, Moradabad Uttar Pradesh with the chief complaint of swelling in lower front teeth region since 1 month. Patient noticed a slowly progressing swelling in the lower front teeth region 1 month back. She had taken various courses of medication for the condition. Patient had no complaint of pain, dysphagia, trismus, dysphonia, fever, chills, loss of weight and her past medical history was not significant.

Intraoral examination revealed a diffuse swelling of the mandibular labial and lingual vestibular region adjacent to 31, 32, 33, 41, 42, 43, measuring approximately 3×2 cm with smooth surface and overlying skin appeared normal. On palpation, the swelling was uniformly bony hard, nontender with no local rise in temperature. (Figure 1)

Figure 1: - Clinical photograph showing lingual swelling in the anterior mandibular region.

On radiographic evaluation, orthopantomogram (OPG) revealed multiple well defined sclerotic masses with radiolucent border in mandibular symphyseal region and both right and left molar region of the mandible. These sclerotic masses were surrounded by a thin radiolucent border and appeared to be attached to the root apices. All the teeth were vital. The routine haematological and serum investigations revealed alkaline phosphatase and rest of the values within normal limits.
An incisional biopsy was done and tissue was evaluated histopathologically. Microscopic examination showed fibrous connective tissue background with some round as well as irregular calcified areas. Calcified areas showed osteoblastic rimming and various osteocyte like cells within the osseous area whereas some other areas showed retraction from the adjacent stroma having ginger root like appearance. The fibrous connective tissue background was dense with active proliferating fibroblast.

After the confirmation of the diagnosis, patient was treated with a surgical excision of the lesion in the anterior mandibular region. Lesions in the posterior mandibular area left untreated as they were not symptomatic.

Discussion

The term florid cemento-osseous dysplasia (FCOD) has been proposed in the second edition of the World Health Organisation’s (WHO) “International Histological Classification of Odontogenic Tumours” to replace the first edition’s term “gigantiform cementoma.” It is a non-neoplastic, reactive fibroosseous lesion confined to the alveolar areas of the jaws and seen to have a typical female gender predilection affecting black women in 4th - 5th decades with a mean age of 42 years. Cemento-osseous dysplasias are usually classified depending on their extent and radiological appearances into three main groups; periapical (surrounds the periapical region of the teeth and are bilateral), florid (sclerotic symmetrical masses) and focal (single lesion) cemental dysplasias. This disorder is strictly localized to tooth bearing areas and not associated with any other skeletal disease. The pathogenesis of the condition still remains largely obscure. Some authors accredit to the proliferation of the fibroblastic mesenchymal stem cells in the apical periodontal ligament which are cementoblastic precursor stem cells, while others hold the view that it may arise from the remnants of the cementum left after tooth extraction.
Waldron proposed that reactive or dysplastic changes in PDL might be the cause.\(^2\)
In our case, we have diagnosed the case as Florid Cementosseous Dysplasia based on histopathological evaluation coupled with clinical and radiographic features. In regards to treatment modalities, it is been suggested by Waldron CA in 1975 \(^6\) that lesions which are asymptomatic and quiescent should be left untreated. Once the diagnosis has been established in an asymptomatic patient, under normal circumstances, there is no need for further treatment. The patient should be regularly examined with prophylaxis and educated for a good oral hygiene care to prevent periodontal disease and subsequent tooth loss. In cases where lesion becomes symptomatic or causes bone expansion surgery becomes necessary.

**Conclusion**

To diagnose a case of Florid Cementosseous Dysplasia clinical, radiographic and histopathological examination is significant. Although, Its solid nature and posterior localization ease the differential diagnosis. The treatment of FCOD includes long term follow-up for asymptomatic lesions or surgical excision if dental implant rehabilitation is planned for the affected partial edentulous region of jaw.

**References**


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