

Case Report

Bilateral maxillary paramolars: a rare case report

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Abstract:

Paramolars are supernumerary teeth usually found buccally or palatally near the molars. In most of the cases, the paramolars are situated between the second and third molars, while in very few cases, as in our case it was found between first and second molars. From literature review very few articles are found about bilateral maxillary paramolars. The present article presents a case of bilateral maxillary paramolars in a 26-year-old female patient and its management.

Keywords: Paramolars, Bilateral, Maxillary, Supernumerary tooth, Extra tooth.

INTRODUCTION

Supernumerary teeth are present in addition to the normal series of teeth in both dentitions i.e. deciduous and permanent dentition. Supernumerary teeth develop from the third tooth bud which arises from the dental lamina in close proximity to the permanent tooth bud or most likely from the splitting of the permanent tooth bud itself. These teeth may be present anywhere in the oral cavity.¹ The prevalence of supernumerary teeth has been recorded to a lesser extent in primary dentition (0.2-0.8%) as compared to the permanent dentition (1.5-3.5%).² It can be impacted in both the jaws i.e. maxilla or mandible or may be

completely erupted.¹ Supernumerary teeth are classified based on their morphology (accessory and supplemental), location and form i.e. size and shape (mesiodens, paramolar and distomolar). Supernumerary teeth which occur in the molar region are of two types—paramolars and distomolars.^{3,4,5} Supernumerary teeth can be found erupted or unerupted and remain in the bone. Unerupted and impacted supernumerary teeth are revealed during routine radiographic examinations.^(6,7)

Supernumerary teeth are found to have association with some syndromes like cleidocranial dysplasia, Gardner's syndrome,⁸ and in patients with cleft lip and palate⁹ and less commonly with Ehlers-Danlos syndrome, chondroectodermal dysplasia, trichophalangeal syndrome, Fabry's disease, incontinentia pigmenti.^{4,7} A paramolar is a supernumerary molar, usually rudimentary, situated on the buccal or lingual/palatal side of one of the molars or in the interproximal space buccal to the second and third molar. Paramolars have a conspicuous predilection for maxilla than the mandible and they are more frequently seen in males compared to females in a ratio of 2:1.¹ Paramolars can also be seen bilaterally in the arch as in our case or can be observed more on one side of the arch.² Cases of localized periodontitis have

been reported as a complication of bilateral ectopic occurrence of paramolar in the maxillary molar.³
⁴The purpose of this paper is to report a case of bilateral maxillary paramolars situated between the first and second molars without any association with any developmental disorders

CASE REPORT

A 26-year-old female patient reported to the department of oral and maxillofacial surgery with the chief complaint of food lodgment in between teeth in the upper arch on the both sides.



Fig. 1: Intraoral picture of bilateral paramolar

On intraoral examination, extra teeth were found on the buccal side, between the

right 1st and 2nd maxillary molars and the left 1st and 2nd maxillary molars (Fig. 1).



Fig. 2 - OPG view of both paramolars

The supernumerary tooth on each side of the right and left quadrant were diagnosed as a paramolars. Both the paramolars were buccally placed, which is very rare finding. The crowns of both paramolars had no caries. No other relevant clinical features were apparent. Patient's medical and family history

was irrelevant and there were no signs of any systemic diseases or syndromic features. Patient was informed about the extra tooth and its possible complications like food lodgment, which was in fact his chief complaint at the time of presentation.

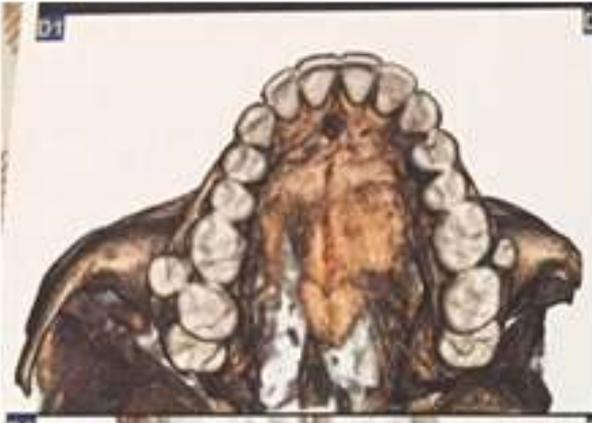


Figure 3



Figure 4



Figure 5

To reach the diagnosis OPG (Fig. 2) and CBCT (Fig. 3, 4, 5) was advised, after diagnosis was confirmed we extracted both paramolars (Fig. 6, 7) in two visits under local anesthesia. No postoperative complication was observed as the patient was instructed to follow post-extraction instructions completely.

DISCUSSION

The occurrence of paramolar is not a common dental finding. The exact etiology of this anomaly is not known. Various factors have been proposed

as etiologic factors for development of this anomaly.^{10, 11} Several theories have been proposed such as the dichotomy theory (splitting of the tooth bud into two parts, dental lamina hyperactivity theory), the phylogenetic reversion theory (atavism), and a combination of genetic and environmental factors. The third theory proposed that some malformations of the dental germ caused by trauma occurring the tooth eruption can be an etiological factor for extra teeth such as paramolar.



Fig 6: Extracted left Paramolar



Fig 7: Extracted right Paramolar

The most accredited theory sustains that extra teeth than normal number in arch are related to genetic factors and this would describe the presence of supernumerary teeth in the relatives of patients possessing this dental anomaly.¹² In our case a detailed family history from the patient was asked, but evidence of any relative or family members having this clinical presentation was not found. Supernumerary teeth have shown strong association with developmental disorders, such as cleft lip and palate. Incidence of paramolar in the primary dentition is extremely rare. Only one case of paramolar in primary mandibular molar region has been reported in a study.¹³ Paramolar is usually seen predominantly on one side only. Only two cases of bilateral presence of paramolar, one in the maxilla (3) and one in the mandible have been reported.¹⁴ Supernumerary teeth can cause numerous complications such as crowding due to insufficient space for the eruption of other teeth and malocclusion due to a diminution of the space in the dental arch due to paramolar eruption, follicular cyst due to the degeneration of the follicular sacs, neoplasm pain in the molar area and neuralgia of the trigeminal nerve when the paramolar compresses the nerve retention, delayed eruption or displacement of adjacent teeth. Other complications resulting as a sequela to paramolar are periodontal disease and caries if in case the tooth interferes with oral hygiene maintenance, traumatic bite due to its buccal position causing laceration to the buccal mucosa, pulp necrosis and

root resorption of the adjacent teeth, formation of diastema between the molars, interference with orthodontic treatment.¹⁵ Radiographs play a significant role in evaluation of both the type and location of the supernumerary teeth. However, complex characteristics of supernumerary tooth and its rare nature of occurrence makes radiographic diagnosis difficult. Radiographs (periapical, occlusal and panoramic) do not provide detailed information about the three-dimensional relationship between supernumerary and adjacent structures. As the paramolar is seen buccal or lingual to the arch overlapping of this structure with the normal molars may result in misdiagnosis of this structure (4). CBCT (Cone-Beam Computerized Tomography) - a new generation equipment allow the visualization of bony and dental pathologic conditions such as structural maxillofacial deformity and fracture recognition, analysis of available bone for placement of implant, preoperative assessment of impacted teeth and temporomandibular joint imaging. CBCT is also helpful in locating as well as finding the extension of dental resorptions, radicular position and fractures. This equipment thus allow a broad examination of the maxilla-mandibular complex (7,16). Therefore, CBCT was advised for patient in our case to reach accurate diagnosis.

CONCLUSION

The presentation of a clinical case with bilateral paramolar is an extremely rare phenomenon. Very

few articles have been published related to bilateral paramolars in the maxilla. Supernumerary teeth can be present in any region in the oral cavity. Private dental practitioners and clinicians should be aware of the various types of supernumerary teeth and after thorough clinical and radiographic examination treatment plan should be made. One treatment modality for unerupted supernumerary teeth is to leave the tooth as it is and follow a wait and watch approach. But if any clinical problems or complications arise such as crowding, cyst formation, ectopic eruption of adjoining teeth the tooth should be extracted immediately. As in our case the patient usually complains of food lodgment and the best treatment in such case is to extract the teeth to prevent any further harm to the molars and oral cavity.

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