

FLORID OSSEOUS DYSPLASIA

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ABSTRACT

Florid osseous dysplasia is a rare non-neoplastic and asymptomatic bone disorder involving the jaws. It is commonly seen in elderly females. Discovered on routine radiographic examination it manifests as radiopacities involving multiple quadrants. Microscopically, the lesion shows a fibroblastic proliferation along with irregular trabeculae of woven bone and cementum like material. Here with presenting two such interesting cases of this rare entity presenting in a family and associated with multiple impacted teeth.

KEY WORDS : Florid osseous dysplasia, Gigantiform cementoma, Florid osseous dysplasia

INTRODUCTION

Florid Osseous Dysplasia as coined by Melrose and co-workers (1976) is a very rare non neoplastic condition of the alveolar bone ¹. It is characterized by the occurrence of multiple sclerotic radiopaque masses of bone/cementum or both. They show symmetric distribution involving all the four posterior segment. The current classification of cementomatous lesions formulated in 1992 by WHO is based on age, sex, histopathologic, radiographic, clinical characteristics, as well location of the lesion. This classification includes cemento-ossifying fibroma, benign cementoblastoma, and the group of the cemento-osseous dysplasias. Periapical cemental dysplasia and florid cemento-osseous dysplasia (FOD), which have been reported under the term "gigantiform cementoma", are included in the latter group^{2,4,5,6}.

Familial tendency is very uncommon. We report 2 such cases which occurred in mother and daughter.

Case Report

A 35 years old female patient was referred to SDM Dental college outpatient department (OPD) by a general practitioner. She had undergone extraction of grossly decayed 25, three months back in a private dental clinic owing to pain. The patient presented with a complaint of a salty discharge

oozing from the unhealed socket and of a long standing continuous throbbing pain of one year duration. Extra orally there was a slight facial asymmetry on the left side (**Fig.1**). Intraoral examination showed a diffuse swelling surrounding the unhealed socket in the left posterior maxilla with expansion of both cortices (**Fig.2**). An oroantral fistula with draining pus was also observed. Anteriorly it extended from the retained deciduous canine till the 2nd molar region. Further examination showed slight expansion of the other three posterior segments of both cortices as well. On examination 23,24,25,13,43,44,45,33,34,35 teeth were noted to be missing and 53, 55, 63,75,73,74 were retained. On further questioning the patient told about her 18 years old daughter who was also suffering from similar complaint of pain in the jaw bones. Out of interest the patient was requested to report to the OPD.

On clinical examination daughter also showed a gross facial swelling on the right side (**Fig.3**). Intraorally a diffuse swelling was noted in the posterior upper right jaw with discharging sinuses in the buccal vestibule and on the palatal side because of decayed teeth (**Fig. 4**). However the other quadrants showed minimal cortical expansion and few decayed teeth. Many retained teeth were also observed. The patient otherwise appeared healthy. Hard tissue specimen was submitted for



Fig.1. Slight facial asymmetry on the left side of the face--Mother

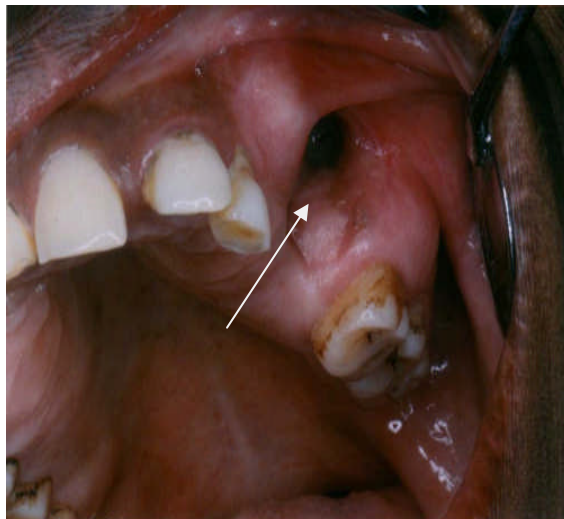


Fig no 2 shows diffuse swelling and unhealed socket--Mother



Fig.3. Gross facial swelling on the right side of the face—daughter



Fig.4. Diffuse swelling on the posterior upper right side and discharging sinuses –buccal and palatal aspect--daughter

microscopic evaluation on surgical curettage of the socket in the first case. In the second case pus drainage was done. Both patients were advised oral antibiotics and analgesics.

Radiological Examination: OPG of the both cases revealed multiple impacted teeth mainly canine and premolars surrounding ill defined patchy radiopaque areas akin to cotton wool/ cloudy appearance. (Fig.5 and Fig.6)

Histopathology of the decalcified specimen revealed irregular anastomising trabeculae of both mature and immature bone (Fig.7), with large osteocytic lacunae (Fig. 8). Reversal lines exhibiting minimal osteoblastic activity and ovoid basophilic masses similar to cementum were observed(Fig. 9). The marrow tissue was fibro cellular with scattered chronic inflammatory cells and few areas of hemorrhage.



Fig 5. Case report 1(Mother). Orthopantomography shows multiple impacted teeth and ill defined patchy radioopacity



Fig 6. Case report 2 (daughter) Orthopantomography shows multiple impacted teeth and ill defined patchy radioopacity

Discussion

FOD, a cemento osseous dysplasia usually affects middle aged black females and is a very rare condition⁵. A large scale survey in the Orientals (Chinese population) showed an incidence rate of 0.01 case/year/1, 00,000 population (1989)⁴. Patients usually present with diffuse swellings, discharging sinuses/fistulae or osseous sequestra. However the second case (daughter) presented with no acute symptoms. Though jaw expansion is a noticeable feature, cases show a range of clinical manifestations either being extensive (causing gross facial asymmetry) or with minimal clinical features. Extra skeletal involvement is not seen and the blood chemistry falls within the normal range⁴. Few cases associated with simple bone cysts and malignant spindle cell tumors arising from FOD have been reported³. The clinical profile of our case was similar to the earlier reported cases, except for the presence of multiple impacted permanent teeth³. Histologically basophilic masses with many reversal and resting lines (pagetoid appearance) and fibroblastic background showing acute and chronic inflammatory infiltration was observed. Observation made by Melrose and co-workers and

our cases shows mixture of irregular bony trabeculae and cementum like deposits². At times even it is difficult to differentiate both cementum and bone when large ovoid masses are encountered.

Differential diagnosis: Though Paget's disease can be considered as a differential diagnosis, the age group, the elevation of alkaline phosphatase levels, involvement of multiple quadrants and extraganthic involvement rules out this possibility⁴.

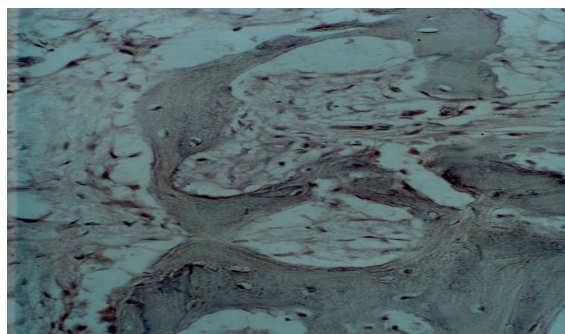


Fig. 7. Trabeculae of woven bone

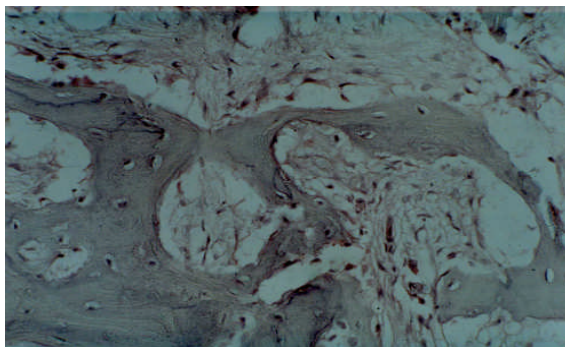


Fig.8.Large osteocytic lacunae

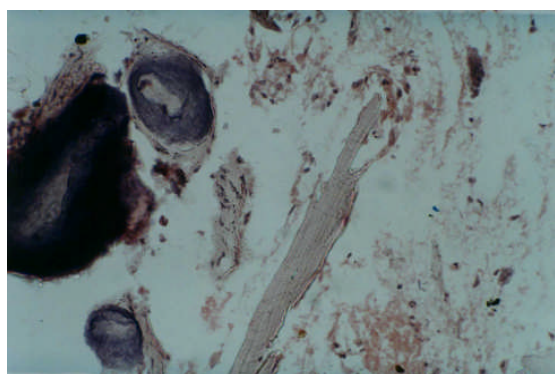


Fig.9. cementum like deposits

CONCLUSION

Familial tendency has been reported but is very uncommon. A surprising and interesting feature in our cases was the presence of multiple impacted permanent teeth which is not observed so far. Possibly the osseous dysplastic process which started at early age could have led to the impaction. Thus we bring forth one of the astonishing and rare entity of a spectrum of cementomatous lesions.

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