



A Rare Incidence of Bilateral Paramolars and Unilateral Impacted Distomolar in the Maxilla of a Non-Syndrome Patient: A Case Report

[PP: 01-04]

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Bedong 08100, Malaysia**Dr. Saurabh Singh**Senior Lecturer, Faculty of Dentistry, AIMST University
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Supernumerary molars are relatively rare entities in oral maxillofacial region which can be classified broadly into distomolars and paramolars. Usually these occur singly and unilaterally. Occurrence of both paramolars and distomolars together is a very rare finding. This paper reports an unusual occurrence of combination of bilateral maxillary erupted paramolars and impacted unilateral distomolar. The distomolar was an incidental finding in the orthopantomograph of a 20 year old female. Patient was asymptomatic, hence was kept under observation and follow up. Patient's had no signs of any syndrome. Knowledge about the supernumerary teeth can enable dentist in early diagnosis, intervention and prevent many possible complications associated with supernumerary teeth. The present article reports of this unique entity as the first case to be reported.

Keywords: Supernumerary Molars, Distomolar, Paramolars, Maxilla, Syndrome**ARTICLE INFO** The paper received on: 2/1/2019 Accepted after review on: 4/2/2019 Published on: 4/6/2019**Cite this article as:**

Gupta, K. & Singh, S.. (2019). A Rare Incidence of Bilateral Paramolars and Unilateral Impacted Distomolar in the Maxilla of a Non-Syndrome Patient: A Case Report. *Case Reports in Odontology*. 6(1), 01-04. Retrieved from www.casereportsinodontology.org

1. Introduction

An upsurge in the number of teeth is amongst the utmost common variation in oral and maxillofacial development. Supernumerary teeth (hyperdontia) is an alteration in odontogenesis and can be defined as teeth that surpass the normal dental arrangement of twenty deciduous and thirty-two permanent teeth irrespective of their location and morphology. These teeth may be seen in the oral cavity or may be observed in the routine radiograph by chance. They can be recognized in any part of the dental arch in the deciduous and

permanent dentition, can be erupted or impacted, normal in size/shape or deformed, single or multiple, and unilateral or bilateral.^[1] Majority of supernumerary teeth occur in the median maxillary region and occurrence of supernumerary teeth in the molar region is very rare. Supernumerary teeth in the molar region are called as supernumerary molars which basing on their location can be divided into paramolars and distomolars.^[2] Literature has few countable reports of paramolars as these are less often seen. Predominantly these occur singly and very rarely are bilateral occurrence seen. Co-occurrence of the bilateral paramolars and



unilateral impacted distomolar which is rare clinical presentation was noted in our case.

2. Case Description

A 20 year old female patient came to AIMST dental clinic for routine dental checkup. Medical and family history did not reveal any related positive findings. On detailed intraoral examination, supernumerary teeth were found distobuccal to the maxillary second molar bilaterally (Figure 1). This extra tooth had crown with single cusp with some grooves and was smaller in size compared to the adjacent normal molars. The supernumerary tooth not associated with any pathology. The supernumerary structures were diagnosed as a paramolars. There was no history of pain, swelling or discomfort to the patient. The patient was sent for pantomography for checking the status of periodontal condition and evaluation of bone loss, pantomography revealed unilaterally impacted left maxillary distomolar accidentally and it demonstrated position of distomolar separate from those of third molar, distomolar displayed normal tooth morphology with regard to crowns and roots and it was vertically impacted (Figure 2). Patient was informed regarding presence of paramolars and distomolar, possible complications like food lodgment, difficulty with proper cleaning and occurrence of dental caries and treatment options were explained pertaining to the particular condition. However, the patient did not agree for treatment. Preventive measures like oral prophylaxis was performed and oral hygiene instructions were given. Patient was instructed to attend for regular follow ups. Patient's medical and family history was not relevant and there were no signs of any systemic disease or syndromic features.

To the best of our knowledge, presence of combination of bilateral paramolars and unilateral impacted

dostomolar in maxilla is very rare and not reported in the literature.

3. Discussion

Supernumerary teeth, or hyperdontia, is an odontostomatologic anomaly and may be defined as any teeth or tooth substance in excess of the usual configuration of 20 deciduous, and 32 permanent teeth. The prevalence of supernumerary teeth varies between 0.1% and 3.8% and is more common in the permanent dentition.^[3] Supernumerary teeth in the molar region are called as Supernumerary molars. There were only few studies considering prevalence of supernumerary molar teeth. Basing on the collected data from available studies, prevalence of supernumerary molars is ranging between 0.001% to 0.57%.^[4]

Supernumerary molars are divided into paramolars and distomolars. A paramolar is a supernumerary molar situated buccally or lingually/palatally to one of the molars or present in the interproximal space between two molars. Paramolars can be present between first and second molar or they can be present between second and third molar also inter proximally. A distomolar is a supernumerary tooth located distally or distolingually to a third molar. It is also called as fourth molar. The presence of fourth molars is usually noticed not in intraoral examination, but on the radiographs. In supernumerary molars distomolars were more common than paramolars in most of the studies on Turkish population^[5], Paramolars were more common than distomolars in only few studies reported by Cassetta on Italian Caucasian population^[6] and Kumar and Gopal^[7] study on Chennai population India.

The occurrence of paramolars and distomolar is relatively uncommon. Despite the advances in knowledge of odontogenesis, the main reason of



occurrence of supernumerary teeth is not certainly explained, several hypothesis have been postulated to explain their presence. The exact etiology of this anomaly is still not completely understood. Several theories that have been suggested for their occurrence are ‘phylogenetic theory’, which means paramolars may be an atavistic appearance of fourth molar of primitive dentition the other theory proposed is the ‘dichotomy theory,’ where the supernumerary tooth is created as a result of dichotomy or splitting of the tooth bud. The last and most accepted theory is the “hyperactive dental lamina”, which states that supernumerary teeth are result of local, independent conditional hyperactivity of dental lamina. Residues of un-degenerated dental lamina epithelial cells may cause eruption cysts, while over-proliferation or prolonged survival of dental lamina epithelial cells may cause supernumerary tooth formation.^[8] The above mentioned theory can infer that the occurrence of supernumerary teeth is related to genetics that is why these are more commonly seen in relatives of affected individuals than the general population; however the inheritance pattern does not follow Mendelian principles.

Multiple supernumerary teeth are commonly associated with developmental anomalies such as cleidocranial dysplasia, Gardner’s syndrome, trichorhinophalangic syndrome and cleft lip and Palate^[2], but they are rarely seen without any syndromes, as in our case. Extensive review of international English literature revealed only 10 reports of bilateral paramolars in maxilla and mandible. Review of literature showed that till date only one case reported by P.B Kariya et al. with Bilateral maxillary paramolar between second and third molar and bilateral impacted maxillary distomolar

in same patient.^[9] In our present case, it is unique and first case where, the impacted distomolar is only in one side, so total numbers of supernumerary teeth are three.

The clinical management of patients with supernumerary molar usually depends upon the position of the supernumerary molar and on its effect or potential effect on adjacent teeth and important anatomical structures. The most common treatment for paramolars and distomolar is extraction in order to prevent the complications. However, other treatment modality for unerupted supernumerary teeth is to leave the tooth as it is and use a wait and watch approach. If any clinical problems or complications occur such as cyst formation, crowding, ectopic eruption of adjacent teeth the tooth should be immediately extracted.

4. Conclusion

To conclude, even though distomolar teeth were not clinically visible in intraoral examination screening panoramic radiogram is helpful for the diagnosis and intraoral periapical radiograph aids in the treatment planning. The treatment modalities required for these teeth is to be determined by the type, position or any associated complications revealed on clinical and radiographic examination. The early diagnosis and proper treatment in every case of supernumerary teeth are essential factors for the prevention and confrontation of the potential complication they could cause.

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Figures & Legends:



Figure 1: Intraoral photograph showing bilateral paramolars supernumerary teeth in the maxillary arch



Figure 2: OPG showing impacted Distomolar on the left side