

The Bulky Boulder Roots: A Case of Hypercementosis

Geon P^{1*}, Kulkarni AV¹, Kashyap RR², Kini R³, Rao PK⁴ and Bhandarkar GP⁵

Image Article

Volume 1 Issue 2

Received Date: September 16, 2017

Published Date: October 03, 2017

¹Postgraduate Student, Department of Oral Medicine and Radiology, AJ Institute of Dental Sciences, Kuntikana, Mangaluru, Karnataka, India

²Reader, Department of Oral Medicine and Radiology, AJ Institute of Dental Sciences, Kuntikana, Mangaluru, Karnataka, India

³Professor and Head, Department of Oral Medicine and Radiology, AJ Institute of Dental Sciences, Kuntikana, Mangaluru, Karnataka, India

⁴Professor, Department of Oral Medicine and Radiology, AJ Institute of Dental Sciences, Kuntikana, Mangaluru, Karnataka, India

⁵Tutor, Department of Oral Medicine and Radiology, AJ Institute of Dental Sciences, Kuntikana, Mangaluru, Karnataka, India

***Corresponding author:** Geon Pauly N, Postgraduate student, Department of Oral Medicine and Radiology, A J Institute of Dental Sciences, Kuntikana, NH-66. Mangaluru, PIN- 575004, Karnataka, India, Tel: +918905102696; Email: geonpauly@gmail.com

Abstract

Hypercementosis is a non-neoplastic thickening of the cementum. It may be restrained to the apex of the root, on one side of it, or involve it entirely. Hypercementosis is coupled with a number of etiological factors, which may be local or systemic in nature. It is decisive that the general dental practitioner is aware of these factors and is able to distinguish presentation due to a local cause from that of a systemic disease process.

Keywords: Hypercementosis; Cementum; Radiographic

Clinical Image

A 30-year-old male patient reported to our department with a chief complaint of continuous throbbing pain in lower left back tooth region with an associated mild extra-oral swelling since 1 week. His medical and family histories were non-contributory. On clinical examination the left mandibular first molar was grossly decayed and tender to palpation and percussion. On radiographic examination, there was an evident radiolucency involving

the pulp and also periapically with furcation involvement suggestive of a chronic periapical abscess (Figure 1). However, as an incidental finding, club-shaped enlargement of the mesial and the distal root was seen suggestive of hypercementosis of a single tooth as adjacent teeth were not affected (Figure 1A). An OPG was taken which confirmed that it was affecting only the first molar on the left side amidst the entire dentition (Figure 1B). Patient was referred to department of oral surgery for extraction of the tooth as the prognosis was poor.

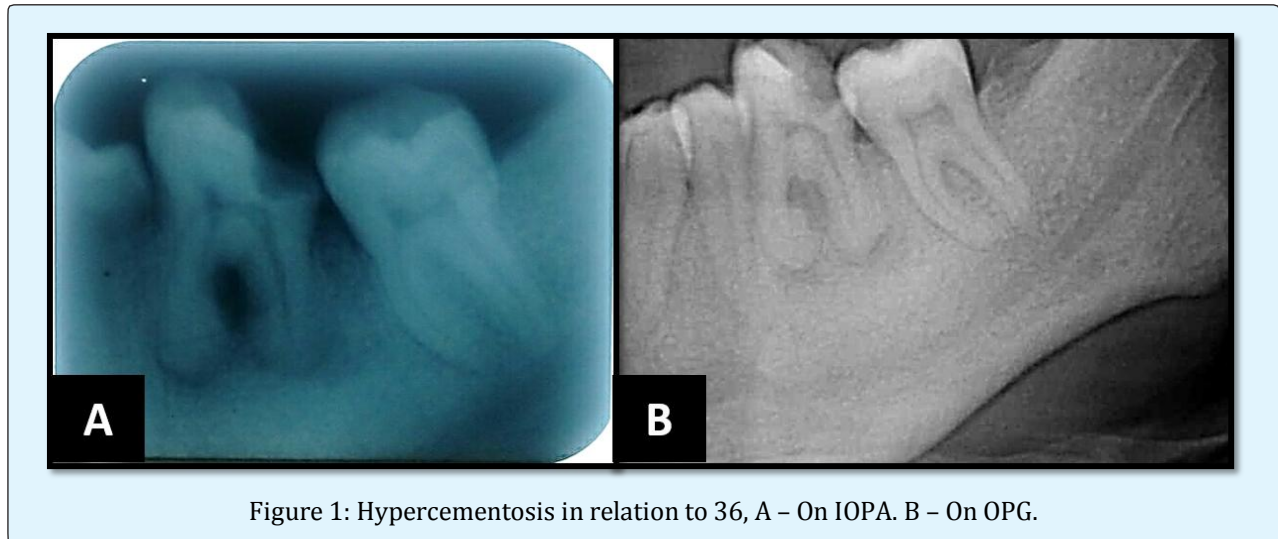


Figure 1: Hypercementosis in relation to 36, A - On IOPA. B - On OPG.

Hypercementosis refers to an adaptive change in the periodontal ligament characterized by increased cementum thickness on the root surface above and beyond the extent necessary to fulfil its normal functions, resulting in abnormal thickening with macroscopic changes in shape. This cementum may be either hypocellular or cellular resembling bone (osteocementum) [1]. Generally, the cementum-like substance is deposited in concentric layers on either the entire root or to be limited to apical portion. Radiographically, the exact amount of cementum thickness increase is difficult to assess, since cementum and dentin has similar radiodensity. Based on morphologic appearance, hypercementosis can be classified under four types: A - normal root, B - club-shaped diffuse, C - focal/localized, D - 'shirt sleeve cuff' appearance [2]. Based on this classification our case was clearly type B.

For healthy teeth, patients with hypercementosis stand in no need of any treatment. But, in cases of treatment needs such as endodontic procedures and need for extraction it can make the procedure more challenging and cumbersome. Thus, there is a need for the practitioner to be aware and be on guard before undertaking any invasive procedures [3].

References

1. Consolaro A, Consolaro RB, Francischone LA (2012) Cementum, apical morphology and hypercementosis: A probable adaptive response of the periodontal support tissues and potential orthodontic implications. *Dental Press J Orthod* 17(1): 21-30.
2. Pappen FG, Fagonde CG, Martos J, Silveria LFM (2011) Hypercementosis: a challenge for endodontic therapy. *Revista Sul-Brasileira de Odontologia* 8(3): 321-328.
3. Patil SR, Yadav N (2015) Generalized hypercementosis with multiple missing teeth in a young female: A rare case report. *Int J Health Allied Sci* 4(3): 178-180.