Unilateral supplemental primary lateral incisor A report of 2 cases

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Abstract

Supplemental tooth is a rare entity in primary dentition. Supernumerary tooth of normal shape and size are termed as supplemental tooth. They are of great concern to both the dentist and parents because of the eruption, occlusal and aesthetic problem they can cause. Early recognition and diagnosis of supernumerary tooth is highly important to prevent further complications in the permanent dentition.

Keywords

Supernumerary tooth, supplemental tooth, primary dentition

Introduction

Supplemental tooth is type of supernumerary tooth that resembles tooth shape and also supplementary for occlusion1. Supernumerary teeth are rarely seen in primary dentition with a prevalence of 0.3-0.6%. In both primary and permanent dentition supplemental teeth are most commonly located in maxillary anterior region2.

This article describes two cases of supplemental primary maxillary lateral incisor and its management.

Case -1

A 7 year old girl reported to the department of Pedodontics, Annoor Dental College; with a chief complaint of malaligned upper anterior teeth. Intra oral examination showed presence of a supplemental tooth resembling primary lateral incisor in the upper right quadrant mesial to the lateral incisor(Fig 1). There was no other supernumerary tooth in primary and permanent dentition.Medical and family history was not conclusive. No history of trauma was reported. She didn't have any other dental problem. Supplemental tooth was placed out of the arch labially resulting in crowding and unaesthethic appearance (Fig 2). So it was extracted under local anaesthesia (Fig 3).

Figure 1: intraoral photograph showing right supplemental lateral incisor

Figure 2: Occlusal photograph showing retained right supplemental

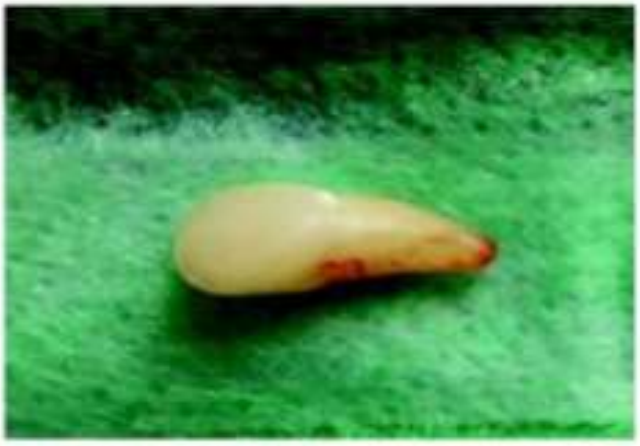

Figure 3: extracted right supplemental lateral incisor

Case-2

An 8 year old girl reported to the Department of Pedodontics and Preventive Dentistry,Annoor Dental College; with a chief complaint of mobile tooth in the upper right front region. Intra oral examination showed a mobile supplemental primary lateral incisor distal to permanent right lateral incisor(Fig 4). Parent gave a history of extraction of deciduous right lateral incisor six months back. There was no significant medical history and no history of trauma.Supplemental tooth was rotated in mesiopalatal direction. Anterior maxillaryocclusal view showed the presence of permanent supplemental lateral incisor in the permanent dentition (Fig 5). Deciduous supplemental lateral incisor was extracted under LA. The patient was advised to maintain good oral hygiene and to get periodic check up. mesiopalatal direction. Anterior maxillary occlusal view showed the presence of permanent supplemental lateral incisor in the permanent dentition (Fig 5). Deciduous supplemental lateral incisor was extracted under LA. The patient was advised to maintain good oral hygiene and to get periodic check up.

Figure 4: Intraoral photograph showing right supplemental lateral incisor

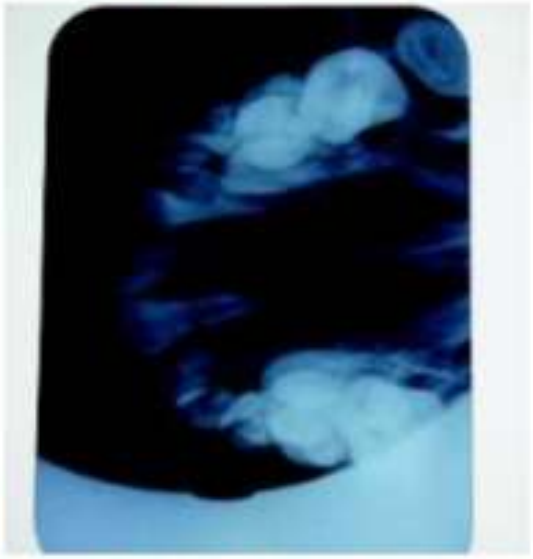

Figure 5: Maxillary anterior occlusal radiograph showing primary and permanent right supplemental lateral incisors

Discussion

According to literature supplemental tooth is a rare entity in primary dentition. Additional teeth are of normal shape and size, often erupt in proper alignment in spaced primary dentition might be less detected by parents. Lateinitialdentalvisit may failto detect the supernumerary tooth, which have erupted and exfoliated[3].Etiology of supernumerary teeth are unclear. It may result from any disturbance in the initiation and proliferation stages of odontogenesis[4,2].Trauma, environmental factors, phylogenetic theory (regression to the anthropoids whose dental formula had more teeth), activism (reversion to a more primitive type of dentition), dichotomy of tooth germ, hyperactivity of the

dental lamina and autonomic recessive inheritance linked to the X chromosome some have been suggested. According to dichotomy theory which seems the most plausible in case of supplemental tooth, the tooth bud splits into two parts of equal or unequal size.

Anomalies in primary dentition are usually associated with an increased incidence of anomalies of the succedaneous permanent dentition[5]. Here one case is associated with supernumerary permanent lateral incisor but not the other. Radiographic investigation is necessary to rule out presence of supernumerary tooth/teeth in both primary and permanent dentition.

Supernumerary tooth may associated with syndromes and show familial occurrences. Common ones are cleft lip and palate,Gardner's syndrome and cleidocranialdysostosis. This should be ruled out[6].Presented cases was not associated with syndromes

In primary dentition about two third of supernumerary teeth erupt, while in permanent eruption frequency varies between 15% and 34%[7].Distinguishing between a normal tooth and its supplemental twin may be difficult. A supplemental tooth may exhibit deep palatal pith and coronal invagination[7].Supernumerary teeth precipitate a variety of complications such as impactions and delay in the eruption of the permanent teeth, deviation of the tooth from their normal position, crowding and malocclusion, growth of affected jaws, aesthetic problem[8]. Treatment varies depends on factors like age, cooperation,aesthetics,position of supernumerary teeth causing any malocclusion, development of adjacent and succedaneous tooth. Tooth should be observed till the child is old enough, if it is not interfering with the development and eruption of adjacent and succedaneous teeth. Any pathological changes,interfering with eruption of permanent teeth, crowding along with aesthetic problem and difficulty in oral hygiene maintaince may need earlyremoval of supernumerary teeth.If it is difficult to determine which tooth is supplemental, extract the tooth that is most displaced from the line of arch[9].

Conclusion

Hyperdontia observed in primary dentition should alert the clinician to the possibility of hyperdontia in the permanent dentition. A careful clinical and radiographic survey of maxillary and mandibular arches will provide the clinician and the parents with a preview of any potential problems likely to develop during the course of the child's growth and development.

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