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CASE REPORT

Non-syndromic impacted multiple supernumerary teeth in permanent Dentition : A case report

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ABSTRACT

Non-syndromic hyperdontia or supermunery teeth is a rare phenomenon. Syndromes, metabolic and hormonal disorders are often associated with several impacted permanent and supernumery teeth. Approximately 75% of supernumery teeth are impacted and asymptomatic. Accordingly, most such teeth compromise of typical findings in context of routine X- ray studies. More often shortage of eruptive force and rotation of tooth buds that causes multiple impactions. Nevertheless additional examinations are required to exclude any systemic or metabolic conditions.

This is a case report of 10 -year-old male having 3 supernumerary teeth with non-syndromic association, which were diagnosed during routine radiographic examination

INTRODUCTION

Syndromes and metabolic disorders may be related to multiple impacted teeth. However, a fixed complex of symptoms is not always accompanied with impaction of multiple teeth.1

Supernumerary teeth have been reported in the literature over the years as a well-recognized clinical phenomenon.2It is a term used to describe more than normal number of a full complement of teeth in either the primary or permanent dentitions.3 Multiple supernumerary teeth are associated with cleidocranial dysplasia and Gardner syndrome.2-4 In such cases the maxillary anterior region is the common site of occurence.5 This case report presents a case of a non-syndromic male patient with multiple supplemental supernumerary teeth in two quadrants of his mouth.

CASE REPORT

A 10-year-old healthy male child arrived in the Department of Preventive and Paediatric Dentistry, for the purpose of routine examination. The patient neither had any complain of pain, nor presented any signs of infection. The medical history shown was insignificant, and no related syndrome with normal mental status was observed. The family history did not reveal any history of malocclusion/ hyperdontia or any syndromic illness. No abnormality was detected during extraoral examination. Intraoral clinical examination revealed palatal bulging in the anterior palatal region of the maxilla. Clinical photograph of maxillary arch displaying a supernumerary tooth along with palatal bulging. (Fig. 1).

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Figure 1. Pre operative image with palatal bulge.

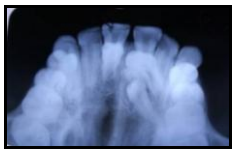


Figure 2 . Pre Operative occlusal radiograph with supernumerary teeth.

Figure 3 . materials and instruments used.

Figure 4. Initial Incision

Figure 5. Full Thickness flap Raised

Figure 6. Size of supernumerary teeth

A maxillary occlusal radiograph indicating the presence of three supernumerary teeth located in the maxillary right incisor region, maxillary left incisor premolar region (Figure 2).

The concept of supernumerary teeth and its presence in their child was explicated to the parents. An informed consent was taken from parents before proceeding with the procedure.

INVESTIGATIONS

The radiographical investigation included maxillary occlual views depicting the supernumarary teeth. Routine blood investigations were advised.

DIFFERENTIAL DIAGNOSIS

Ehler-Danlos syndrome , Gardner's syndrome, Single distomolar, non-syndromic single paramolar, Fabry-Anderson syndrome, , facial fissures or cleidocranial dysplasia.

TREATMENT

After administration of local anesthesia, the visible supernumerary tooth was extracted using forceps .A full thickness palatal flap (Figure 4) was raised from maxillary incisor to the maxillary premolar region to expose the supernumerary teeth (Figure 5).

Extraction of supernumerary teeth (Figure 6) was possible with the aid of adequate bone removal; Repositioning of flap was done with the help of sutures. Post – operative medication was prescribed. The child had asymptomatic post-operative healing (Figure 7) and he remained healthy and in good spirits.

OUTCOME AND FOLLOW-UP

Follow up was done after one week and one month which showed good healing. (Figure 8) The follow-up was done for 1 month to evaluate for healing of bone which was associated with supernumerary teeth.

DISCUSSION

The most affected area is mandibular premolar region. Maxillary premolar, mandibular and maxillary molar region and in some cases maxillary lateral incisor canine area was also seen to be engaged.

Figure 7. Recalled after 3 days.

Supernumerary teeth can be solitary or numerous in numbers. Supernumerary teeth can be akin to a normal tooth (eumorphic) or can be far removed from any such resemblance (dysmorphic). Although many theories have been proposed the etiology of supernumerary teeth is still unidentified. One such theory is dichotomy theory of tooth germs. This theory states that the tooth bud splits into two equal or different sized parts, resulting in two teeth of equal size or one normal and one dismorphic tooth, respectively.6 when there are one or more supernumerary teeth in dental arches, then it is considered to be multiple hyperdontia.

The present case confirms multiple supernumerary teeth without any syndrome or any systemic condition. Diagnosis is typically made as an outcome of standard finding during customary radiographical evaluation. The clinical situations that may indicate the presence of impacted supernumerary teeth are the absence of permanent teeth in the arch,7 malposition of the erupted permanent teeth,8malocclusion,9resorption of roots of the adjacent teeth.10

No ideal or definite treatment can be planned in all situations of multiple supernumerary teeth. Optimal treatment can be planned for the delayed eruption of normal dentition due to supernumerary involvement. The options include the removal of the supernumerary and orthodontic treatment to re-establish sufficient space.

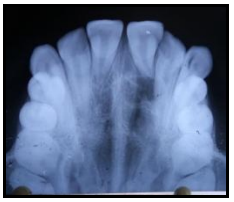
a)  b) 

Figure 8 : (a)Radiographic view (b) clinical view after 1 months

SUMMARY

Commonly Multiple supernumerary teeth are concomitant with syndromes but can occur, although rarely, without any such association. This case report describes a case of a non-syndrome male patient with multiple supernumerary teeth in two quadrants of his mouth.

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