

Case Report

Natal teeth with subesquent bilateral fusion of Primary Mandibular Incisors A Case Report

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ABSTRACT

Background: Natal teeth can occur as an isolated dental finding, but can be associated with syndromes and developmental disturbances of tooth.

Case Report: A case is described in which a 2 day old non-syndromic male child presented with two natal teeth in the mandibular incisor region. The teeth were mobile and were extracted because of fear of aspiration. After two years, child presented with complaint of missing lower front teeth. Oral examination demonstrated that <71-72> and <81-82> were fused together. Intra-oral periapical radiograph and computed tomography scan confirmed the diagnosis of fusion of <71-72> and <81-82>.

Discussion: Presence of natal tooth is one of the variations observed in newborn's oral cavity. Many theories have been proposed to explain the etiology of premature eruptions of teeth: fever, endocrine disorders, dietetic deficiencies, family history and association with some syndromes. The majority of natal teeth represent the early eruption of normal primary deciduous dentition and less than 10% of natal teeth are supernumerary.

Conclusion- The present case concluded that the children with natal teeth requires careful examination and long term follow up, as they may be associated with anomalies in the primary dentition.

Key words: Developmental, Fusion, Natal teeth, Neonatal teeth.

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Introduction:

Natal teeth are defined as the teeth that are present in the mouth at birth, with incidence of approximately 1:2000 to 1:3000 in live births.¹ Natal teeth usually occur in pairs and most commonly affected teeth are lower primary central incisors (85%).² Natal teeth might resemble normal primary teeth; but, in many instances, they are poorly developed, small, conical yellowish, with hypoplastic enamel and dentin, and with poor or absent

root formation. Most natal teeth are mobile and complications that arise from the presence of natal teeth include discomfort during suckling, sublingual ulceration with resultant feeding refusal and aspiration of teeth.¹ The etiology of natal teeth is not known, but they can be associated with syndromes and developmental disturbances of teeth.^{2,3}

Developmental dental disorders may be due to abnormalities in the differentiation of the dental lamina and the tooth germs.

Fusion is a developmental anomaly characterized by the union of two separately developing tooth germs typically leading to one less tooth than normal in the affected arch. Bilateral dental fusion in the primary dentition is a rare dental anomaly (0.01-0.04%).⁴

The present article describes a case of presence of natal teeth with subsequent bilateral fusion of primary mandibular incisors in a non-syndromic patient. To our knowledge such a case has never been reported in the dental literature.

Case Report:

A 2 days old male child reported to the Department of Pediatric with Preventive Dentistry, Faculty of Dental Sciences, CSM Medical University, Lucknow, India for the evaluation of teeth present in the mandibular central incisor region. The child was born after a normal pregnancy and his mother had not taken any medications during the pregnancy. At birth he appeared to be physically normal except for two teeth like structures in the oral cavity. This child was the first in the family and there were no dental developmental anomalies reported in histories of paternal/maternal side.

Oral examination revealed two teeth like structures in the region of mandibular primary central incisors, loosely attached to the alveolus exhibiting grade II mobility (Figure 1A).

A diagnosis of natal teeth was made. Extraction was chosen as treatment of choice and after obtaining the consent from the parents, prophylactic administration intramuscular injection of vitamin K was done one hour prior to procedure. The extraction of teeth followed by soft tissue curettage was done under topical anesthesia, which the patient tolerated well. The extracted teeth had crowns but were devoid of roots (Figure 1B). The patient was reevaluated after 2 days, and the recovery was found to be uneventful. Parents were advised regular follow up but they failed to maintain it.



Figure 1: (A) Preoperative clinical appearance of natal teeth; (B) Extracted natal teeth.

After two years, the patient reported again with the chief complaint of missing lower front teeth. Oral examination demonstrated that <71-72> and <81-82> were fused together (Figure 2A). Radiographic examination indicated the presence of separate pulp chambers and root canals in the fused roots of <71-72> and <81-82> (Figure 2B) and it was confirmed by computed tomography scan (Figure 3). With these investigations, conclusive diagnosis of fusion of <71-72> and <81-82> was made.

Discussion:

Presence of natal tooth is one of the variations observed in newborn's oral cavity. Many theories have been proposed to explain the etiology of premature eruptions of teeth: fever, endocrine disorders, dietetic deficiencies, family history and association with some syndromes.¹

Moreover, natal teeth with dental fusion have been reported in conjunction with some syndromes like Ellis-van-creveld and Hallerman-streiff syndrome.^{2,3} However, no such causes could be attributed in the present case.

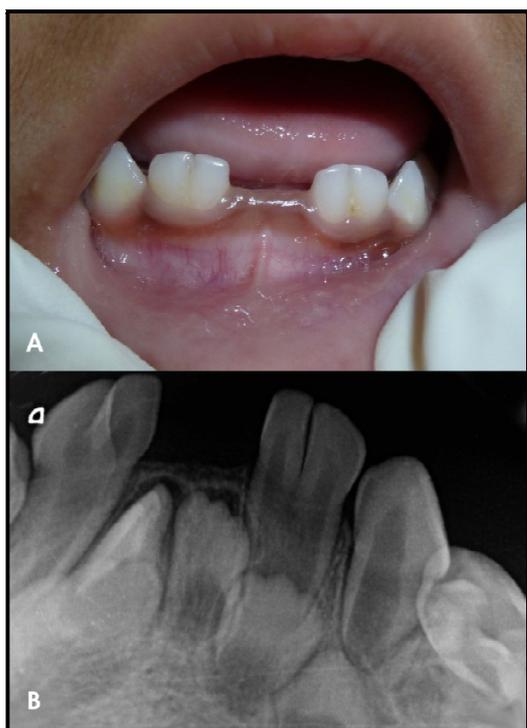


Figure 2: (A) Fusion of clinical crown of <71-72> and <81-82>; (B) Radiograph showing type-I morphology and complete fusion of <71-72> and type- IV fusion of <81-82>.

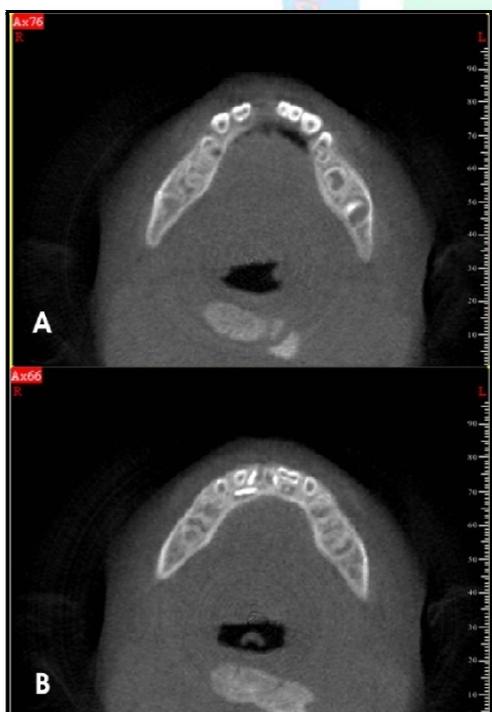


Figure 3: 3-D computed tomography (CT) view of <71-72> and <81-82>. (A) Horizontal view at crown portion; (B) Horizontal view at apical portion.

The etiology of fusion is not exactly known, it is believed that some physical forces or pressures cause the contact of developing teeth.⁴ We believe that in the present case also, the pressure from the natal teeth resulted in the contact between the developing tooth germs of primary mandibular incisors and their subsequent fusion.

The majority of natal teeth represent the early eruption of normal primary deciduous dentition and less than 10% of natal teeth are supernumerary.¹ However, in the present case all the teeth in the deciduous dentition were present suggesting that the natal teeth could have been supernumerary teeth of the predeciduous dentition.

Conclusion

The present case concluded that the children with natal teeth requires careful examination and long term follow up, as they may be associated with anomalies in the primary dentition.

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