Natal Teeth – A Case Report

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ABSTRACT

Teeth that are present in newborn infant are called "natal teeth". In some cases, the infant is born without teeth, but eruption may occur in the first four weeks following delivery. These types of teeth are called "neonatal teeth". They are most commonly the mandibular central incisors, which are the teeth that usually erupt first. The incidence of natal and neonatal teeth is difficult to determine, and reports vary widely, most certainly under reported because in some cultures great fear and negativity was associated with natal teeth. One re-view of 359 recorded cases suggests an incidence of 1 in at least 3,000 births. Natal teeth are more common than neonatal teeth with a ratio of 3:1. Natal teeth might cause discomfort to a nursing mother and present a risk of aspiration and swallowing by the infant if they are loose. Also, they may cause irritation and trauma to the infant's soft tissues. Under these circumstances, natal teeth need to be extracted. In this article, a case report of infant with two natal teeth is presented. The teeth were present in the mandibular incisor region and excessively mobile. Because the teeth caused problems in the nursing process and ran a risk of aspiration, they were removed and histopathologically examined.

Key Words: Natal tooth, Neonatal tooth, Hypoplasia


INTRODUCTION

In 1950, Massler and Savara1 introduced the now commonly used terms “natal teeth” for teeth present at birth and “neonatal teeth” for teeth that erupt within the first 30 days of life. These terms only define the time of eruption and give no consideration to anatomy, histology or whether the tooth is a component of primary dentition or supernumerary teeth.2,3 Various terms such as congenital teeth, fetal teeth, pre-deciduous teeth, precociously erupted teeth (Mayhall and Bodenhoff), premature teeth, dentitia praecox and dens connatalis have been used to describe these teeth in the past. The normal eruption of the primary teeth typically begins at six months of age.4 Natal teeth are present at birth and are usually a benign problem.5 However, natal teeth might interfere with breastfeeding and, if loose and mobile, might be swallowed or aspirated during nursing.6

The presence of natal and neonatal teeth is definitely a disturbance of biological chronology whose aetiology is still unknown.7 It has been related to several factors, such as superficial position of the germ,8,9 osteoblastic activity inside the germ area related to the remodelling phenomenon,10 transmission of a dominant autosomal gene11,12 (hereditary), eruption accelerated by febrile states13 or hormonal stimulation, malnutrition and hypovitaminosis.

Natal teeth may also be associated with cleft lip, cleft palate14 and cyclopia. Most of the time, natal teeth are not related to a medical condition. However, sometimes they may be associated with Ellis-van Creveld Syndrome,15
Hallermann-Streiff syndrome, Jadassohn-Lewandowsk Syndrome, Soto syndrome.

Studies showed that the incidence of occurrence of natal and neonatal teeth is 85% in mandibular incisors and usually in pairs, 11% in maxillary incisors, 3% in mandibular canines and molars and only 1% in maxillary posterior regions. Natal and neonatal cuspids are extremely rare. More than 90% of natal and neonatal teeth are prematurely erupted whereas less than 10% are supernumerary. With respect to gender, there was no difference in prevalence between males and females. However, a predilection for females was cited by Kates et al (1984) reporting a 66% proportion for females against a 31% proportion for males. A case report is presented in this article where an infant was born with two natal teeth.

**CASE REPORT**

A 12 days old female infant was brought to department of paediatric dentistry by her parents with the chief complaint of teeth in her lower jaw. Mother also complained that child exhibits pain during suckling and could not nurse properly (Figure 1 & 2). There was no familial history of any similar oral manifestation. Medical history revealed that the infant was delivered naturally following a 40-week pregnancy. There was no evidence of systemic disease, congenital anomalies or syndromes. Intraoral examination revealed calcified teeth-like structures, whitish yellow in colour and exhibit grade II mobility are present corresponded to those of teeth 71 and 81. The structures were smaller in overall dimensions as compared to the corresponding primary teeth. The baby seemed to be uncomfortable and mouth was kept open during feeding and hence was spoon fed. Examination of the rest of intra oral mucosa revealed no other lesions.

Due to lack of co-operation from the baby, intraoral radiographs could not be taken. The teeth were diagnosed as “natal teeth” since it was present in the infant’s mouth at the time of the delivery. It was decided to extract the mobile natal teeth for two reasons: a) to prevent aspiration and b) to ensure proper feed for the baby.

Extraction was done with minimal blood loss and haemostasis was readily achieved and teeth were send for histological examination. The removed natal teeth had dimensions of 5 mm to 4 mm and the root development had been
incomplete. It also had a hypoplastic appearance (Figure 2).

Histological report suggests normal enamel with enamel lamellae and dentin with dentinal tubules with prominent terminal branching with large vascular pulp (Figure 4). There was no evidence of root formation. The features were suggestive of natal teeth. After 2 days of extraction infant was re-evaluated, recovery was satisfactory and feeding was normal.

DISCUSSION

Normally primary teeth begin to erupt at age of six months\(^1\) which is a milestone both in terms of functional and psychological changes in the child’s life and in emotional terms for the parents. The expectations about the eruption of the first teeth are greater and even more when the teeth appear early in the oral cavity. In rare cases, the chronology to tooth eruption is significantly altered and the first teeth are present at birth or will emerge shortly after birth.

On the basis of clinical characteristics, these teeth were then classified into: Mature—when they are fully developed in shape and comparable in morphology to the primary teeth; immature—when their structure and development are incomplete. Hebling (1997)\(^2\) recently classified natal teeth into 4 clinical categories:

1. Shell-shaped crown poorly fixed to the alveolus by gingival tissue and absence of a root;
2. solid crown poorly fixed to the alveolus by gingival tissue and little or no root;
3. eruption of the incisal margin of the crown through gingival tissue;
4. oedema of gingival tissue with an un erupted but palpable.

Clinically, the natal teeth are small or of normal size, conical or of normal shape. They may reveal an immature appearance with enamel hypoplasia and small root formation.

Natal teeth may exhibit a brown yellowish or whitish opaque color. They are attached to a pad of soft tissue above the alveolar ridge. The dimensions of the crown of these teeth are smaller than those of the primary teeth under normal conditions. There is some fear that a natal tooth could come loose, and the baby could aspirate (inhale) it. However, this appears to be rare.

Most frequent difficulty is during feeding including Riga-Fede disease\(^2\) where the presence of natal or neonatal teeth in association with nursing or suckling leads to ulceration on the ventral surface of tongue. Prolonged gingival irritation from natal or neonatal teeth may cause localized inflammation of the gingiva or fibrous hyperplasia.

Histologically, the majority of natal teeth have dysplastic or hypomineralized enamel, irregular dentin and osteo dentin in the cervical portions, and interglobular dentin in the coronal regions.\(^2\) The incisal edge might lack enamel. Both Hertwig’s sheath and cementum might be absent. There is often an increase in the number of dilated blood vessels in the pulpal tissue. Root formation is often incomplete.

Differential diagnosis may include bohn’s nodules and epulis might be confused with natal teeth. Bohn’s nodules are usually multiple and found along the buccal and lingual aspects of the mandibular and maxillary ridges.\(^2\) These remnants of mucusgland tissue are firm with whitish rice-like appearance, asymptomatic, do not interfere with feeding and are spontaneously shed within several weeks.

Epulis are tumour-like growths of the gums that might be either sessile or pedunculated, and are reactive rather than neoplastic lesions. Other differential diagnoses include lymphangioma and hamartoma of the alveolar ridge.

A dental roentgenogram is always indicated to differentiate the premature eruption of a primary deciduous teeth from a supernumerary tooth.\(^5,6\)

Difficulty in obtaining a radiographic appraisal of the region, due to the child’s age, prevented immediate confirmation of whether the tooth in question belonged to the normal series or was supernumerary. However, with subsequent patient follow-up and eruption of the remaining teeth, made possible to confirm that the teeth belong to normal complement of primary dentition.

Regarding management of natal teeth, no intervention is necessary if teeth is asymptomatic and does not interfere with breastfeeding. Teeth extraction if indicated should be planned carefully due to its several complications like post extraction haemorrhage and premature loss of primary teeth may cause consequent malocclusion in permanent dentition.
Consultation with a paediatric dentist is strongly recommended. Extraction of the teeth should be followed by curettage of the socket if necessary to prevent continued development of the cells of the dental papilla. Failure to curette the socket might result in the eruption of odontogenic remnants and necessitate future treatment.

Paediatricians are usually the first who find natal teeth and early consultation with a paediatric dentist can prevent complications. Although their occurrence is rare, it is still possible to encounter natal teeth in daily practice. In these cases, it is important to make the appropriate decision, taking into consideration the adverse effects these teeth may have for both the infant and the mother.

REFERENCE


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