Volume 19 Issue 18
Originally issued as J2



Global Journal of Medical Research: J
Dentistry & Otolaryngology
Volume 19 Issue 2 Version 1.0 Year 2019
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4618 & Print ISSN: 0975-5888

Unusually Placed Supernumerary Teeth: A Case Report

By Dr. Jyoti Sharma, Dr. Bhagwat Swaroop Sharma, Dr. Manisha Upadhyay,
Dr. Nilotpol Kashyap, Dr. Updesh Masih & Dr. Shashi Prabha Yadav

Abstract- Supernumerary teeth (hyperdontia) can be defined as any tooth or teeth like substance in excess of the normal number of deciduous or permanent teeth which can cause ectopic and delayed eruption of the permanent teeth, which can further alter the occlusion and appearance of the child. It is has been found as per the different studies that supernumerary teeth in females (1.28%) are more prevalent than in males (1.0%). This case report describes the multidisciplinary management of two impacted supernumerary teeth, which prevented the eruption of the maxillary left central incisor (21) in case 1 and another case describes buccally erupted 11 due to the presence of retained deciduous teeth and palatally placed supernumerary teeth. Surgical removal of the supernumerary teeth was done in both the cases.

Keywords: *supernumerary teeth, SLOB technique, mesiodens.*

GJMR-J Classification: *NLMC Code: WU 300*



Strictly as per the compliance and regulations of:



© 2019. Dr. Jyoti Sharma, Dr. Bhagwat Swaroop Sharma, Dr. Manisha Upadhyay, Dr. Nilotpol Kashyap, Dr. Updesh Masih & Dr. Shashi Prabha Yadav. This is a research/ review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Unusually Placed Supernumerary Teeth: A Case Report

Dr. Jyoti Sharma [α], Dr. Bhagwat Swaroop Sharma [σ], Dr. Manisha Upadhyay [ρ], Dr. Nilotpol Kashyap [ω], Dr. Updesh Masih [¥] & Dr. Shashi Prabha Yadav [§]

Abstract- **Supernumerary teeth (hyperdontia) can be defined as any tooth or teeth like substance in excess of the normal number of deciduous or permanent teeth which can cause ectopic and delayed eruption of the permanent teeth, which can further alter the occlusion and appearance of the child. It is has been found as per the different studies that supernumerary teeth in females (1.28%) are more prevalent than in males (1.0%). This case report describes the multidisciplinary management of two impacted supernumerary teeth, which prevented the eruption of the maxillary left central incisor (21) in case 1 and another case describes buccally erupted 11 due to the presence of retained deciduous teeth and palatally placed supernumerary teeth. Surgical removal of the supernumerary teeth was done in both the cases.**

Keywords: supernumerary teeth, SLOB technique, mesiodens.

I. Introduction

The supernumerary teeth (hyperdontia) can be defined as any teeth or tooth like substance in excess of the normal number of deciduous or permanent teeth[1].

Although the exact aetiology remains unclear, various theories were proposed which include atavism (evolutionary throw back), hyperactivity of the dental lamina, dichotomy of the tooth germ and other genetic factors. More recently, a multifactorial aetiology has been suggested[2].

Classification of supernumerary teeth may be on the basis of position or form. Positional variations include mesiodens, paramolars, distomolars and parapremolars. Variations in form consist of conical types, tuberculate types, supplemental teeth and odontomes. Supernumerary teeth may, therefore, vary from a simple odontome, through a conical or tuberculate tooth to a supplemental tooth which closely resembles a normal tooth. Also, the site and number of supernumeraries can vary greatly. It is most frequently found in males than females in the proportion of 2:1[3].

The most common type of supernumerary tooth as indicated by Alberti is mesiodens. The term mesiodens was coined by Balk in 1917 to denote a supernumerary tooth located mesial to both central incisor appearing as peg-shaped crown in normal or inverted position. A mesiodens has an overall prevalence of 0.15–1.9%[4-7]. Mesiodens account for 80% of all supernumerary teeth. It can occur individually or as multiples, may appear unilaterally or bilaterally, and often remain unerupted[8].

Supernumerary teeth, especially in anterior region of maxilla, can cause eruption failure, displacement and rotation of the permanent teeth[9]. In general these remain impacted and asymptomatic and are commonly discovered during routine radiographic examination.

When any of the above complication occurs or is anticipated, surgical removal of the supernumerary tooth is indicated. These case reports presents a cases of a non-syndromic patient with presence of an impacted, supernumerary teeth which was detected during routine radiographic examination and its surgical removal was planned.

II. Case Reports

Case 1

An 11 year old male patient reported to the department of Pedodontics and Preventive Dentistry with a chief complaint of a missing maxillary right central incisor (11). The patient had no history of dental trauma. The intraoral examination showed absence of 11 (Figure 1a) and decayed 75, 85. Intra-oral periapical radiograph and OPG (Figure 1b, 1c) was advised which revealed the presence two supernumerary teeth in relation to 11, 12 which was hindering in the eruption of 11.



Figure 1a

Author α ρ: Lecturer, Dept of Pedodontics and Preventive Dentistry, Universal College of Medical Sciences, College of Dental Surgery, Bhairahawa, Nepal.
Author σ: Lecturer, Dept of Oral Pathology, Universal College of Medical Sciences, College of Dental Surgery, Bhairahawa, Nepal.
Author ω: Professor and head, Dept of Pedodontics and Preventive Dentistry, Universal College of Medical Sciences, College of Dental Surgery, Bhairahawa, Nepal. e-mail: nilkash9365@gmail.com
Author ¥: Professor and head, Dept of Pedodontics and Preventive Dentistry, K. D. Dental College and Hospital, Mathura, India.
Author §: Lecturer, Dept of Pedodontics and Preventive Dentistry, Rama Dental College Kanpur, India.

© 2019 Global Journals



Figure 1b



Figure 1c

On the basis of the above findings, diagnosis of non-syndromic supernumerary teeth was made and surgical removal of the supernumerary teeth was planned along with extraction of 75, 85.

Under local anesthesia full thickness flap was raised. After elevation of the flap, 1/3rd crown of supernumerary teeth in relation to 11 was visible and thus was extracted, but adequate amount of bone was removed from the buccal side in relation to 21 using slow speed hand piece with surgical round bur (No. 8) with copious saline irrigation to expose the impacted conical shaped supernumerary tooth (Figure 1d).



Figure 1d

The margin of the bone was smoothened with a bone file. The buccal mucoperiosteal flap was repositioned and sutured with 3-0 black braided silk (Mersilk, Ethicon, Inc., Johnson & Johnson company, USA). Sutures were removed after one week and the healing was uneventful. Extraction was done of 75 followed by 85 after one week of interval.

Case 2

An 8 year old female patient reported to the department of Pedodontics and Preventive dentistry with a chief complaint of irregularly placed 11. The intraoral examination showed buccally placed 11 with palatally placed retained deciduous 51 (Figure 2a).



Figure 2a

Intra-oral periapical radiograph was advised in relation to 11, 21 which revealed the presence supernumerary tooth in relation to 21 and retained deciduous 51(Figure 2b).



Figure 2b

With the help of SLOB (same side lingual and opposite side buccal) technique, the position of supernumerary tooth was found to be palatally placed. On the basis of the above findings, diagnosis of non-syndromic supernumerary teeth was made and surgical removal of the supernumerary teeth was planned along with extraction of 51. Under local anesthesia full thickness flap from plalatal aspects was raised. After elevation of the flap, supernumerary tooth was visible and thus was extracted along with 51. (Figure: 2c)



Figure 2c

© 2019 Global Journals

The palatal mucoperiosteal flap was repositioned and sutured with 3-0 black braided silk (Mersilk, Ethicon, Inc., Johnson & Johnson company, USA). Sutures were removed after one week and the healing was uneventful.

III. Discussion

Any delayed, ectopic or asymmetric eruption of maxillary permanent central incisors should alert the clinician to the possibility of an impacted supernumerary tooth and requirement of careful monitoring of the case. The presence, position and relation of supernumerary teeth to the adjacent teeth, and the distance of the impacted permanent tooth from occlusal plane should be evaluated on the radiographic basis. An early recognition of the supernumerary teeth is essential for determining the appropriate treatment for each patient[10].

It has been stated that only 25% of maxillary anterior supernumerary tooth erupts spontaneously into the oral cavity[11]. Unerupted supernumerary tooth may lead to some potential problems which include disturbed tooth eruption, tooth rotation, bodily displacement, crowding, spacing, or diastema of normal teeth. A cystic alteration was reported in 4–9% of the supernumerary cases, with the anterior maxilla being affected in 90%[5,11]. Therefore, these potential detrimental effects in young children make it mandatory to extract unerupted supernumerary teeth.

The exact aetiology of supernumerary teeth is still obscure although many theories have been proposed. Two popularly accepted theories are[10]:

1. The dichotomy theory of tooth germs states that the tooth bud splits into two equal or different sized parts, resulting in two teeth of equal size or one normal and one dismorphic tooth, respectively. This hypothesis is supported by animal experiments in which split germs have been cultivated in vitro.
2. Localised and independent hyperactivity of dental lamina is the other accepted theory, which suggests supernumerary teeth are formed as a result of local, independent, conditioned hyperactivity of dental lamina.

In the present cases, surgical extraction of supernumerary teeth was made as soon as it was diagnosed, without any damage to adjacent teeth. Patient was monitored at regular intervals for further follow ups.

References Références Referencias

1. Pels E., et al. “Rare cases of supernumerary teeth”. Anna University Mar Cur 2 (2006): 849-853.
2. Brook A H. An unifying etiological explanation for anomalies of human tooth number and size. Archs Oral Biol. 1984; 29: 373-378.
3. Kupietzky A, Rotstein I, Kischinovsky D. A multidisciplinary approach to the treatment of an intruded maxillary permanent incisor complicated by the presence of two mesiodens. Pediatr Dent. 2000; 22: 499-503.
4. Sedano H O, Gorlin R J. Familial occurrence of mesiodens. Oral Surg Oral Med Oral Pathol. 1969; 27: 360-361.
5. Sykaras SN. Mesiodens in primary and permanent dentitions- Report of a case. Oral Surg Oral Med Oral Pathol. 1975; 39: 870-874.
6. Primosch R E. Anterior supernumerary teeth-assessment and surgical intervention in children. Pediatr Dent. 1981; 3: 204-215.
7. Russell K A, Folwarczna M A. Mesiodens- diagnosis and management of acommon supernumerary tooth. J Can Dent Assoc. 2003; 69: 362-366.
8. Ferrĕs-padrŏe, Prats-Armengol J, Ferrĕs- Amat E. A descriptive study of 113 unerupted supernumerary teeth in 79 pediatric patients in Barcelona. Med Oral Pathol Oral cir Bucal. 2009; 14: E146-152.
9. Giancotti A., et al. “Multidisciplinary evaluation and clinical management of mesiodens”. Journal of Clinical Pediatric Dentistry 26.3 (2002): 233-237.
10. Jafri S. A. H., et al. Management of an inverted impacted mesiodens, associated with a partially erupted supplemental tooth- a case report. Ind J Dent 2011; 2: 40-3.
11. Lustmann J, Bodner L. Dentigerous cysts associated with supernumerary teeth. Int J Oral Maxillofac Surg. 1988; 17: 100-102.

© 2019 Global Journals