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Co-occurrence of Florid Osseous Dysplasia with Osteomas and Impacted Teeth: A Case Report

Shakya Hemant[1*], Khare Vikram[2], J Anshuman[3], Yadav Satyapal[4], Rana Divya[5]
[1]Reader, [2]Professor & HOD, [3]Professor, [4]Assistant Professor, [5]Final year post graduate, Department of Oral Medicine & Radiology, Mahatma Gandhi University of Medical Sciences & Technology, Jaipur, Rajasthan-302022, India

***Corresponding Author:**
Name: Dr. Hemant shakya
Email: shakyamds@gmail.com

Abstract: Florid cementoosseous dysplasia (FCOD) is rare, benign, fibroosseous, and multifocal dysplastic lesion of the jaw. FCOD exhibits multiple radiopaque cemetum-like masses distributed throughout the jaws. It characteristically affects the jaws of middle-aged black women, is generally asymptomatic, usually detected during radiological examination. FCOD associated with multiple impacted teeth and bone expansion is a rare. Only a few familial cases have reported in the literature. This is a report of a 48-year-old female patient diagnosed with FCOD from clinical, radiological findings. It is a case of the nonfamilial FCOD with many impacted teeth and osteoma.
Keywords: Cemento-osseous dysplasia, Osseous dysplasia of jaw, Fibro-osseous lesion, World Health Organization classification

INTRODUCTION

Florid cementoosseous dysplasia (FCOD) is a benign, fibroosseous, and multifocal dysplastic lesion of the jaw consisting of cellular fibrous connective tissue with bone and cementum-like tissue [1]. Its etiology is unknown. There is no clear explanation for its gender and racial predilections [2]. FCOD most frequently occurs in the mandible of middle-aged black females [3].

FCOD may be totally asymptomatic; while pain, swelling, purulent discharge and sequestrum formation are found in some patients. These symptoms are almost always associated with exposure of the sclerotic calcified masses in the oral cavity [2, 4-6]. Jaw expansion is a feature of COD which is less reported [7-10]. FCOD lesions have tendency towards bilateral, often quite symmetrical location, involving all quadrants [11]. It usually presents a multiple radiopaque bone/cemetum-like masses distributed throughout the jaw [3]. In 2005, World Health Organization subdivided Cemento-Osseous Dysplasias (CODs) into periapical, florid and other CODs [12]. The case presented here highlights a rare combination of FCOD co-existing with multiple impacted teeth, multiple osteoma and osteomylitis.

CASE REPORT

A 48 years old female came to the department of oral medicine and radiology with the chief complaint of pain in left lower back tooth region and extra oral pus discharge from left side.

Patient revealed history of pain in lower left back tooth region for last 3 months which was mild to moderate and continuous in nature. Patient took medication for the same and underwent extraction one and half months ago in a private dental clinic. Patient again visited the dentist one week back with the complaint of mild continuous pain along with complain of pus discharge from the left side of face.

Extraoral examination revealed a bony hard swelling, measuring around 2cm on right forehead (Fig. 1) with small swelling on left forehead.

Fig. 1: Frontal view of a 48 year old female showing large swelling (right) & small swelling (left) at forehead region

Draining sinus was seen on the lower border of mandible (Fig. 2) with tender and enlarged Left submandibular lymph nodes. A well defined bony hard swelling felt at left lower border of mandible. Intraoral examination revealed that 35, 36 were missing (Fig. 3) with mild pain on palpation & buccal cortical plate expansion was noticed in 35, 36 region.

Fig. 2: Lateral view of left mandible showing draining sinus at lower border of mandible

Fig. 3: Intra oral view showing missing left lower first and second molars

A bony prominence was felt on posterior lingual aspect of mandible with respect to 36, 37 region. On the basis of clinical examination provisional diagnosis of Osteomyelitis with extraoral draining sinus with respect to 36 was given. A written informed consent was obtained and the patient was referred for routine radiographic and hematological examination. IOPA of left mandibular edentulous area (Fig. 4a & 4b) showed radiopaque area (sequestrum) surrounded by a radiolucent area suggestive of Osteomyelitis.

Fig. 4a: IOPA of lower left anterior region showing radio-opaque region suggested of osseous dysplasia

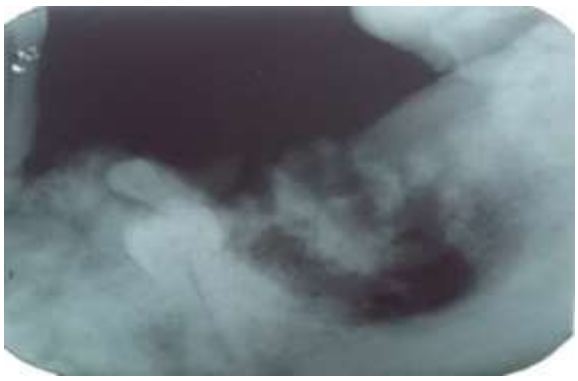

Fig. 4b: IOPA of left lower premolar region showing radio-opaque lesion surrounded by radiolucent region suggestive of osteomyelitis

OPG (Fig. 5) revealed cotton wool appearance suggestive florid osseous dysplasia, multiple impacted teeth (supernumerary) and osteoma on left lower border of mandible.

Fig. 5: Orthopantomograph showing radio-opaque lesion in all four quadrants suggestive of florid osseous dysplasia with multiple impacted teeth and osteoma at left lower border of mandible

CT scan (axial section) suggestive of osseous dysplasia (Fig. 6) and 3D CT image (Fig. 7) suggestive of osteoma at forehead and left lower posterior border of mandible.

Fig. 6: ct scan section showing radiodence lesion in all four quadrants suggestive of bone dysplasia

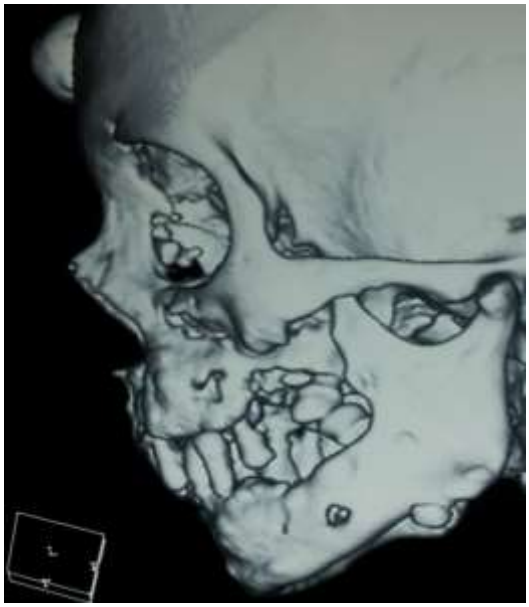

Fig. 7: 3D reconstructive image showing well defined osteoma at forehead and left lower mandible region

All the Radiographic features suggestive of

- Florid Osseous dysplasia
- Osteomyelitis with respect to left body of mandible.
- Osteoma with respect to lower left angle of mandible and forehead.
- Multiple impacted supernumerary teeth

The Final Diagnosis was given as florid osseous dysplasia with osteomyelitis with extraoral draining sinus on left mandibular body. Further patient was referred to oral surgery for removal of sequestrum and conservative management of lesion.

DISCUSSION

In FCOD mature bone is replaced with a woven bone in a matrix of fibrous connective tissue. Clinically, lesions are often asymptomatic and may present as an incidental radiological findings [13, 14]. Multiple impacted teeth is a rare phenomenon in cases diagnosed as FCOD. Few cases of FCOD associated with multiple impacted teeth have been reported. In majority of the cases FCOD was familial in nature [15, 16]. However, in this case multiple impacted teeth, osteoma and osteomyelitis were seen, without any familial and syndromic aspects.

CONCLUSION

Diagnosis of FCOD in the jaws is normally done by clinical and radiographic examinations [17]. A biopsy is not required to confirm the diagnosis as it is usually established radiographically. As surgery can be extensive, so surgical removal of the lesion is not justified. Instead, follow up and recontouring is recommended [18]. In our case only necrotic bone was removed. Whenever surgical treatment is planned, the lack of vascularity of the lesion and increased risk of osteomyelitis has to be considered.

REFERENCES

1. Wakasa T, Kawai N, Aiga H, Kishi K; Management of florid cemento-osseous dysplasia of the mandible producing solitary bone cyst: report of a case. Journal of Oral and Maxillofacial Surgery, 2002; 60(7): 832–835.
2. Beylouni I, Farge P, Mazoyer JF, Coudert JL; Florid cemento-osseous dysplasia: report of a case documented with computed tomography and 3D imaging. Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontics, 1998; 85(6): 707–711.
3. Gündüz K, Avsever H, Karaçayli U, Senel B, Pişkin B; Florid cemento-osseous dysplasia: a case report. Braz Dent J., 2009; 20(4): 347-350.
4. MacDonald-Jankowski DS; Florid cemento-osseous dysplasia: a systematic review. Dentomaxillofac Radiol., 2003; 32(3): 141-149.
5. Melrose RJ, Abrams AM, Mills BG; Florid osseous dysplasia. A clinical pathologic study of thirty four cases. Oral Surgery Oral Medicine and Oral Pathology, 1976; 41(1): 62–82.
6. Waldron CA; Fibro-osseous lesions of the jaws. Journal of Oral and Maxillofacial Surgery, 1985; 43(4): 249–262.
7. Kawai T, Hiranuma H, Kishino M, Jikko A, Sakuda M; Cemento-osseous dysplasia of the jaws

in 54 Japanese patients: A radiographic study. Oral Surg Oral Med Oral Pathol Oral Radiol Endod., 1999; 87(1): 107–114.
8. Melrose RJ, Abrams AM, Mills BG; Florid osseous dysplasia. A clinical-pathologic study of thirty-four cases. Oral Surg Oral Med Oral Pathol., 1976; 41(1): 62–82.
9. Loh FC, Yeo JF; Florid osseous dysplasia in orientals. Oral Surg Oral Med Oral Pathol., 1989; 68(6): 748–753.
10. Tonioli MB, Schindler WG; Treatment of a maxillary molar in a patient presenting with florid cemento-osseous dysplasia: A case report. J Endod., 2004; 30(9): 665–667.
11. Beylouni I, Farge P, Mazoyer JF, Coudert JL; Florid cemento-osseous dysplasia: Report of a case documented with computed tomography and 3D imaging. Oral Surg Oral Med Oral Pathol Oral Radiol Endod., 1998; 85(6): 707-711.
12. Barnes L, Eveson JW, Reichart P, Sidransky D; World Health Organization Classification of Tumours. Pathology and Genetics of Head and Neck Tumours. Lyon: IARC Press, 2005.
13. Singer SR, Mupparapu M, Rinaggio J; Florid cemento-osseous dysplasia and chronic diffuse osteomyelitis Report of a simultaneous presentation and review of the literature. J Am Dent Assoc., 2005; 136(7): 927-931.
14. Mupparapu M, Singer SR, Milles M, Rinaggio J; Simultaneous presentation of focal cemento-osseous dysplasia and simple bone cyst of the mandible masquerading as a multilocular radiolucency. Dentomaxillofac Radiol., 2005; 34(1): 39-43.
15. Toffanin A, Benetti R, Manconi R; Familial florid cemento-osseous dysplasia: a case report. Journal of Oral and Maxillofacial surgery, 2000; 58(12): 1440–1446.
16. Srivastava A, Agarwal R, Soni R, Sachan A, Shivakumar GC, Chaturvedi TP; Familial florid cemento-osseous dysplasia: a rare manifestation in an Indian family. Case Reports in Dentistry, 2012, Article ID 574125, 5 pages, 2012.
17. Sarmento DJDS, de Brito Monteiro BV, de Medeiros AMC, da Silveira EJD; Severe florid cemento-osseous dysplasia: a case report treated conservatively and literature review. Oral and Maxillofacial Surgery, 2013; 17(1): 43–46.
18. Jerjes W, Banu B, Swinson B, Hopper C; Florid cemento-osseous dysplasia in a young Indian woman. A case report. British Dental Journal, 2005; 198(8): 477–478.