Bilateral maxillary supplemental incisors - A case report

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Abstract

Supernumerary teeth are odontostomatological anomalies resulting in increased number of teeth in addition to normal dentition. Supernumerary teeth usually associated with syndromes such as Cleidocranial dysostosis, Gardner’s syndrome, cleft lip and palate, Fabry disease and Rubinstein-Taybi syndrome etc. But sometimes these teeth are present alone without any symptom. In present case patient has permanent maxillary supernumerary teeth almost similar to lateral incisors in addition to normal set of teeth.

Keywords: Supernumerary tooth, dichotomy, eumorphic, rudimentary.

Introduction

Supernumerary teeth are additional teeth to the normal set of dentition. These can be single or multiple, unilateral or bilateral and can be present in any of arch at any place.\(^1\) Bilateral supernumerary teeth cases are rare that is only 8% of total cases.\(^2,3\) Their occurrence is more in permanent dentition as compared to primary dentition. Prevalence of supernumerary teeth in permanent dentition ranges from 1% to 4% and in primary dentition it ranges from 0.2% to 1.9%.\(^4\) Primosch classified supernumerary teeth into two types depending upon their shape. These two types are eumorphic and dysmorphic. Eumorphic teeth have normal shape and size and also called supplemental or incisiform teeth. Dysmorphic teeth have abnormal shape and also called as rudimentary teeth. Dysmorphic teeth include conical, tuberculate and molariform teeth.\(^5\)

Case Report

A 17 years old male patient came to department of Orthodontics and Dentofacial orthopaedics in S.K.S.S. College and hospital with chief complaint of forwardly placed upper front teeth. On clinical examination it
was observed that intraorally patient has all permanent teeth up to second molar in first, second and third quadrants, but in fourth quadrant deciduous second molar was retained in place of lower second premolar. (fig.1a) Patient also has two additional supernumerary teeth that are roughly similar to maxillary lateral incisors. (fig 1b) Overjet is 10mm, molar relationship on right side is class I and on left side molar relation is class II. Patient has convex facial profile and incompetent lips.

Orthopantogram (OPG) examination revealed the presence of two supernumerary teeth in anterior maxillary region on both right and left side. These supernumerary teeth are similar in anatomy to normal set of lateral incisors. Second premolar in mandibular arch on right side was absent in OPG. (fig2) Patient was physically healthy and has no medical history.

**Fig.1** (a) Mandibular occlusal view (b) Maxillary occlusal view

**Fig.2** Orthopantomogram showing supernumerary teeth

**Discussion**

Supplemental teeth occur most frequently in anterior maxillary region in both primary and permanent dentition. There are many theories to explain etiology of supernumerary teeth. These are:

- Supernumerary teeth are produced as a result of dichotomy of the tooth bud.
- These teeth are formed due to local, independent, conditioned hyperactivity of the dental lamina.
- Heredity and environmental factors also play role in presence of supernumerary teeth, these teeth are more common in relatives of affected children than in general population.

Supernumerary teeth can cause many problems such as eruption failure, root resorption, cystic formation, crowding, rotation or displacement of adjacent teeth, esthetic problems and delayed or abnormal root development of permanent teeth. Proper clinical examination, case history and radiographic examination is needed for these teeth.
Due to such problems, extraction of supernumerary teeth is advised in many cases such as delayed eruption of permanent tooth, chances of caries due to supernumerary tooth, displacement or rotation of adjacent tooth, compromised esthetics and for orthodontic treatment to align the teeth. The radiographs useful for investigation are orthopantomograph, anterior occlusal or periapical radiograph and computed tomography. In some cases where supplemental tooth is present and erupted, it becomes difficult to decide which is the supplemental tooth. In such situations if both the teeth are healthy, then it is suggested to extract the tooth which is more displaced.

In present case the supernumerary teeth fully erupted and look like lateral incisors, and it is difficult to determine which are the supplemental teeth. As we need to reduce overjet of patient so extraction of one supernumerary tooth on each side in maxillary arch adjacent to canine, is decided as part of orthodontic treatment. After extraction, retraction of four incisors is planned and then reevaluation of case would be done for further treatment if needed. In the mandibular arch the patient wants to retain deciduous molar tooth.

**Conclusion:** Diagnosis of supernumerary tooth is necessary during orthodontic treatment planning as their extraction can be useful for alignment of teeth or to reduce overjet.

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**References**