NATAL TEETH IN MAXILLARY CANINE AND MOLAR REGION- A RARE CASE REPORT

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ABSTRACT
Natal teeth are a rare anomaly with a rarer prevalence in maxillary molar region. They are most commonly a part of deciduous dentition. The prevalence is between 1 in 2000 - 3500 live births. The incidence of natal teeth is a rare anomaly, which has been associated with many different types of Syndromes and Systemic diseases. The case herein is of a 6 day old neonate reported to the dental clinic with multiple erupted teeth (canine and molar region) in the maxillary arch. Prevalence of natal teeth has been reported to be 1% in maxillary canine and molar region. The main objective was to manage this problem with minimal damage to the future teeth and to prevent aspiration of these anomalous teeth. Management was done by extraction of the offending mobile natal teeth.

Key Words: Natal Teeth, Deciduous Dentition and Neonatal Teeth

INTRODUCTION
First deciduous tooth erupts in the oral cavity at about six-months of age (Alexander & William, 2006). Teeth present at the time of birth are called Natal teeth. Teeth which erupt in the neonatal period that is, within thirty days of birth are Neonatal teeth (Massler & Savara, 1950). Teeth erupting beyond the natal period of thirty days (i.e. erupting within 1-3.5 months) are usually referred to as early infancy teeth (Kates et al., 1984; Anegundi et al., 2002). Other synonyms are congenital teeth, fetal teeth, Precocious dentition, Dentino-Preccocious and Dens congenitale. Natal and neonatal teeth erupt commonly in the mandibular anterior region, but several reports show their occurrence at unusual sites in the oral cavity, it has been observed that, natal and neonatal teeth erupt 85% in mandibular incisor region, 11% in maxillary incisor region, 3% in mandibular canine region and 1% in maxillary canine and molar region (Kamboj & Cougule, 2009). The exact etiology is unknown, it is thought be due to infection, febrile states, trauma, malnutrition, hyperactivity of osteoblastic cells within the tooth germ, hormonal stimulation and maternal exposure to environmental toxins (Leung & Robson, 2006). The most acceptable theory is based upon the result of the superficial localization of the dental follicle, probably related to the hereditary factor.

History
Natal teeth have been the subject of curiosity and study since the beginning of time, being surrounded by beliefs and assumptions. Titus Livius, in 59 B.C., considered natal teeth to be a prediction of disastrous events. Caius Plinius Secundus (the Elder), in 23 B.C., believed that a splendid future awaited male infants with natal teeth, whereas the same phenomenon was a bad omen for girls. In Poland, India, and Africa, superstition prevailed for a long time, and in many African tribes children born with teeth were murdered soon after birth because they were believed to bring misfortune to all they would contact (Bodenhoff & Gorlin, 2012). Historical figures, such as Chanakya, Richard III, Louis XIV, Napoleon, Mirabeau, Mazarin, Cardinal Richelieu, Zoroaster and Hannibal, were described as examples of the former (More et al., 2012).

CASE REPORT
A six days old male neonate was referred to the Department of Dentistry of S.P Medical College, Bikaner, Rajasthan by the Department of Pediatrics with the chief complaint of teeth present in the upper jaw since birth. Family history was non-contributory.

Examination of the oral cavity revealed natal teeth in the right side maxillary canine and molar region the teeth exhibited an opaque whitish coloration. The crown was partially erupted and the appearance of the gingiva was mildly inflamed. Since there was neither difficulty in breast feeding nor the fear of aspiration, the patient was recalled after a week for review.

On review visit after 10 days, the patient showed erupted natal teeth in the right side maxillary canine (height approx. 4-5 mm) and molar (height approx. 3-4 mm) region associated with edema of the gingival tissue (Fig. 1). Multiple unerupted but palpable teeth like structures in the left side maxillary canine and anterior region were also appreciable (Fig. 2). Now the teeth of the right side were erupted in the oral cavity with >2 mm mobility. Considering the severe mobility and fear of aspiration of natal teeth extraction of the teeth was planned.

Words: Natal Teeth, Deciduous Dentition and Neonatal Teeth

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After parents motivation, education and taking consent the natal teeth were extracted and the socket was gently curettaged. Failure to curette the socket may cause development of odontogenic lesions and necessitate future treatment.

Figure 1: Natal teeth in the right side maxilla
Figure 2: Tooth like structures in the left side maxilla
Figure 3: Extracted deciduous canine and first molar

The morphology of the extracted teeth presented crown but were devoid of root. Their crown shape resembled that of deciduous canine and first molar (Fig. 3). The parents were informed about the importance of future follow-up. The patient was recalled after two weeks and it was reported by parents that he was feeding normally without any post-operative complications.

DISCUSSION
Natal and neonatal teeth are rare events in the oral cavity. The incidence of natal and neonatal teeth has been reported to vary between 1:2000 and 1:6000 births respectively. Natal teeth are more frequent than neonatal teeth, the ratio being approximately 3:1. The most commonly affected teeth are the lower primary central incisors. More than 90% of natal and neonatal teeth are prematurely erupted deciduous teeth whereas less than 10% are supernumerary teeth. Natal teeth usually occur in pairs. The eruption of more than two natal teeth is rare. Occasionally, a child may be born with a considerable number of erupted deciduous teeth (Masatomi et al., 1991; Zhu & King, 1995; Ziai et al., 2005).

Etiology
The most acceptable theory is based upon the result of a superficial localization of the dental follicle, probably related to the hereditary factor. Many times the natal teeth are not related to a medical condition. Rarely, they may be associated with Ellise-van Creveld syndrome, Hallermanne-Streiff syndrome, Pierre Robin syndrome, Soto syndrome, Pachyonychia congenita or Jadassohne-Lewandowski syndrome, Epidermolysis bullosa simplex, cleft lip and cleft palate (More et al., 2012).

The majority of natal teeth represent the early eruption of normal primary deciduous dentition. Natal teeth might resemble normal primary dentition in size and shape; however, the teeth are often smaller, conical dental structures with poor or absent root formation.

About 70% of the natal and/or neonatal teeth are firmly fixed but few subsequently become loose which permit great mobility, facilitating spontaneous loss or exfoliation, with gingival edema and inflammation, and some bleeding areas. Similarly, a small fraction of those natal teeth initially loose become fixed.

Classification:
Hebling (1997) classified natal teeth into 4 clinical categories (Anegundi et al., 2002)
1. A shell shaped crown poorly fixed to the alveolus by gingival tissue and absence of a root.
2. A solid crown poorly fixed to the alveolus by gingival tissue and little or no root.
3. An eruption of the incisal margin of the crown through the gingival tissues.
4. Edema of gingival tissue with an unerupted but palpable tooth.

CONCLUSION
Management of Natal teeth may vary from, conservative treatment such as smoothing the incisal edge with an abrasive instrument in case of mild irritation to the oral cavity (Allwright, 1958) up to radical intervention like extraction and curettage.
Tooth extraction is indicated in cases where the tooth is not firmly attached to gingiva and excessively mobile which is associated with the risk of aspiration. Extraction in our case was planned after the 10th day of life to prevent hemorrhage and the need to administer vitamin K before extraction (0.5 -1.0 mg I.M). This waiting period before tooth extraction is due to the need to wait for commensal flora of the intestine to become established and to produce vitamin K, this is essential for production of prothrombin in liver (Leone & Aradjo, 1994).

In our case extraction of the natal teeth present in the right side maxillary canine and molar region followed by curettage was planned because of excessive mobility of the teeth to avoid the risk of aspiration.

As reported, the incidence of natal teeth in maxillary canine and molar region is in only 1% so, this is a rare case having almost all the types described by Hebling (1997), natal teeth present in maxillary molar region had shell shaped crown which was poorly fixed to the alveolus by gingival tissue with absence of a root as in Hebling’s class I (Firoza et al., 2011).

Toothe present in canine region was solid crown which was poorly fixed to the alveolus with no root as in Hebling’s class II, on first visit only incisal margin of the crown through the gingival tissues was visible as in Hebling class III, in maxillary anterior region and on left side edema of gingival tissue with an unerupted but palpable tooth was seen as in Hebling class IV (Robson et al., 2001).

Extraction of mature natal or neonatal teeth may cause loss of space, hindering or preventing the eruption of permanent teeth but the risk associated with not extracting mobile natal or neonatal teeth is far greater.

REFERENCES