

# CENTRAL OSSIFYING FIBROMA OF MANDIBLE - A CASE REPORT

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## Abstract

Central cementifying fibroma is a rare non odontogenic tumor coming in the group of fibro osseous lesion, arising from periodontal ligament and is usually seen in tooth bearing area. It can affect both the mandible and the maxilla, particularly the mandible. This bone tumour consists of highly cellular, fibrous tissue that contains varying amounts of calcified tissue resembling bone, cementum or both. Here we present a case of Central cementifying fibroma (recurrent) in a 34 year old female.

## Introduction

In 1971 WHO classified four types of cementum- containing lesions: fibrous dysplasia, ossifying fibroma, cementifying fibroma and cemento-ossifying fibroma. According to the second WHO classification, benign fibro-osseous lesions in the oral and maxillofacial regions were divided into two categories, osteogenic neoplasm and non-neoplastic bone lesions; cementifying ossifying fibroma belonged to the former category. However, the term "cementifying ossifying fibroma" was reduced to Ossifying fibroma[ OF ] in the new WHO classification in 2005.

The origin of OF is thought to be the periodontal membrane. Some Ossifying fibromass do, in fact, contain prevalent cementum-like calcifications and others show only bony material, but a mixture of the two types of calcification is commonly seen in a single lesion. It can occur at any age, however, many authors confirmed that OF of the jaw tended to occur middle-aged patients. OF of the jaw bone shows a predilection for females. OF predominantly affects the craniofacial bone and rarely involves the long bones.

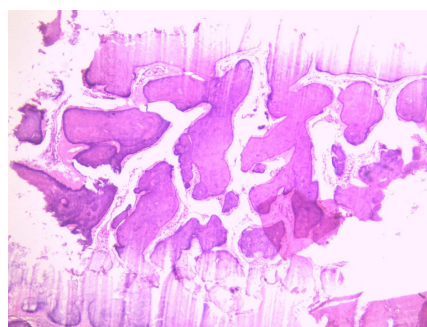
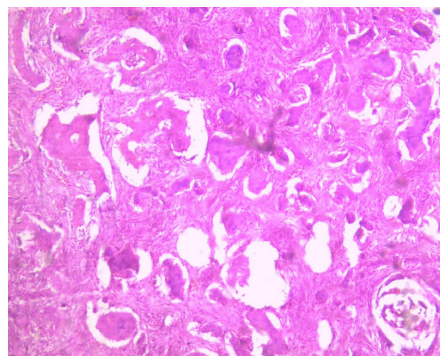
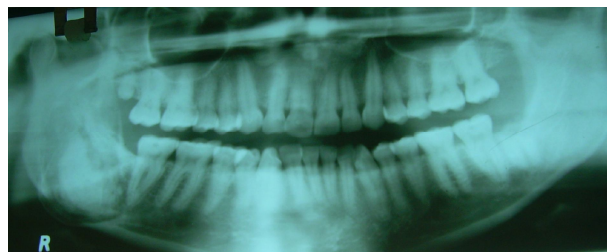
## Case Report

A thirty four year old lady presented with a swelling in ramus of mandible. Swelling started eight years back and it was slowly growing. Swelling was not painful. There was no history of dental pain or trauma She had undergone surgery for the same 4 years back and diagnosis was cementoma. General examination revealed a moderately built lady with no other systemic problems.

*Extra oral examination revealed a uniform swelling* extended from angle of mandible to condylar area ,and mandible was expanded 1cm in lateral direction. There was no rise of temperature over the lesion. Consistency of the swelling was hard and was not tender. Dental examination revealed no abnormalities.

Radiographic examination revealed a radiolucency extending throughout right ramus .Central portion of radiolucency shows a radio opaque lesion near the lower part. Lower part of mandible was thinned out .

Histopathologically lesion is made of moderately dense bundles of collagen fibers with moderate cellularity. There is presence of spicules of lamellated bone. Peripheral part of lesion show discrete masses of cementum .With the above mentioned features diagnosis of central cementifying fibroma was made.



## Discussion

The origin of cementoossifying fibroma is supposed to be from periodontal ligament .Age range of this tumor is from 20-40 years . In a study by Eversole females were five times more affected than males. In Summerlin and Tomich study females were affected twice than males. Usually condition is painless but if a nerve is involved there can be pain. Mandible is more affected than maxilla. It is a relatively slow growing tumor and because of this , the cortical plates of bone and overlying mucosa or skin are almost invariably intact.Growth of the tumor will be usually in centrifugal manner. Usually lesion occurs in tooth bearing area .Radiographic appearance of lesion vary according to stage of development of tumor. In early stages it is radiolucent lesion with no evidence of internal radiopacities. As it matures , there is increasing calcification sothat radiolucency becomes flecked with opacities and ultimately appears as uniform radiopaque mass. Sometimes peripheral portion show sclerotic margin .Lesion is always well circumscribed and demarcated from the surrounding bone in contrast to fibrous dysplasia . The connective tissue is characterized by many small foci of irregular bony trabeculae, bearing some similarity to the chinese-letter shape of trabeculae in fibrous dysplasia.It contains

variable mixture of bony trabeculae, cementum like spherules or both.

Surgical contouring of affected bone or local resection and bone grafting is done

## Summary

Central cementifying fibroma is a fibro osseous lesion arising from periodontal ligament and is usually seen in tooth bearing area. Here we presented a lesion occurred in ramus of mandible. It was a recurrent lesion probably due to inadequate curettage. The affected bone was surgically resected and deformity was repaired with rib graft.

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