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UNUSUAL PRESENTATION OF FOUR NATAL MOLARS AND ONE INCISOR IN THE SAME PATIENT: A CASE REPORT

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ABSTRACT

Introduction: Natal teeth are dental organs present at birth. The worldwide prevalence of natal teeth is 34.55 per 10,000. In 90% of cases, they are primary teeth, while in 10% of cases, they are supernumerary teeth. **Case report**: A 3-day-old male patient with a family history of natal teeth on the paternal side. Without pathological antecedents, the patient has received complete immunization according to his age, as well as the administration of vitamin K at birth. Intraoral examination revealed the presence of 5 dental organs diagnosed as natal teeth, including: 1 upper right molar, 1 upper left molar, 1 lower right molar, 1 lower left molar, and 1 lower central incisor. These teeth were observed to be hypermobile, mucosa-supported, and with generalized hypoplasia. The treatment of choice was the extraction of all five dental organs, under local anesthesia with 2% lidocaine. There were no complications, neither during the surgical procedure nor afterward. **Conclusion**: Dental extraction was the elective treatment in this case. No local or general complications were reported. The treatment of natal teeth should be personalized, taking into account the variables of each case.

KEYWORDS: Natal teeth; pediatric dentistry; supernumerary teeth.

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PRESENTACIÓN INUSUAL DE CUATRO DIENTES NATALES MOLARES Y UN INCISIVO EN EL MISMO PACIENTE: REPORTE DE UN CASO CLÍNICO

RESUMEN

Introducción: Los dientes natales son órganos dentarios que se presentan al nacimiento y los dientes neonatales son aquellos que erupcionan durante el primer mes de vida. Su incidencia es de 1 de cada 2,000 nacidos vivos, en el 90% de los casos se trata de dientes temporales y en el 10% se trata de dientes supernumerarios. El manejo de estos dientes depende de múltiples factores. La extracción está indicada cuando el diente es supernumerario o presenta hipermovilidad. **Reporte del caso clínico**: Paciente masculino de 3 días de nacido, con antecedentes de padre y abuelo paterno con dientes natales. A la exploración intraoral se observó la presencia de 5 órganos dentales, los cuales fueron diagnosticados como natales de los cuales se reporta: 1 molar superior derecho, 1 molar superior izquierdo, 1 molar inferior derecho, 1 molar inferior izquierdo, 1 incisivo central inferior. Los cuales se observaron con hipermovilidad, mucosoportados y con hipoplasia generalizada. El tratamiento de elección fue la extracción de los cinco órganos dentales, para realizar este procedimiento se infiltro lidocaína al 2%. Conclusión: La extracción dental fue el tratamiento electivo en el presente caso. No se presentaron complicaciones locales ni

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generales. El tratamiento de los dientes natales debe ser personalizado, así como valorarse las variables de cada caso.

PALABRAS CLAVE: Dientes natales; dientes neonatales; dientes supernumerarios.

INTRODUCTION

Odontogenesis is the process leading to the formation of teeth in both dental arches, involving the sequential appearance of two classes of teeth: primary and permanent teeth. It is a complex process involving the ectodermal epithelium, which forms enamel, and the ectomesenchyme, which forms dentin, pulp, cementum, periodontal ligament, and alveolar bone. In odontogenesis, the inductive trigger role is played by the ectomesenchyme or cephalic mesenchyme. The process of odontogenesis consists of two phases: morphogenesis or morphodifferentiation and histogenesis or cytodifferentiation (1-3). Dental eruption is a physiological process associated with growth, where the tooth moves from its original position in the jaw to its final position in the oral cavity (4). The normal eruption period of primary teeth begins around six months of age with the lower central incisors and ends around 24 months with the upper second molars. This process brings about various functional changes in a child's life and emotional experiences for parents. Expectations regarding the eruption of the first teeth are significant, but they can be even greater when teeth appear early in the oral cavity (5).

Teeth that appear prematurely, either at birth or after birth, are called natal or neonatal teeth. Natal teeth are those that erupt at birth, while neonatal teeth are dental organs that erupt within 30 days after birth. They are classified based on the degree of maturation or appearance (6). The worldwide prevalence of natal teeth is 34.55 (95% CI, 20.12 to 59.26)

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per 10,000. Subgroup analysis by continent showed that the prevalence of natal teeth ranged from 11.26 (95% CI, 7.58 to 16.61) per 10,000 in Asia through 75.32 (95% CI, 51.11 to 99.86) per 10,000 in North America (7). In 90% of cases, they are primary teeth, while in 10% of cases, they are supernumerary teeth. Regarding their location, 85% are mandibular central incisors, 11% are maxillary incisors, 3% are mandibular canines and molars, and 1% are maxillary canines and molars (1,6,8,9). Their occurrence is usually bilateral, with women presenting them more frequently. Although their etiology is unknown, various factors such as hypovitaminosis, hormonal stimulation, multiple steatoma, trauma, superficial positioning of dental germs, osteoblastic activity in a dental germ area, febrile states, or environmental factors may be involved (10). However, no conclusive relationships have been proven. The most acceptable theory is that the dental germ is located superficially. Although, Stamfelj et al. suggest that the presence of natal teeth in individuals with agenesis of primary successors is linked to faster or premature dental development rather than the superficial location of tooth germs (6). Histologically, most natal and neonatal teeth may follow a normal mineralization pattern but also present alterations in both enamel and dentin. Other findings include the absence of the Weil basal layer, Hertwig's sheath, and cementum, as well as an increase in the number of dilated blood vessels in the pulp (1,6,10).

Clinically, they appear as normal primary teeth, but are usually smaller and sometimes conical. They typically exhibit hypermobility due to their mucosa-supported nature caused by the lack of root formation and may have enamel alterations, they may have an immature appearance with irregular and sharp-edged hypoplastic enamel, often with a brownish-yellow/whitish opaque coloration (11). Importantly, radiographic findings often show an absence of the root. Treatment should be tailored to each tooth and each child. Available treatments

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include extraction or maintenance of the tooth in the dental arch. The most common complication of natal or neonatal teeth is traumatic ulceration of the ventral part of the tongue due to friction, known as Riga-Fede ulcer. There are no reports of bronchoaspiration. The treatment of natal and neonatal teeth should be carefully assessed, considering their mobility, administration of vitamin K, integrity, feeding commitment, and the presence of any ulcer (11,12). The aim of this study was to report a clinical case of five natal teeth in a single patient.

Clinical Case Presentation

This case involves a 3-day-old male patient who was brought by his father to the Pediatric Dentistry service at the Craniofacial Clinic of the DIF Hidalgo Children's Hospital, who reported the following: "My son was born with molars and teeth, I feel that they hurt when he eats, and I am afraid he might swallow them since they move a lot" (*sic*).

Informed consent was obtained, as well as the patient's medical history, which is on file at the DIF Children's Hospital, where the following information was observed: without pathological antecedents, the patient has received complete immunization according to his age, as well as the administration of vitamin K at birth. The hereditary family history was as follows: the patient's father and paternal grandfather were born with natal teeth, but the father does not remember which ones or their location, which were removed in the months following birth in both cases. No current pathological antecedents were reported.

Diagnosis

Upon extraoral physical examination, it was observed that the child had adequate skin coloration and hydration, and was responsive to external stimuli. Upon intraoral examination (Figure 1), the presence of 5 dental organs was observed, which were diagnosed as natal teeth, consisting of: 1 upper right molar, 1 upper left molar, 1 lower right molar, 1

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lower left molar, and 1 lower central incisor. These teeth were observed with hypermobility, mucosa-supported, and generalized hypoplasia. The labial and lingual frenulum were adequately inserted, and the tongue showed no lesions (Riga Fede). The cheeks and buccal mucosa were appropriately colored and hydrated. It was not reported that the presence of natal teeth interfered with breastfeeding.

Figure 1. Intraoral photographs showing 1 upper right molar, 1 upper left molar, 1 lower right molar, 1 lower left molar, and 1 lower central incisor.

Treatment

The treatment of choice was the extraction of the five dental organs, which were scheduled to be performed in two sessions, as the father, despite being explained that the procedure would not be complex and the risk of bronchoaspiration was high, did not agree to have it done in a single session.

On the same day, the extraction of the lower natal molars and lower central incisor was performed; for this procedure, 2% lidocaine (Uniseal, Mexico) was infiltrated with peripheral points in the lower molars, and topical anesthetic (Helyicaine, Mexico) was applied under relative isolation to the mucosa

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corresponding to the lower central incisor natal tooth. (Figure 2) Following this, the lower molars and central incisor were extracted using Kelly forceps without any complications. Digital pressure was applied to achieve adequate hemostasis. The father was asked to start feeding to alleviate the patient's stress.

Figure 2. Photographs of infiltration of 2% lidocaine, application of local anesthetic, and extraction of the lower right molar.

At the second appointment, the patient was asked to fast for 2 hours. Under relative isolation, topical anesthetic was applied to the mucosa corresponding to the upper molars, and they were extracted using Kelly forceps without complications. Hemostasis was immediately achieved without the need for digital pressure. The father was asked to monitor for any eventualities. After the extractions, it was confirmed that the teeth did not have root formation and all presented hypoplasia (Figure 3). The father was instructed to return for a follow-up in 15 days, but did not attend further appointments.

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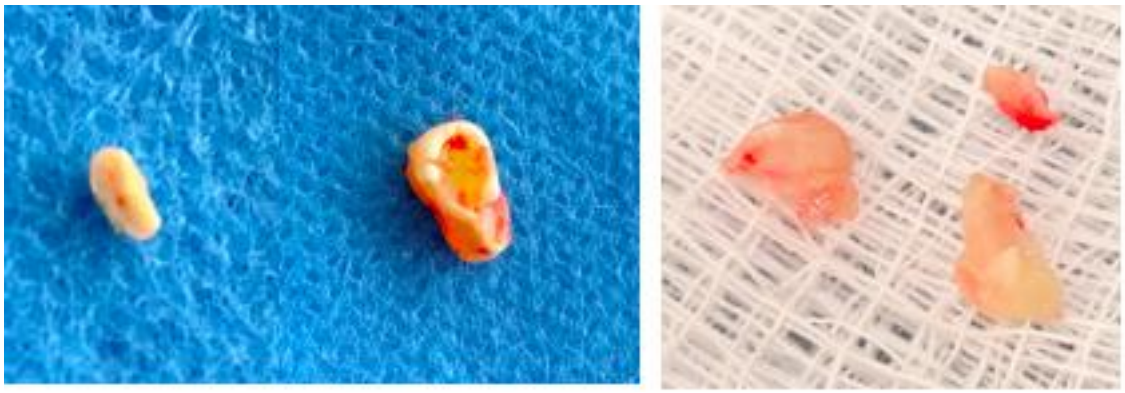

Figure 3. View of natal teeth. Root formation is absent

Discussion

Natal teeth are uncommon, and the presentation of multiple natal teeth is even rarer. Natal teeth are those present in babies at birth, as in the case of this report. The presence of these teeth causes confusion among parents and pediatricians, and they should be attended to by pediatric dentists for proper diagnosis and treatment. The most frequently reported recommendation in the literature is the extraction of natal and neonatal teeth, citing the risk of bronchoaspiration if the tooth is spontaneously avulsed. However, a literature review did not find any reports of this complication occurring (13). Nonetheless, extraction helps prevent this risk and any potential major complications.

Deciding on the treatment requires considering specific criteria (Table 1), as well as imaging tests to determine whether the teeth belong to deciduous dentition or are supernumerary teeth.

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Table 1. Criteria to consider for treatment selection in natal and neonatal teeth

Criterion	Decision
Patient's age	The patient's age should be considered before making a treatment decision, as babies under 14 days old cannot synthesize vitamin K and are at risk of bleeding.
Dental Hypermobility	Natal and neonatal teeth lack root formation, making support difficult and resulting in potential spontaneous avulsions that could lead to bronchoaspiration.
Administration of Vitamin K at Birth	The absence of vitamin K in the body leads to inadequate coagulation, causing uncontrolled bleeding. It is important to verify the administration of vitamin K at birth before deciding to extract any natal or neonatal teeth.
Belonging to Deciduous Dentition	If the natal or neonatal tooth belongs to deciduous dentition, it is important to preserve it in the oral cavity.
Belonging to Supernumerary Teeth	If the natal or neonatal tooth belongs to a supernumerary tooth, it is essential to remove it to allow the deciduous tooth to erupt properly.
Presence of Tongue Lesions (Riga-Fede)	Lesions on the tongue or mother's nipple will limit feeding and, therefore, the newborn's growth and development.

The treatment of choice in the present case was the extraction of the five natal teeth, based on the clinical characteristics of the teeth (primarily mobility) and the discomfort experienced during breastfeeding. Therefore, the decision to extract was made to prevent potential spontaneous exfoliation. While bronchoaspiration has not been reported in scientific literature, it remains a concern for both the dentist and parents, making tooth extraction a more beneficial option compared to the risk of spontaneous exfoliation.

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Conclusion

Dental extraction was the elective treatment in the present case, with no local or general complications reported. Natal and neonatal teeth are uncommon, and the presentation of multiple teeth in the same patient is even rarer. The treatment of natal teeth should be personalized, taking into account variables such as the patient's age, dental hypermobility, administration of vitamin K at birth, belonging to deciduous dentition, being supernumerary teeth, presence of nipple lesions in the mother, presence of tongue lesions (Riga-Fede). It is worth noting that there are currently no objective diagnostic criteria to determine the degree of mobility and the short- and long-term prognosis of natal/neonatal teeth. Therefore, studies focused on answering these questions and establishing treatment protocols are recommended.

REFERENCES

1. Lucas-Rincón SE, Medina-Solís CE, Pontigo-Loyola AP, Robles-Bermeo NL, Lara-Carrillo E, Veras-Hernández MA, et al. Dientes natales y neonatales: una revisión de la literatura. Pediatria. (Asunción) 2017;44(1):62-70.

2. Yu T, Klein OD. Molecular and cellular mechanisms of tooth development, homeostasis and repair. Development. 2020;147(2):dev184754. doi: 10.1242/dev.184754.

3. Chussid S, Perez C, Reardon R, Foree R, Cubilla R, Galitz C, et al. Primary and Secondary Dentition. In: Niekrash CE, Ferneini EM, Goupil MT. (eds) Dental Science for the Medical Professional. Springer, Cham. 2023. Doi: 10.1007/978-3-031-38567-4_2

4. Roulias P, Kalantzis N, Doukaki D, Pachiou A, Karamesinis K, Damanakis G, Gizani S, Tsolakis AI. Teeth Eruption Disorders: A Critical Review. Children (Basel).

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2022;9(6):771. doi: 10.3390/children9060771.

5. Ogodescu E, Popa M, Isac C, Pinosanu R, Olaru D, Cismas A, Tudor A, Miron M. Eruption Timing and Sequence of Primary Teeth in a Sample of Romanian Children. Diagnostics (Basel). 2022;12(3):606. doi: 10.3390/diagnostics12030606.

6. Mhaske S, Yuwanati MB, Mhaske A, Ragavendra R, Kamath K, Saawarn S. Natal and neonatal teeth: an overview of the literature. ISRN Pediatr. 2013;2013:956269. doi: 10.1155/2013/956269.

7. Vitali FC, Santos PS, Massignan C, Cardoso M, Maia LC, Paiva SM, Teixeira CDS. Worldwide prevalence of natal and neonatal teeth: Systematic review and meta-analysis. J Am Dent Assoc. 2023;154(10):910-921.e4. doi: 10.1016/j.adaj.2023.06.017.

8. Kana A, Markou L, Arhakis A, Kotsanos N. Natal and neonatal teeth: a systematic review of prevalence and management. Eur J Paediatr Dent. 2013;14(1):27-32.

9. Bulut G, Bulut H, Ortac R. A comprehensive survey of natal and neonatal teeth in newborns. Niger J Clin Pract. 2019;22(11):1489-1494. doi: 10.4103/njcp.njcp_152_19.

10. Cunha RF, Boer FA, Torriani DD, Frossard WT. Natal and neonatal teeth: review of the literature. Pediatr Dent. 2001;23(2):158-62.

11. Anton E, Doroftei B, Grab D, Forna N, Tomida M, Nicolaiciuc OS, et al. Natal and Neonatal Teeth: A Case Report and Mecanistical Perspective. Healthcare (Basel). 2020;8(4):539. doi: 10.3390/healthcare8040539.

12. Anusha Durairaj B, Gajula Shivashankarappa P, Muthukrishnan K, Saraswat Y. Natal and neonatal teeth: early diagnosis and management. BMJ Case Rep. 2023;16(11):e256249. doi: 10.1136/bcr-2023-256249.

13. Lucas-Rincón SE, Robles-Bermeo NL, Lara-Carrillo E, Vera-Guzmán S, Pontigo-Loyola AP, Casanova-Rosado JF, Medina-Solís CE. Paciente con diente natal y diente neonatal, una

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experiencia de tratamiento en el servicio social: reporte de un caso clínico. En: Medina-Solís CE, Vallejos-Sánchez AA, Alonso-Sánchez CC, Robles-Bermeo NL, Casanova-Rosado JF, Lara-Carrillo E, Pontigo-Loyola AP, Coordinadores. Mis casos clínicos en odontopediatría. Campeche: Universidad Autónoma de Campeche; 2017. p. 39-47.