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Presence of Multiple Impacted Supernumerary Premolars in a Patient Visiting a Satellite Setting in Panchkula: A Case Report

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In comparison to normal dentition, extra teeth present in the oral cavity are called as Supernumerary teeth with prevalence varying between 0.1% and 3.6%. It is more common in permanent dentition and incidence rate is high in maxillary incisor region, followed by maxillary third molar and mandibular molar, premolar, canine, and lateral incisor. Supernumerary premolars may occur in single or multiple numbers and their prevalence rate is 0.08-0.3%. Huge percentage of supernumerary premolars remain unerupted, impacted and usually asymptomatic. Radiograph plays an important role in their diagnosis. The present paper reports a case of impacted fully completely developed supernumerary premolar teeth along with upper and lower molars.

KEYWORDS: Supernumerary teeth, Impaction, Premolars

INTRODUCTION

Presence of any extra set of teeth in the dental arch in addition to the normal dentition, whether in erupted or impacted form, are designated as supernumerary teeth (also known as hyperdontia)¹ which is a well-known dental phenomenon. This dental anomaly is common to primary and permanent dentitions in which the jaw has more teeth than normal. The term supernumerary frequently encompasses the supplementary teeth which are extra teeth that resemble those of the normal series. They develop from a third tooth bud arising from the dental lamina near the permanent tooth bud or by splitting of the tooth bud in itself.¹ In the deciduous dentition, the prevalence varies from 0.3% to 1.9%, while in the permanent dentition, the range varies from 0.1% to 3.6% respectively.^{2,3}

The presence of supernumerary teeth is more common in maxilla (90%) as compared to mandible and may either be single or multiple in numbers either erupted or impacted form.⁴ Supernumerary teeth are usually associated with syndromes (e.g. Gardener's syndrome, Cleidocranialdysostosis, cleft lip/palate). The presence of non-syndromic supernumerary teeth are rare; a majority of which occur in mandible, especially in the anterior region.⁵⁻⁷

It is important to perform radiographic investigations to assess the position of supernumerary tooth. Supernumerary teeth can also be an incidental finding as they are diagnosed mainly during radiographic examination. The investigations include IOPAR, occlusal radiographs in intra-oral radiography. Panoramic radiography is also an important additional tool in diagnosing the anomaly and helps detect other supernumerary teeth, if present.⁸ The common complications of supernumerary teeth are malocclusion, crowding and delayed eruption of adjacent teeth.⁹

This case report presents a case of an adult non-syndromic male patient diagnosed in a satellite setting with three supernumerary teeth resembling premolars.

CASE REPORT

A 63 year old patient visited the satellite centre of a dental college situated in Panchkula District, Haryana (India) with the chief complaint of sensitivity and pain in his upper left back tooth region. Upon clinical examination, cervical abrasion and recession were seen with respect to buccal aspect of tooth number 26 (Figure 1). It was decided to extract the tooth to relieve the

patient of the clinical symptoms and a diagnostic IOPAR was taken to check for aberrations in root anatomy, if any.

The IOPAR revealed the presence of periapical infection in relation to distal root of 26 (Figure 2) and the overlapping of a tooth like structure resembling a premolar. Therefore, the patient was advised to visit the Dental College for further investigations.

Upon visiting the college, a detailed case history of the patient was taken (non-contributory), and the patient records revealed that the patient had undergone extraction in relation to 24 and 25 three weeks ago. An RVG along an OPG (Figure 3) was advised along with Complete Blood Count (CBC) investigation. The RVG confirmed the presence of a premolar shaped tooth structure overlapping the distal root of tooth number 26 and also confirmed the presence of extracted premolar sockets of 25 (Figure 4). No anomalies in blood profile of the patient was seen and the OPG confirmed the presence of an impacted premolar in relation to 26. Also, two impacted supernumerary premolars were seen in the mandible.

The patient was then referred to the department of Oral Surgery for extraction of 26. The tooth was successfully extracted along with the impacted premolar (Figure 5). Upon follow-up after 2 months, the extraction wound healed asymptotically. Since the patient was asymptomatic, he did not agree to extraction of his impacted mandibular premolars.

DISCUSSION

The presence of hyperdontia or supernumerary teeth is a rare clinical entity in a non-syndromic individual and is more prevalent in the permanent dentition with a male predisposition.¹⁰ It has also been reported that supernumerary premolars are usually of normal anatomy and 75% of them are usually impacted.¹¹ All the above criteria were seen in the patient treated in this case report.

The presence of two impacted molars in the mandible along with non-syndromic association

of the patient makes the present case report a rare occurrence.⁵⁻⁷

Authors have also reported the recurrence of supernumerary teeth after surgical extraction as periapical radiographs may also miss some of the more apically developing supernumerary premolars.¹² It has been documented that patients with a previous history of supernumerary teeth in the anterior region have a 24% possibility of developing supernumerary premolars at a later age, and should therefore be closely monitored. Since the patient in this case was a middle aged patient, the chances this are less. The presence of supernumerary premolars in this case report is in accordance Melamed Y et al., who reported that most multiple supernumerary teeth (69.5%) are present in the premolar area.¹³

CONCLUSION

A clinician must be aware of the various types of supernumerary teeth and should recognize signs suggestive of their presence. Hence it is imperative to evaluate the patient clinically and radiologically when a single supernumerary is detected to rule out association with syndromes and for its appropriate and timely management. And it is important on our part to educate the patients about the complications which can arise when the patient is reluctant to the therapy.

REFERENCES

1. Rajendran R, Sivapathasundharam B. Developmental disturbances of oral and paraoral structures. 6th ed. New Delhi: Elsevier; 2009. Shafer's textbook of oral pathology; pp. 46-8.
2. Saini T, Keene JJ, Whetten J. Radiographic diagnosis of supernumerary premolars: Case reviews. *J Dent Child* 2002;69:184-90.
3. Parolia A, Kundabala M, Dahal M, Mohan M, Thomas MS. Management of supernumerary teeth. *J Conserv Dent* 2011 Jul-Sep; 14(3): 221-4.
4. Kasat VO, Saluja H, Kalburge JV, Kini Y, Nikam A, Laddha R. Multiple bilateral supernumerary mandibular premolars in a non-syndromic patient with associated orthokeratizedodontogenic cyst-A case report and review of literature. *Contemp Clin Dent* 2012 Sep; 3(Suppl 2): S248-S252.

5. Murali RV, Gnanashanmugam K, Rajasekar L, Kularashmi BS, Saravanan B. A rare case of impacted supernumerary premolar causing resorption of mandibular first molar. *J Pharm Bioallied Sci* 2015 Apr; 7(Suppl 1): S309–S313.
6. Farahani RM, Zonuz AT. Triad of bilateral duplicated permanent teeth, persistent open apex, and tooth malformation: A case report. *J Contemp Dent Pract* 2007;8:94–100.
7. Yusof WZ. Non-syndrome multiple supernumerary teeth: Literature review. *J Can Dent Assoc* 1990;56:147–9.
8. Uppal MK, Das AS, Tiwari TV, Banerjee A. Bilateral Non-Syndromic Multiple Supernumerary Teeth- A Rare Case Report. *Int Healthcare Res J* 2017;1(2):33-6.
9. Neville BW, Damm DD, Allen CM, Bouquot JE. *Oral and maxillofacial pathology*, 4th ed. Philadelphia, PA: WB Saunders; 2016.
10. Thumati P, David CM, Tiwari R. Non-syndromic multiple supernumerary teeth: A Case Report and Review of Literature. *IJSS Case Reports & Reviews* 2014; 1(5): 1-5.
11. Hall A, Onn A. The development of supernumerary teeth in the mandible in cases with a history of supernumeraries in the premaxillary region. *J Orthod* 2006;33:250–5.
12. Solares R, Romero MI. Supernumerary premolars: a literature review. *Pediatr Dent* 2004; 26(5):450-8.
13. Melamed Y, Barkai G, Frydman M. Multiple supernumerary teeth (MSNT) and Ehlers-Danlos syndrome (EDS): a case report. *J Oral Pathol Med* 1994 Feb;23(2):88-91.

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LEGENDS



Figure 1. Clinical Examination of tooth number 26
(Arrow indicates cervical abrasion)

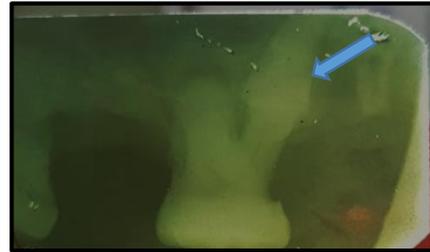


Figure 2. IOPAR of tooth number 26
(Arrow Indicates Premolar like tooth structure)

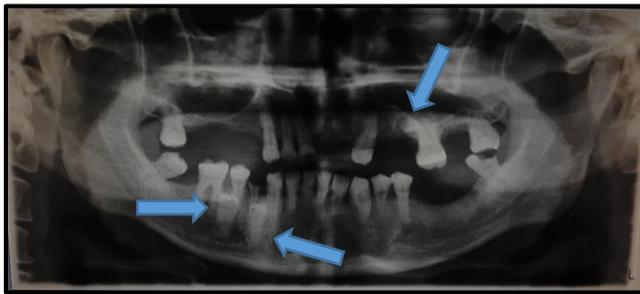


Figure 3. OPG of the patient
(Arrows indicate impacted supernumerary teeth)



Figure 4. RVG of tooth number 26
(Arrow indicates socket of tooth number 25)



Figure 5. Extraction of 26 and impacted supernumerary tooth