

**ISSN: 0976-3031**

***International Journal of Recent Scientific  
Research***

**Impact factor: 5.114**

**UNUSUAL OCCURRENCE OF MULTIPLE SUPERNUMERARY  
TEETH IN MIXED DENTITION PERIOD IN A NON SYNDROME  
PATIENT: A RARE ENTITY**



**Rashmi Agarwal., Geeta Singh., Subodh Shankar Natu., Niharika  
Gupta and Shivakumar G C**

**Volume 6**

**issue 9**

**THE PUBLICATION OF  
INTERNATIONAL JOURNAL OF RECENT SCIENTIFIC RESEARCH  
(IJRSR)**

**<http://www.recentscientific.com>  
E-mail: [recentscientific@gmail.com](mailto:recentscientific@gmail.com)**



ISSN: 0976-3031

Available Online at <http://www.recentscientific.com>

*International Journal of Recent Scientific Research*  
Vol. 6, Issue, 9, pp.5997-5999, September, 2015

**International Journal  
of Recent Scientific  
Research**

## CASE REPORT

# UNUSUAL OCCURRENCE OF MULTIPLE SUPERNUMERARY TEETH IN MIXED DENTITION PERIOD IN A NON SYNDROME PATIENT: A RARE ENTITY

Rashmi Agarwal\*<sup>1</sup>, Geeta Singh<sup>2</sup>, Subodh Shankar Natu<sup>3</sup>, Niharika Gupta<sup>4</sup>  
and Shivakumar G C<sup>5</sup>

<sup>1,3,4,5</sup>BabuBanarsi College of Dental Sciences Department: Oral and Maxillofacial Surgery

<sup>5</sup>Dental Sciences, King Georges Medical University Department: Oral and Maxillofacial Surgery

### ARTICLE INFO

#### Article History:

Received 15<sup>th</sup> June, 2015  
Received in revised form 21<sup>st</sup>  
July, 2015  
Accepted 06<sup>th</sup> August, 2015  
Published online 21<sup>st</sup>  
September, 2015

#### Key words:

Supernumerary teeth, non-  
syndrome patient,  
orthopantomograph.

**Copyright © Rashmi Agarwal et al. 2015**, This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

### INTRODUCTION

Supernumerary teeth or hyperdontia are the existence of an excessive number of teeth in relation to the normal dental formula, and they may develop at any location in either upper or lower dental arch. While single tooth impaction is not uncommon, development of multiple impacted teeth is a rare condition and often found in association with syndromes or developmental anomalies such as cleidocranial dysplasia, Gardner's syndrome, trichorhinophalangeal syndrome, and cleft lip and palate. However, it can be present in patients without any systemic pathology. The presence of supernumerary teeth can cause alterations in neighbouring teeth, commonly retained teeth or delayed eruption, ectopic eruption, dental malposition, occlusal problems, diastema, and rotation.

#### Classification of Supernumerary Teeth

According to chronology, location (topography), morphology and their orientation. Chronologically, they can be classified as pre-decidual, similar to permanent teeth, and post permanent or complementary; Morphologically as conical, tuberculate, supplemental (eumorphic) and odontome; Topographically as mesiodens, paramolar, distomolar and parapremolar, and according to Orientation as vertical, inverted and transverse[8].

### ABSTRACT

Hyperdontia or supernumerary teeth without associated syndrome is a rare phenomenon, as supernumerary teeth are usually associated with cleft lip and palate or other syndromes such as Gardner's syndrome, cleidocranial dysplasia and so on. However it is rare to find multiple supernumeraries in individuals with no other associated disease or syndrome. We describe the occurrence of multiple supernumerary teeth in a family occurring as a non-syndrome trait. The autosomal dominant transmission of non-syndrome multiple supernumerary teeth are new.

Paramolars are supernumerary molars, usually rudimentary (dysmorphic), situated buccally or lingually/palatally to the molar row. Mostly, they are situated between the second and third molars, while in very rare cases they can be found in between the first and second molars. Distomolars are situated either directly distal or distolingually to the third molar and are usually rudimentary conical shape.

The exact etiology of the supernumerary teeth has not yet completely understood. Several theories have been suggested for their occurrence, such as the phylogenetic theory, the dichotomy theory, and occurrence due to hyperactive dental lamina and due to a combination of genetic and environmental factors. Generally, multiple supernumerary teeth are associated with diseases or syndromes.[4] Supernumerary teeth show strong association with developmental disorders such as cleft lip and palate, cleidocranial dysostosis, Gardner syndrome and less commonly with Ehlers-Danlos syndrome, Fabry Anderson's syndrome, chondroectodermal dysplasia, incontinentia pigmenti and tricho-rhino-phalangeal syndrome.[2,5]. The autosomal recessive inheritance or linked to the X chromosome. Supernumerary teeth may erupt normally, remain impacted, appear inverted or assume an abnormal path of eruption.

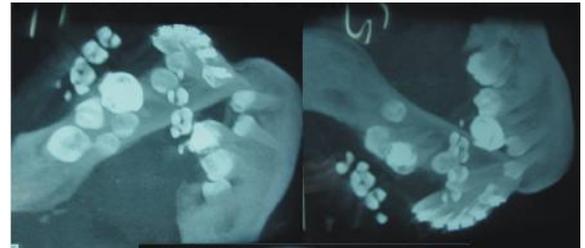
\*Corresponding author: **Rashmi Agarwal**

BabuBanarsi College of Dental Sciences Department: Oral and Maxillofacial Surgery

### **Case report**

A 14 yr old boy (Fig.1) reported to dept of oral and maxillofacial surgery with a chief complaint of irregular and missing teeth. Patient was examined properly, and detail history was recorded. Examination was done clinically (Fig.2), radiographically with orthopantomograph (Fig.3) and with dentascan (Fig.4).

Multiple supernumerary teeth were found in radiographic evaluation. Family history was taken and was found to be non significant. Orthodontic opinion was taken. Patient underwent extraction of multiple supernumerary teeth, and fixed orthodontic treatment was advised.



### **DISCUSSION**

Supernumerary paramolars are the rare anomalies of the maxillofacial complex. Supernumerary teeth are defined as those in addition to the normal series of deciduous or permanent dentition. They may occur anywhere in the mouth. They may appear as a single tooth or multiple teeth, unilaterally or bilaterally, erupted or impacted and in mandible/maxilla or both the jaws. The prevalence of supernumerary teeth varies between 0.1 and 3.8% and is more common in the permanent dentition.[1-3] The low prevalence of supernumerary teeth in primary dentition is because it is generally overlooked by the parents, is often of normal shape (supplemental type), erupt normally, and appear to be in proper alignment.[4] The incidence is considerably higher in the maxillary incisor region followed by maxillary third molar and mandibular molar, premolar, canine and lateral incisors.[5] Though there is no significant sex distribution in primary supernumerary teeth, males are affected approximately twice than females in the permanent dentition.[6,7]

Supernumerary teeth are found in association with syndromes or developmental anomalies such as cleidocranial dysplasia, Gardner's syndrome, trichorhinophalangeal syndrome, and cleft lip and palate. However, it can be present in patients without any systemic pathology. The frequency of supernumerary permanent teeth in the cleft area in children with unilateral cleft lip or palate or both was found to be 22.2%.[12,13,14,15] The frequency of supernumeraries in patients with cleidocranial dysplasia ranged from 22% in the maxillary incisor region to 5% in the molar region.

Complications associated with supernumerary teeth may be delay or failure of eruption of permanent teeth, displacement, crowding, root resorption, dilaceration, loss of vitality of adjacent teeth, subacute pericoronitis, gingival inflammation, periodontal abscesses, dental caries due to plaque retention in inaccessible areas, incomplete space closure during orthodontic treatment, and pathological problems such as dentigerous cyst formation, ameloblastomas, odontomas and fistulae. They may also interfere in alveolar bone grafting and implant placement. Occasionally, supernumerary teeth are asymptomatic and may be detected as a chance finding during radiographic examination. Detailed history, clinical examination, thorough investigation, early diagnosis and appropriate treatment of supernumerary teeth are mandatory. An anterior occlusal or periapical radiograph using paralleling technique and orthopantomograph are the most useful radiographic investigations to visualize supernumerary teeth. Recently, computed tomography has also been used to detect the presence of supernumerary teeth. [9, 10, 11] Treatment depends on the type and location of the supernumerary teeth and on its potential effect on adjacent hard and soft tissue structures. Removal of the supernumerary teeth is recommended where there is associated pathology, permanent tooth eruption has been delayed due to the presence of supernumerary tooth, increased risk of caries due to the presence of supernumerary teeth which makes the area inaccessible to maintain oral hygiene, altered eruption or displacement of adjacent tooth is evident, there are severely rotated teeth leading to further complication, orthodontic treatment needs to be carried out to align the teeth, its presence would compromise alveolar bone grafting and implant placement and there is compromised esthetic and functional status.

## CONCLUSION

Supernumerary teeth can present in any region of oral cavity. Multiple supernumerary teeth are a feature of certain disorders like cleidocranial dysplasia, cleft Palate, and Gardner's syndrome. Detection of these teeth is best achieved by clinical and radiographic examination. These may erupt or remain impacted and may lead to various complications. Though the occurrence of paramolars is rare, clinicians should be aware of their presence and associated problems in order to formulate a sound treatment plan after thorough clinical and radiographic investigations, to meet the challenges.

### How to cite this article:

Rashmi Agarwal *et al.* 2015, Unusual Occurrence Of Multiple Supernumerary Teeth In Mixed Dentition Period In A Non Syndrome Patient: A Rare Entity. *International Journal of Recent Scientific Research*, 6(9) pp.5997-5999.

\*\*\*\*\*

## References

1. Ballal S, Sachdeva GS, Kandaswamy D. Endodontic management of a fused mandibular second molar and premolar with the aid of spiral computed tomography: A case report. *J Endod.*2007; 35:1247–51.
2. Brook AH. Dental anomalies of number, form and size: Their prevalence in British school children. *J Int Assoc Dent Child.* 1974; 5:37–53.
3. Garvey MT, Barry HJ, Blake M. Supernumerary teeth-an overview of classification, diagnosis and management. *J Can Dent Assoc.* 1999; 65:612–6.
4. Ghoddusi J, Zarei M, Jafarzadeh H. Endodontic treatment of a supernumerary tooth fused to a mandibular second molar: A case report. *J Oral Sci.* 2006; 48:39–41.
5. Grimanis GA, Kyriakides AT, Spyropoulos ND. A survey on supernumerary molars. *Quintessence Int.*1991; 22:989–95.
6. Jensen BL, Kreiborg S. Development of the dentition in cleidocranial dysplasia. *J Oral Pathol Med* 1990; 19:89-93.
7. Kinirons MJ. Unerupted premaxillary supernumerary teeth. A study of their occurrence in males and females. *Br Dent J.* 1982; 153:110.
8. Liu DG, Zhang WL, Zhang ZY, Wu YT, Ma XC. Three dimensional evaluations of supernumerary teeth using cone-beam computed tomography for 487 cases. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2007; 103:403–11. [PubMed]
9. Loh FC, Yeo JF. Paramolar with bifid crown. *Oral Surg Oral Med Oral Pathol Oral Radiol.*1993; 76:257–8.
10. Nunes E, De Moraes IG, De Novaes PM, De Sousa SM. Bilateral fusion of mandibular second molars: A case report. *Braz Dent J.* 2002; 13:137 41.
11. Rajab LD, Hamdan MA. Supernumerary teeth: Review of the literature and a survey of 152 cases. *Int J Pediatr Dent.* 2002; 12:244–54.
12. Rao PV, Chidzonga MM. Supernumerary teeth: literature review. *Cent Afr J Med.* 2001;47:22–26.
13. Scheiner MA, Sampson WJ. Supernumerary teeth: A review of the literature and four case reports. *Aus Dent J.* 1997; 42:160–5.
14. Shah A, Gill DS, Tredwin C, Naini FB. Diagnosis and management of supernumerary teeth. *Dental Update.* 2008; 35:510–20.
15. Yusof WZ. Non-syndromal multiple supernumerary teeth: Literature review. *J Can Dent Assoc.*1990; 56:147–9.

***International Journal of Recent Scientific  
Research***

ISSN 0976-3031



9

770576

303009