

Double Teeth in Deciduous Maxillary Incisor Region: A Rare Anomaly

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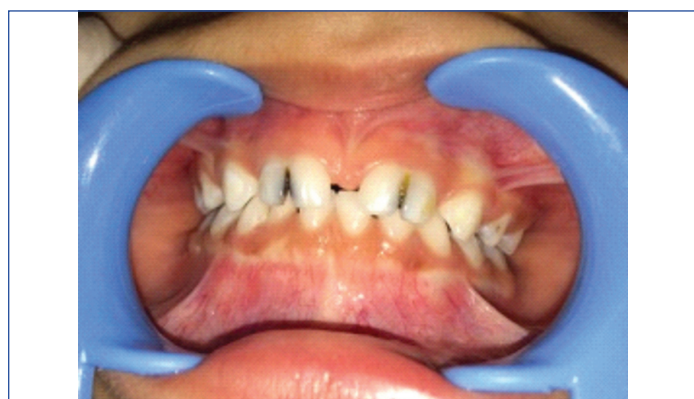
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A four-year-old male patient reported with the chief complaint of carious teeth. Patient's medical history was non-contributory and his parents had non-consanguineous marriage. On intraoral examination, unusually large deciduous maxillary incisors were observed. Further detailed examination revealed that bilaterally there was fusion of deciduous maxillary central and lateral incisor with proximal caries [Table/Fig-1]. There was no evidence of any supernumerary or missing tooth clinically in maxillary and mandibular arch [Table/Fig-2]. Carious lesion was present with respect to 54, 55, 64, 65, 74, 75, 84, and 85. Patient was further subjected to radiographic evaluation. Radiovisiography (RVG) of maxillary anterior region showed the following [Table/Fig-3]:

- Fusion of crown and root between 51, 52 and between 61, 62 with distinct pulp chamber and pulp canal in each tooth.
- Proximal carious lesion approaching pulp in crown portion of fused 51, 52 and 61, 62.
- Developing tooth bud of 11 and 21 in periapical portion of fused 51, 52 and 61, 62.



[Table/Fig-3]: RVG radiograph showing fusion between 51, 52 and 61, 62 with distinct pulp canal and proximal caries in coronal portion and developing tooth bud of 11 and 21.



[Table/Fig-1]: Photograph showing fusion between primary maxillary central and lateral incisor bilaterally with proximal caries.



[Table/Fig-2]: Photographs showing normal number of primary teeth in maxillary (upper) and mandibular arch (lower).

On screening, there was no such anomaly in parents, siblings and any other family member. Patient was referred to the department of paediatric and preventive dentistry for management of carious lesions. Carious lesion was excavated with respect to fused 51, 52 & 61, 62 using chemomechanical method and composite restoration was done [Table/Fig-4]. Patient was kept under regular and periodic follow-up after every two months, follow-up period being eight months till now and patient is still under periodic follow-up.



[Table/Fig-4]: Photograph showing management of carious lesion in fused 51, 52 and 61, 62 by composite restoration.

DISCUSSION

The developmental anomaly of union of two teeth in deciduous or permanent dentition is known as fusion. Currently, the terminology "double tooth" is used to describe fusion and gemination due to difficulty in clinical differentiation, as the phenomenon of fusion is often confused with gemination especially in the presence of involvement of a supernumerary tooth [1]. The prevalence of tooth fusion in the primary dentition is reported to be 0.5-2.5% [2]. Shilpa G et al., reported a prevalence of double teeth in primary dentition in South India as 0.95% [3]. Sekerci AE et al., found the prevalence of double primary teeth in children under 12 years of age in their study to be 0.38% [4]. Bilateral fusion is

less frequent than unilateral fusion. A survey of the literature has revealed prevalence estimates for bilateral double teeth ranging from 0.01 to 0.04% in the primary, and 0.05% in the permanent dentition [4]. Sekerci AE et al., reported the prevalence of bilateral double teeth in primary dentition as 0.08% in their study [4]. To the best of author's knowledge, this is the second case of bilateral fusion between primary central and lateral incisor in maxillary region that has been reported till date [1]. The dental management of the fused primary teeth depends upon clinical situation which includes regular monitoring for their normal exfoliation and in some situations, extraction to guide eruption of succedaneous teeth, restoration, endodontic therapy can be considered if required.

Fusion of teeth can lead to aesthetic problems due to improper spacing, diastema, malocclusion hence, orthodontic and prosthodontic rehabilitation should be taken into consideration. Presence of deep fissure or groove at the point of union of teeth makes it more prone to caries. Double primary teeth may cause delayed resorption of the root because of the greater root mass and increased area of root surface relative to the

size of the permanent successor crown, resulting in delayed or ectopic eruption of permanent teeth [5]. When fusion occurs in primary dentition, succedaneous dentition may show absence of succedaneous teeth, supernumerary teeth, peg-shaped permanent maxillary lateral incisors, dens in dente, nail disorders, syndactyly, and successional conical, macrodontia and double permanent teeth [4].

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