

An Unusual Occurrence of 5 Impacted Supernumerary Teeth in a Non Syndromic Patient: A Case Report

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Abstract: A supernumerary tooth is one that is additional to the normal series and can be found in almost any region of the dental arch. Here we are presenting a case report of a 9 year old male patient reported to the department with the chief complain of unerupted upper central incisors. On clinical examination, maxillary central incisors were missing, an unusual bulge was felt in the maxillary anterior region and the permanent lateral incisors had already erupted into position suggesting a definite delay in the eruption of the central incisors. Radiographic examination revealed the presence of 5 impacted supernumerary teeth in the maxillary anterior region. The impacted supernumeraries in the anterior region were blocking the eruption of the permanent centrals. Surgical extraction of all the supernumeraries were planned as it was anticipated that the extraction of the supernumeraries would promote the eruption of the central incisors in the normal path. The extraction of supernumeraries was planned in two appointments under local anesthesia. In the first visit the labially placed 4 supernumeraries were extracted and in the next visit the palatally placed tooth was extracted. After administration of local anesthesia the flap was raised and the extraction of supernumeraries was carried out with utmost care ensuring minimum trauma to the central incisors. OPG examination was carried out after 6 months revealed that both the centrals had moved tremendously from its original position taking the normal path of eruption. A proper diagnosis, treatment plan and early intervention will prevent the occurrence of malocclusion or other associated pathologies at a later stage and will promote the normal eruption of the permanent teeth thus eliminating the need for various comprehensive and elaborate procedures.

Keywords: Supernumerary, extraction, teeth, eruption

INTRODUCTION

A supernumerary tooth is one that is additional to the normal series and can be found in almost any region of the dental arch [1]. The etiology of supernumerary teeth is not completely understood. Various theories exist for the different types of supernumerary. One theory suggests that the supernumerary tooth is created as a result of a dichotomy of the tooth bud.² Another theory, is the hyperactivity theory, which suggests that supernumeraries are formed as a result of local, independent, conditioned hyperactivity of the dental lamina [2, 3]. Heredity may also play a role in the occurrence of this anomaly, as supernumeraries are more common in the relatives of affected children than in the general population. In a survey of 2,000 schoolchildren, Brook found that supernumerary teeth

were present in 0.8% of primary dentitions and in 2.1% of permanent dentitions [4]. Occurrence may be single or multiple, unilateral or bilateral, erupted or impacted, and in one or both jaws [5].

While single tooth impaction is quite common, development of multiple impacted teeth is a rare condition and often found in association with syndromes or developmental anomalies such as cleidocranial dysplasia, Gardner's syndrome, trichorhinophalangioma syndrome, and cleft lip and palate. However, it can be present in patients without any systemic pathology. The presence of supernumerary teeth can cause alterations in the neighbouring teeth, resulting in retained teeth or delayed eruption, ectopic eruption, dental malposition, occlusal problems, diastema, and rotation [6]. Here we are presenting a

case report of a 9 year old male patient reported to the department with the chief complain of unerupted upper central incisors.

CASE REPORT

A 9 year old patient reported to the Department with the chief complain of unerupted upper front teeth. On clinical examination it was found that both the centrals were missing. On clinical examination, maxillary central incisors were missing an unusual bulge was felt in the maxillary anterior region and the permanent lateral incisors had already erupted into position suggesting a definite delay in the eruption of the central incisors. Radiographic examination revealed the presence of 5 impacted supernumerary teeth in the maxillary anterior region (figure 1). The occlusal radiograph showed that 4 supernumerary teeth were placed labially while one of them lied palatally. OPG revealed that there were no supernumerary teeth in the posterior region and in the lower jaw and full complement of teeth were present. The impacted supernumeraries in the anterior region was blocking the

eruption of the permanent centrals. Surgical extraction of all the supernumeraries were planned as it was anticipated that the extraction of the supernumeraries would promote the eruption of the central incisors in the normal path. The extraction of supernumeraries were planned in two appointments under local anesthesia. After administration of local anesthesia the flap was raised and the extraction of supernumeraries were carried out with utmost care ensuring minimum trauma to the central incisors. Bone cutting was not required as the supernumeraries were clinically visible once the flap was raised. In the first visit the labially placed 4 supernumeraries were extracted and in the next visit the palatally placed tooth was extracted. Thereafter the patient was recalled every 2 months for check up. OPG examination was carried out after 6 months for evaluating the status of eruption of the permanent central incisors which revealed that both the centrals had moved tremendously from its original position taking the normal path of eruption and is expected to erupt in another few months (figure 2).



Figure 1: Pre operative OPG showing 5 supernumeraries and position of 11 and 21



Figure 2: Post operative OPG showing the position of 11 and 21 after 6 months

DISCUSSION

Multiple supernumerary teeth not associated with syndromes are rare conditions. The occurrence of non-syndromic supernumerary teeth is more often in maxilla than in mandible [7] in male than in female [8],

in permanent dentition than in primary dentition, and unilaterally than bilaterally [9] Patients with nonsyndromic supernumerary teeth might be related to heredity factor, therefore familial history should be

carefully examined. But in this case patient had no relevant family history.

Maintaining a supernumerary tooth could result in the appearance of different abnormalities. Hegde and Munshi [10] and Mason et al [11] reported the displacement, rotation, ectopic eruption, and malocclusion of adjacent teeth due to supernumerary teeth in their studies. The clinical and radiographic examinations are important for a substantial treatment plan which varies from simple extractions to orthodontic/prosthetic treatment for obtaining correct occlusion. However, it is difficult to establish an ideal treatment for those of multiple supernumeraries cases.

Removal of a supernumerary tooth preventing permanent tooth eruption usually results in the eruption of the tooth, provided adequate space is available in the arch to accommodate it [12]. Di Biase found 75% of incisors erupted spontaneously after removal of the supernumerary [13]. Eruption occurred on average within 18 months, provided that the incisor was not too far displaced and that sufficient space was available.

CONCLUSION

A proper diagnosis, treatment plan and early intervention is very essential in such cases which will prevent the occurrence of malocclusion or other associated pathologies at a later stage and will promote the normal eruption of the permanent teeth thus eliminating the need for various comprehensive and elaborate procedures.

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