Bilateral Multiple Impacted Paramolars and Impacted Distoangular Molar in Maxilla: A Rare Case report

Received: 15 February 2023, Revised: 20 March 2023, Accepted: 22 April 2023

Dr Nirav Patel¹, Dr Raj Trivedi², Dr Anil Managutti³, Dr Parth Suthar⁴, Dr Shailesh Menat⁵ Dr Kashyap Girdhariya⁶

1Senior Lecturer, Department of Oral and Maxillofacial Surgery, Narsinhbhai Patel dental college & Hospital, Sankalchand Patel University, Visnagar, India. dr. nirav 8@gmail.com 9409561271

2Post Graduate Student, Department of Oral and maxillofacial surgery, Narsinhbhai Patel dental college & Hospital, Sankalchand Patel University, Visnagar, India. Aryantrivedi41@gmail.com, 7874839983

3 Professor and Head, Department of Oral and Maxillofacial Surgery, Narsinhbhai Patel dental college & Hospital, Sankalchand Patel University, Visnagar, India Dranilman12@reddifmail.com, 972776155

4Senior Lecturer, Department of Oral and Maxillofacial Surgery, Narsinhbhai Patel dental college & Hospital, Sankalchand Patel University, Visnagar, India. parth.suthar410@gmail.com, 6353088720

5Professor, Department of Oral and Maxillofacial Surgery, Narsinhbhai Patel dental college & Hospital, Sankalchand Patel University, Visnagar, India.drshailmenat80@gmail.com 9825624905

6Post Graduate Student, Department of Oral and maxillofacial surgery, Narsinhbhai Patel dental college & Hospital, Sankalchand Patel University, Visnagar, India kashyapgirdhariya@gmail.com, 7046600831

Keywords:

Paramolars, Supernumerary teeth, Bucally impacted

Abstract

Paramolars are extra teeth that are usually seen near the teeth, either buccally or palatally. Teeth can either be impacted in the bone or seen in oral cavity. They can disrupt the developing dentition in a variety of ways. In most situations, the paramolars are found unilaterally between the 2nd and 3rd molars, but in a rare cases, it was found bilaterally between the 2nd and 3rd molars or distal to the third molar. Bilateral maxillary paramolars are infrequently reported in the dental literature. The treatment of bilateral maxillary paramolars and a distoangular maxillary molar in a 22-year-old male patient is described in this article.

1. Introduction

Supernumerary teeth (ST)/ are teeth or odontogenic structures generated from an excess of tooth germs in a specific location of the arch bud. and originating from the immediate vicinity or most of the tooth layer. will be the permanent tooth buds themselves are likely to split, and these teeth can be anywhere in the mouth.1 The incidence of supernumerary tooth were found more commonly in permanent dentition (1.5–3.5%) than deciduous dentition $(0.2-0.8\%)^2$ Supernumerary teeth are seen in maxillary and mandibular jaws. The classification of supernumerary teeth depending on morphology are accessory and supplemental and depending on location and form, it is classified as Paramolars and distomolars. Routine xrays reveal supernumerary teeth that have not erupted or are impacted. Gardner's syndrome and cleidocranial dysplasia **Ehlers-Danlos** syndrome, chondroectodermal dysplasia, and triangular dysplasia

are the syndromes that are associated with supernumerary teeth ⁸,. It has been found to be associated with phalangeal syndrome, Fabry disease, and incontinence pigment.

Supernumerary paramolars are rare abnormalities that occur in the maxillofacial complex. A paramolar is an extra molar usually located in the interdental space between the molars either in the buccal or lingual/palatal side.² or you may see more on one side of the arch, as in our case. A case of focal periodontitis has been reported as a complication of bilateral ectopic appearance of maxillary molar paramolars. Most supernumerary teeth appear lingually. Paramolars are rare supernumerary teeth that appear buccal to the second or third molars of the upper jaw.

In our study, we reported a unusual case of bilateral paramolar and distoangular molars between the second and third molars



2. Case Report

A 22-year-old male patient visited to dept of OMFS, at narsinhbhai Patel dental college and hospital, Sankalchand Patel University, with a chief complain of pain in upper right and left side posterior tooth region to last 15 days. While examine the oral cavity, there were no positive findings. (Fig1,2) So orthopantomogram (OPG) was advised & we found an impacted supernumerary tooth which were seen between 2nd & 3rd molar on both sides. (Fig3). There wereno relevant medical and family history, no any systemic condition or syndrome present.

The impacted supernumerary teeth were seen on both side which were diagnosed as "paramolars", which is very rare findings. Patient has been informed about the extra tooth in his oral cavity and its possible complications like malaligned teeth, food lodgement and damage to adjacent teeth. We extracted both the paramolars and third molar on both side in two consecutive visits under local anesthesia with all protocol. (Fig4,5). No postoperative asepsis complication was observed as the patient was instructed to follow post-extraction instructions completely.





Figure 1: Maxillary Right Side

Figure 2: Maxillary Left Side

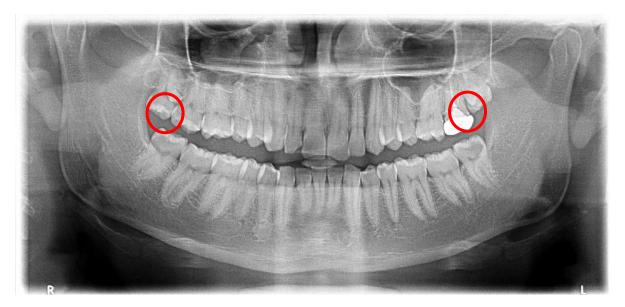


Figure 3: OPG



Figure 4: Extracted tooth on right side

3. Discussion

Supernumerary tooth are characteristically seen linically and radiographically finding that can lead to dental related issues. Sometimes impacted supernumerary tooth that are asymptomatic found accidentally on x-rays. Supernumerary teeth include supplementary odontoma, teeth, orthodontia, primordial teeth, or dysmorphism, which are atypical in shape and less in size, and dysmorphic forms include conical, tuberculous, and molar types. Depending on physical contour, it can be mesiodens, paramolar, distomolars, and parapremolar, and depending on inclination, they can be vertical, inverted, and lateral. 13,14

The incidence of supernumerary teeth is about 1% ¹ in which male patient are 2.5 times more than female patient. The most common site is anterior maxillary teeth followed by molar which is 11% and premolars. ³ According to literature it was found that eighty percent of the supernumerary tooth is found on lingual side. ² and buccal side is found to be very rare, as in our case it was being found on buccal side between second and third molar.

Supernumerary tooth is usually associated with cleft lip and palate. Paramolar is seen rarely in primary dentition. According to literature, there was one case of paramolar seen in primary dentition.⁵

Genetic disorders such as skull dysostosis and Gardner's syndrome are associated with multiple supernumerary teeth.⁴ The etiology is unknown, although a number of theories have been proposed like atavism, tooth germ dichotomy, hyperactivity of the dental lamina and genetic factors comprising a

Figure 5: Extracted tooth on left side

dominant autosomal trait characterized by low penetrance ⁶, among which the hyperactivity of dental lamina is widely accepted theory It states that supernumerary teeth such as paramolars are result of local, independent conditional hyperactivity of dental lamina. ¹⁴ Supernumerary tooth erupts normally, remain unerupted or seen in abnormal position. ⁷

Supernumerary teeth can also cause adjacent tooth malformations such as diastema, root resorption, dehiscence and loss of vitality of nearby teeth.^{8,9}

In 1914, Bolk coined the term "paramolar" as the supernumerary tooth present on the buccal surface of maxillary molars, and also coined the term "paramolar nodules" which is seen on buccal surface of the mesiobuccal cusp of maxillary molars.¹¹

Chandna et al. Twelve reports suggest that the incidence of paramolar is only 0.3% in which bilateral paramolar is only 0.09%. Usually supernumerary tooth are seen bilaterally.

Parolia A and Kundabala M ¹⁰ documented a case of two bilateral maxillary paramolars in which one was buccally developed and another was palatally developed between 1st and 2nd molars presented with caries in adjacent molars. In contrast to this case report, the present case was very rare and interesting because the non-syndromic patient had bilateral paramolars. In our case, the paramolar was located buccal between the second and third molars.

Various treatments have been published in the literature for patients with uncomplicated polyodontia. The location and clinical manifestations of supernumerary teeth influence treatment. Therefore,

early orthodontic treatment is necessary to choose between extraction, orthodontic treatment after extraction, or simply observing or managing supernumerary tooth to reduce the risk of problems caused by the presence of supernumerary teeth. Diagnosis is very important. Surgical treatments range from removal of supernumerary teeth to subsequent orthodontic treatment to achieve proper occlusion. In more extreme situations, multiple supernumerary teeth can become impacted, leading to disintegration of the dental arch by a large number of misplaced teeth. ¹⁵

4. Conclusion

The present clinical case shows bilateral paramolars is a very rare phenomenon. In the literature review only few articles have been found on bilateral maxillary paramolars. Surgeons should know the symptoms of supernumerary teeth, especially abnormal eruption patterns, and perform necessary examinations. Each case should be treated appropriately after diagnosis to minimize difficulties in dentition development.

References:

- [1] Leco Berrocal MI, Martín Morales JF, Martínez González JM. An observational study of the frequency of supernumerary teeth in a population of 2000 patients. Med Oral Patol Oral Cir Bucal 2007;12. E134–8.
- [2] Zhu JF, Marcushamer M, King LD, Henry RJ. Supernumerary and congenitallyabsent teeth: A literature review. J Clin Pediatr Dent 1996;20:87– 95.
- [3] Nayak G, Shetty S, Singh I, Pitalia D. Paramolar -A supernumerary molar: Acase report and an overview. Dent Res J 2012;9:797–803.
- [4] Ozkan A, Dag H, Ayberk H, Sencimen M. Bilateral double maxillaryparamolars: A rare case report. J Clin Diagn Res 2017;11:4–5.
- [5] Shimizu T, Miyamoto M, Arai Y and Maeda T. Supernumerary tooth in the primary molar region: a case report. J Dent Child (Chic). 2007; 74(2): 151-153.

- [6] Yagüe-García J (Oral Surgery and Implantology, University of Barcelona Dental School, Barcelona, Spain), Berini-Aytés L, Gay-Escoda C. Multiple super-numerary teeth not associated with complex syndromes: A retrospective study. Med Oral Patol Oral Cir Bucal 2009 Jul 1;14(7):E331-336
- [7] Nazif MM, Ruffalo RC, Zullo T. Impacted supernumerary teeth: A survey of 50 cases. J Am Dent Assoc 1983 Feb;106(2):201-204.
- [8] Mitchell L. Supernumerary teeth. Dent Update 1989 Mar; 16(2):65-66, 68-69.
- [9] Hogstrum A (Department of Oral and Maxillofacial Surgery, Central Hospital, Västerås, Sweden.), Andersson L. Complications related to surgical removal of anterior supernumerary teeth in children. ASDC J Dent Child 1987 Sep-Oct;54(5):341-343.
- [10] Parolia A, Kundabala M. Bilateral maxillary paramolars and endodontic therapy: a rare case report. J Dent (Tehran). 2010;7:107-11.
- [11] Bolk L. Supernumerary teeth in the molar region in man. Dent Cos1914;56:154–67.
- [12] Belmehdi A, Bahbah S, Harti KE, Wady W. Non syndromic supernumeraryteeth: management of two clinical cases. Pan Afr Med J 2018;29:163.
- [13] N. B. Nagaveni, K. V. Umashankar, N. B. Radhika, P. B. Reddy, and S. Manjunath, "Maxillary paramolars report of a case and literature review," Archives of Orofacial Sciences, vol. 5, no. 1, pp. 24–28, 2010.
- [14] Sulabha AN, Sameer C. Unusual bilateral paramolars associated with clinical complications. Case Reports in Dentistry. 2015 May 21;2015.
- [15] Yagüe-García J (Oral Surgery and Implantology, University of Barcelona Dental School, Barcelona, Spain), Berini-Aytés L, Gay-Escoda C. Multiple super-numerary teeth not associated with complex syndromes: A retrospective study. Med Oral Patol Oral Cir Bucal 2009 Jul 1;14(7):E331-336.