

## **An Unusual Location of Supernumerary Tooth Causing Extreme Distress – A Case Report**

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### **Abstract**

**Supernumerary tooth (ST) or hyperdontia is a dental anomaly characterized by the presence of additional tooth to the normal series in either of the dentition. Mesiodens are 80% of all the supernumerary teeth with a ratio of 2:1 among the males and females. Supernumerary molars usually referred to as paramolar and distomolar, are small and rudimentary in size than the actual molar. paramolar is commonly situated in the location buccal or palatal to maxillary permanent molars while distomolars are located distal to the maxillary third molars. Occurrence of ST is 0.3% – 0.8% in deciduous dentition and 1.5% – 3.5% in permanent dentition as reported in the literature. Usually unerupted ST is asymptomatic and is accidentally found on radiograph. This is a case of distomolar with right erupted maxillary third molar causing recurrent ulceration and extreme distress to the patient.**

**Key Words – Supernumerary Tooth, Distomolar, Paramolar, Hyperdontia**

### **1. Introduction**

Supernumerary tooth (ST) or hyperdontia is a dental anomaly characterized by the presence of additional tooth to the normal series in either of the dentition<sup>(1)</sup>. Different theories suggested for the occurrence of supernumerary tooth in the dentition are dichotomy of the tooth bud, hyperactivity of the dental lamina and combined effect of genetic and environmental factors<sup>(2,3)</sup>. Occurrence of ST in syndromes like cleft lip and palate, Cleidocranial dysplasia, Down's syndromes, etc are reported in the literature<sup>(4)</sup>.

Common site for the occurrence of supernumerary tooth is the midline between the maxillary central incisors named as Mesiodens. Mesiodens are 80% of all the supernumerary teeth with a ratio of 2:1 among the males and females<sup>(5)</sup>. Supernumerary molars usually referred to as paramolar and distomolar, are small and rudimentary in size than the actual molar. Paramolar is commonly situated in the location buccal or palatal to maxillary permanent molars while distomolars are located distal to the maxillary third molars<sup>(6)</sup>. They can have normal tooth structure or can differ from the normal morphology. Occurrence of ST is 0.3%–0.8% in deciduous dentition and 1.5%–3.5% in permanent dentition as reported in the literature<sup>(7, 8)</sup>. Usually unerupted ST is asymptomatic and is accidentally found on radiograph.

This article aims to present a case of distomolar with right erupted maxillary third molar causing recurrent ulceration and extreme distress to the patient.

### **2. Case Report**

A 22-year-old Indian male patient reported to the Department of Oral and Maxillofacial Surgery with the chief complaint of pain in the upper right back region of the jaw since eight days. Patient had the previous

history of pain and ulcer in the same region one-month back, which was relieved by applying the topical gel of lignocaine and metronidazole combination suggested by a dentist. Intraoral examination revealed a traumatic ulcer in the right buccal mucosa just distal to the right maxillary third molar. On palpation of the third molar region revealed a small supernumerary tooth distal to right maxillary third molar. This ST was erupting distal to third molar pointing posteriorly impinging on the opposing buccal mucosa resulting in ulcer formation.

An Orthopantomogram (OPG) was advised for radiographic interpretation. OPG showed a small supernumerary tooth distal to right maxillary third molar with a horizontal angulation (Fig.1). This ST did not resemble the maxillary molar and presence of all the teeth in right maxillary dentition was suggestive of ST. Treatment with simple extraction of ST with adjacent right maxillary third molar was planned under local anaesthesia 2% lignocaine with adrenaline 1:80,000. Right maxillary third molar was planned for extraction because it was partially impinging on the ulcer. The extraction was uneventful and the ulcer healed in 15 days follow-up.



Figure 1. Orthopantomogram

### 3. Discussion

ST is developmental discrepancies that may occur in primary or permanent dentition<sup>(9)</sup>. The etiology still remains unclear. The widely accepted cause for ST is hyperactivity in the dental lamina<sup>(10)</sup>. Other prevailing causes for ST are premature loss of primary tooth, lack of space or crowding of dental arches and rotation of tooth buds<sup>(10)</sup>. Supernumerary teeth are classified according to their location in the dental arch and morphology<sup>(11)</sup>. According to their location, they can be named as mesiodens, paramolars, distomolars, and parapremolars<sup>(6)</sup>. They often cause developmental and eruption disturbances of adjacent permanent tooth which result in crowding, displacement, diastema and rarely radicular resorption and Dentigerous Cyst<sup>(12-14)</sup>. The prevalence of Dentigerous Cyst with ST is 1 to 9.9%<sup>(12,13)</sup>. Occurrence of Adenomatoid odontogenic tumour with multiple impacted ST is also reported<sup>(15)</sup>. Ameloblastoma with dental follicle of ST is rare<sup>(16)</sup>. Radiographic examination in ST is required to diagnose their position, relation and distance of the impacted permanent tooth to the occlusal plane<sup>(10)</sup>. Usually Orthopantomogram is suggested after the accidental finding of ST to rule out their presence in other locations. Cone Beam Computed Tomography (CBCT) is an advanced radiographic technique to evaluate its position with the adjacent vital structures and management. Rationale for surgical removal is to avoid complication and to treat the existing complaint. Immediate removal on accidental finding is suggested unless the reason for retention is obvious<sup>(17)</sup>. Usually, treatment for impacted ST is extraction indicated for pathological changes or orthodontic treatment. Assael et al reported the prophylactic removal of ST to avoid pathological changes in follicle<sup>(18)</sup>. He also stated that such pathological changes can be life threatening and thus early removal is desirable.

Early diagnosis with position, existing status of dental apparatus and dentofacial complex must be acknowledged before surgical intervention <sup>(19)</sup>. Extended surgery is inevitable for removal of inverted impacted tooth due to their apical position. In addition, developing vertical height with age and dense bone can make surgical access critical. Thus demanding early diagnosis <sup>(20)</sup>. Early diagnosis of Mesiodens minimizes the treatment and subsequently the associated complications <sup>(21, 22)</sup>. Surgical removal of impacted ST should be deferred in absence of any complaint to prevent injury to the adjacent unerupted developing tooth <sup>(23, 24)</sup>. To avoid obvious complications related to ST in premaxilla, early removal is warranted <sup>(25)</sup>. ST should be critically evaluated to judge its potential for immediate or later complications to be reported to the patient. Accidental finding of the ST should be efficiently managed to avoid complications and better quality of life.

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