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Multiple developing supernumeraries in an 8 year old boy: A case report

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Abstract:

We describe an interesting case of unusual combination of erupted, impacted and developing supernumeraries in a non-syndromic 8 year old boy. Orthopantomograph of mixed dentition allowed the detection of the associated anomalies not evident clinically, indicating the long term clinical and radiological follow-up of the patient.

Keywords: Non-syndromic, Orthopentomograph, Supernumeraries.

Introduction:

Dental anomalies generally reflect either a change in tooth size, shape or number. Teeth formed in excess of the normal number are termed “supernumerary” or “hyperdontia” and are by no means uncommon. Although supernumerary teeth have been reported in both dentitions but they are more frequently found in permanent dentition. Supernumerary teeth may occur singly, multiply, unilateral or bilateral and in the maxilla, mandible or both. They occur more frequently in males, with a male: female ratio of 2:1.[1] Supernumerary teeth may erupt normally, stay impacted, appear inverted or assume an ectopic position or an abnormal path of eruption. The development of such teeth may precipitate a variety of complications such as crowding, delayed eruption, diastema, rotations, cystic lesions and resorption of adjacent teeth. Supernumerary teeth have a prevalence of 0.2%-0.8% in the primary dentition, with upto 50% of supernumerary teeth forming in premaxilla followed by maxillary molars,

mandibular molars, premolars, lateral incisors and canine region [2]. Supernumerary teeth are sometimes associated with genetic syndromes like cleidocranial dysplasia, Gardner's syndrome and Ehlers-Danlos syndrome [3].

We report an interesting case of a non-syndromic patient with multiple developing supernumerary in the mixed dentition of an 8 year old boy.

Case Report:

An 8 year old boy reported to the department of Pedodontics with a chief complaint of decayed teeth in the lower jaw. The intra oral examination of the maxillary arch revealed mixed dentition comprised of deciduous complement and permanent first molars except for the presence of a peg shaped tooth in the right central incisor region (Figure 1). There was no history of trauma present. The parents gave the history of exfoliation of maxillary right deciduous central incisor. The mandibular arch showed mixed dentition comprised of erupted permanent first molars, erupting central incisors along with the deciduous complement. The extra oral and general examinations revealed no abnormalities. Detailed family examination showed that he was the second child among three children. There were no similar findings in any of the family members.

Figure.1. Photograph showing presence of peg shaped tooth in the right central incisor region.

The eruption of the permanent succedaneous teeth in the maxillary anterior region, appropriate to the patient's age was delayed. A periapical radiograph confirmed the erupting permanent maxillary right and left central incisors. Careful examination of periapical radiograph revealed an additional vertically impacted supernumerary tooth situated above the maxillary left deciduous central incisor. Rotation and delay in eruption of maxillary right permanent central incisor was noticed due to erupted peg shaped tooth (Figure 2).

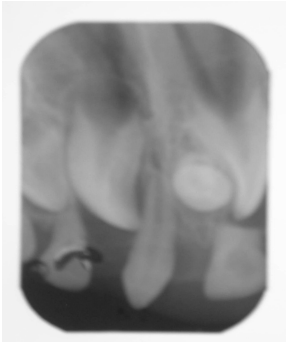

Figure.2. An intra oral periapical radiograph showing vertically impacted supernumerary tooth situated above the maxillary left deciduous central incisor.

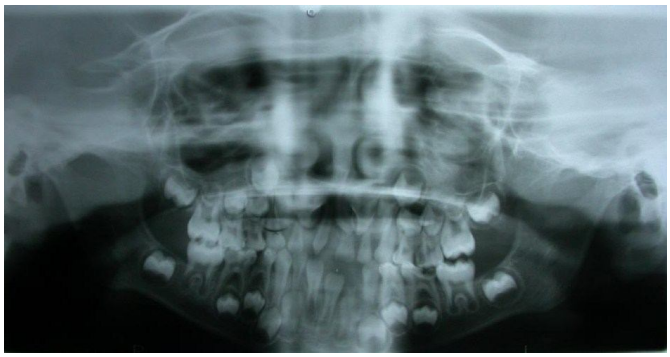

Figure.3. Orthopantomograph showing developing supernumeraries in relation to permanent maxillary first molars on both the sides.

A panoramic tomogram was taken to rule out the possibility of other associated anomalies. Radiograph revealed developing supernumeraries in relation to permanent maxillary first molars on both the sides, which was confirmed with periapical radiographs (Figure 3). The erupted peg shaped tooth was also radiographically confirmed to be supernumerary. The extraction of primary left central incisor, erupted peg shaped supernumerary

and impacted supernumerary tooth in the maxillary anterior region was advised.

Discussion:

Reports of supernumerary teeth are quite common in dental literature, such teeth often being discovered on radiographic examination of dental patients who are totally unaware of these disorders has not been definitively established. Supernumerary teeth are more likely to be present in patients whose relatives also possessed supernumeraries, although inheritance does not follow a simple Mendelian pattern [4]. Anterior maxillary supernumeraries in Pediatric patients are of great concern to the patient, parents and the dentists because it can lead to complications such as rotation, malocclusion, crowding, diastema, delayed eruption of the neighboring tooth and esthetic problems. Early diagnosis, proper evaluation and appropriate treatment are essential, if these complications are to be avoided or minimized [5, 6].

Clinically the presence of supernumeraries should be suspected, if there is considerable delay in the eruption of permanent teeth [7]. The possibility of other associated dental anomalies should be kept in mind in the patients with supernumerary tooth, for which thorough radiographic examination and careful interpretation is mandatory as shown in our case. Considering the attandant risk of displacing the permanent tooth bud during operation, a careful surgical removal of a supernumerary tooth in the primary dentition is advised in selected cases [8].

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