

CLINICAL NATAL AND NEONATAL TEETH: A REPORT OF FOUR CASES

Assistant Prof. Dr. Eda Haznedaroğlu, Prof. Dr. Ali Menteş, Canan Duman

ABSTRACT

A rare phenomenon, natal and neonatal teeth are observed in infants at birth or during the first 30 days of life, respectively. They manifest with different clinical characteristics and may lead to a number of complications. Natal teeth can interfere with breastfeeding and, if excessively mobile, may be swallowed or aspirated during nursing. With periodic follow-up, a pediatric dentist can provide preventive oral health care. More studies are necessary to confirm the etiology and nature of natal/neonatal teeth, and to determine if they are deciduous or supernumerary. This report presents 4 cases of natal/neonatal teeth causing oral tissue injuries in babies.

INTRODUCTION

One of the main aims of dentistry is to provide care during the first year of life as a way of maintaining oral health.¹ Primary teeth typically erupt between 4 and 6 months of age.² Many terms have been used in the literature to describe teeth that erupt before the normal time, eg, fetal teeth, predeciduous teeth, congenital teeth, and dentitia praecox.³ According to the definition offered by Massler and Savara, which uses only the time of eruption as a reference,⁴ natal teeth are those apparent in the oral cavity at birth and neonatal teeth are those that erupt during the first 30 days of life. This description has been widely accepted in the field.^{3,5-7}

Whether or not to treat natal and neonatal teeth remains a question. In the decision to preserve these teeth in the oral cavity, several factors should be considered, such as degree of mobility and implantation, difficulties or interference with breastfeeding, probability of traumatic injury, and whether the tooth can be considered normal dentition or is supernumerary.^{1,7}

CASE DESCRIPTIONS

This report presents 4 cases referred to the Department of Paediatric Dentistry of Marmara University in Istanbul, Turkey: one with not only a natal but also a neonatal tooth, 2 with natal teeth, and a fourth case with a neonatal tooth.

Case 1 was a 7-day-old male infant with an anamnesis of an exfoliated tooth on the mandibular anterior area (**Figure 1A**). We were concerned that it might be swallowed, but fortunately it was not aspirated. At the 9-month follow-up visit, we learned that the incisors had erupted at the third and eighth month (**Figure 1B**).

Figure 1



(A) Clinical appearance of the patient at first visit.



(B) Clinical appearance of the patient after 8 months .

Case 2 was a 3-day-old male infant referred to our department with a lower incisor natal tooth, and in 3 weeks a neonatal tooth had also erupted. Laceration of the mother's breasts and excessive luxation were detected. Because of these issues, the natal and neonatal teeth were extracted with topical anaesthesia (**Figure 2A**). At the 2-year follow-up visit, the primary incisors had not erupted (**Figure 2B**).

Figure 2



(A) Clinical appearance of the patient at first visit.



(B) Clinical appearance of the patient at 2 years.

Case 3 was a 5-day-old male infant referred to our department with a natal tooth. Sublingual ulceration (Riga-Fede disease) and severe luxation were detected (**Figure 3A**). The natal tooth was extracted with topical anesthesia to prevent traumatic ulceration of the sublingual area and more serious complications such as aspiration of the tooth (**Figures 3B & C**). In this case, the primary incisors had not erupted at 2 years.

Figure 3



(A) Clinical appearance of Riga-Fede disorder.



(B) During surgical treatment of the patient.



(C) Clinical appearance of the extracted tooth.

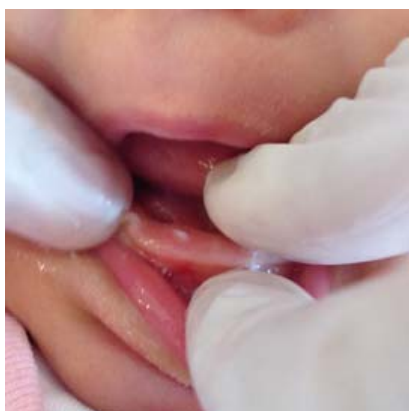
Case 4 was a 3-week-old female infant referred to our department with a neonatal tooth. The mother's breasts were lacerated, but the neonatal tooth had newly erupted and luxation was not detected (**Figure 4A**). A silicone breast protector and regular follow-up examinations were recommended to the mother, and proper oral hygiene was explained. Three months later, we again examined the patient (**Figure 4B**); breastfeeding had been continued with the breast protector. However, after 6 months, dental caries had formed (**Figure 4C**). A twice-daily smear layer of toothpaste with a 500 ppm fluoride content was prescribed.

In all 4 cases, an X-ray was not taken because of the age of the patients.

Figure 4



(A) Clinical appearance of the neonatal tooth of the patient.



(B) Clinical appearance of the neonatal tooth after 3 months.



(C) Clinical appearance of the neonatal tooth after 6 months.

DISCUSSION

The most commonly involved natal and neonatal teeth are lower incisors, as we described in our patients.⁵ These teeth often present with hypoplastic enamel and underdeveloped roots, with resultant mobility.^{1,8} Excessive luxation was detected in 2 of our patients. In the first case, the exfoliated tooth was evident. We were concerned that due to excessive luxation the tooth could be swallowed, but it was not.

Our second patient had both natal and neonatal teeth. We could not find another case in the literature in which the same patient had both types of teeth.

One of the major complications of natal and neonatal teeth is ulceration on the ventral surface of the tongue caused by the tooth's sharp incisal edge. The lesion has been subsequently termed Riga-Fede disease.^{6,9,10} Ulceration on the ventral surface of the tongue and excessive mobility were detected in our third case. The natal tooth was extracted to prevent the baby from having traumatic ulceration of the sublingual area and a more serious complication like aspiration of the tooth.

The most common complaint from mothers of these infants are problems with nursing.^{1,5,7} In our fourth case, the neonatal tooth was preserved in the mouth. The mother received a breast protector and oral hygiene education. However, after 7 months, dental caries had begun because the parents had not cleaned the tooth.

Although more than 90% of natal and neonatal teeth are a prematurely erupted deciduous series of dentition, less

than 10% are supernumerary.^{7,8} In our first case number, we observed lower incisor eruption at the third and eighth month, whereas in our second and third cases, the primary incisors had not erupted at 2 years. Radiographic examination is essential for the differential diagnosis between supernumerary deciduous teeth and teeth of normal dentition.² In all our cases, an X-ray was not taken because of the age of the patients and because the indication was clear.

In general, extraction in infants may cause bleeding problems because the bacterial flora in the digestive tract of newborns may be ineffective in the production of vitamin K in the first 10 days after delivery. Vitamin K plays a major role in prothrombin synthesis in the liver. Therefore, it is always better to wait 8 to 10 days after birth for any extraction procedure.⁸ If extractions are planned within the first 10 days of life, then it must be confirmed that the child has been given the routine postnatal injection of vitamin K.¹¹

SUMMARY

The incidence of natal/neonatal teeth is a rare phenomenon. When it does occur, it manifests with different clinical characteristics and leads to different complications. Periodic follow-up by a pediatric dentist to provide oral health care is recommended, as well as toothpaste containing 500 ppm fluoride at 6 months of age. More studies are necessary to confirm the etiology and nature of natal/neonatal teeth, and whether they are deciduous or supernumerary.

REFERENCES

1. Cunha RF, Boer FAC, Torriani DD, Frossard WT. Natal and neonatal teeth: review of the literature. *Pediatr Dent*. 2001;23(2):158-162.
2. Mhaske S, Yuwanati MB, Mhaske A, et al. Natal and neonatal teeth: an overview of the literature. *ISRN Pediatr*. 2013;18:956269.

3. Zhu J, King D. Natal and neonatal teeth. *ASDC J Dent Child*. 1995;62(2):123-128.
4. Massler M, Savara BS. Natal and neonatal teeth; a review of 24 cases reported in the literature. *J Pediatr*. 1950;36(3):349-359.
5. Leung AK, Robson WL. Natal teeth: a review. *J Natl Med Assoc*. 2006;98(2):226-228.
6. Hegde RJ. Sublingual traumatic ulceration due to neonatal teeth (Riga-Fede disease). *J Indian Soc Pedod Prev Dent*. 2005;23(1):51-52.
7. Moura LF, Moura MS, Lima MD, et al. Natal and neonatal teeth: a review of 23 cases. *J Dent Child (Chic)*. 2014;81(2):107-111.
8. Kumar A, Grewal H, Verma M. Posterior neonatal teeth. *J Indian Soc Pedod Prev Dent*. 2011;29(1):68-70.
9. Baldiwala M, Nayak R. Conservative management of Riga-Fede disease. *J Dent Child (Chic)*. 2014;81(2):103-106.
10. Graillon N, Dumont N, Guyot L. Riga-Fede disease: traumatic ulceration of the tongue in an infant. *Rev Stomatol Chir Maxillofac Chir Orale*. 2013;114(2):113-115.
11. McMillian D; Canadian Pediatric Society. Routine administration of vitamin K to newborns. *Pediatr Child Health*. 1997;2(6):429-431.

Address Correspondence To:

Assistant Prof. Dr. Eda HAZNEDAROGLU

Mailing address: Department of Pediatric Dentistry,
Dentistry Faculty, Marmara University
Buyukciftlik Sok. No: 6 Nisantasi, Sisli, Istanbul, Turkey

Telephone:00902122319120/510

Fax: 00902122465247

e-mail: ehaznedaroglu@marmara.edu.tr