Neonatal tooth associated with gingival abscess- A case report

Nidhi Agarwal¹, Gundeep Kaur Madan², Aakansha Sharma³, Tanya Agarwal⁴

¹HOD, ²⁴Post Graduate Student, Dept. of Pedodontology and Preventive Dentistry, Institute of Dental Studies and Technologies, Modinagar, Ghaziabad, Uttar Pradesh, India

*Corresponding Author: Gundeep Kaur Madan
Email: gundeepmadan@gmail.com

Abstract
The teeth present at birth or within the first month are termed natal and neonatal teeth respectively. In the present case the parents of a 20-day old boy reported with swelling in the mandibular anterior region, associated with abscess which was subsequently drained and later on a neonatal tooth erupted in this region which was extracted. Natal and neonatal teeth although rare may be seen associated with pathologies; the management of which should be done after careful observation and examination. This paper represents a case report and the importance of knowledge among pediatric dentists related to natal/neonatal teeth.

Keywords: Abscess, Case management, Infant care, Neonatal tooth, Oral health.

Introduction
The teeth existent at the time of birth are natal teeth whereas those that erupt within one month of birth are neonatal teeth. The incidence of neonatal and natal teeth ranges from 1:2000 to 1:3500.¹ The natal teeth are more frequently seen than the neonatal teeth with the ratio 3:1.² These are most commonly seen in mandibular central incisor region followed by maxillary incisors.³

Natal and neonatal teeth are accompanied by various difficulties such as discomfort on suckling and refusal to feed.⁴ The most commonly associated complication of the natal teeth is traumatic ulceration seen on ventral surface of tongue or lip and is known as Riga Fede disease.⁵

The natal and neonatal teeth have variable shape and size from small, conical to normal primary teeth. Utmost time they are small, loose, discolored and hypoplastic in nature.² Most commonly, these teeth are primary teeth (90%-99%), only scarcely (1% to 10%) of neonatal and natal teeth are supernumerary.⁴ They are usually adhere to the oral mucosa in varying degrees depending on the root formation.⁶ This leads to their mobility and is associated with high risk of swallowing/aspiration.⁶

Case Report
Parents of a 20-day old baby boy reported to the department of Pedodontics and Preventive Dentistry, with the chief complaint of swelling on the lower jaw of their newborn baby, due to which he was unable to breastfeed. The parents gave the history that there was no pathology at the time of birth, the swelling had erupted only 3-4 days back. On intra-oral examination, a soft, edematous, abscess was seen in the anterior mandibular region. The surface of the abscess appeared shiny, white and ready to drain (Fig. 1). After application of topical anesthesia, 2% Lignocaine with adrenaline was infiltrated locally, and the abscess was subsequently drained with the help of a sterilized probe. After draining, a hard tooth could be felt under this region. The patient was allowed to leave but recalled after 1 week.

After 7 days, the patient reported back to the department and a tooth was found to have been erupted at the place of the abscess (Fig. 2a). This neonatal tooth had Grade III mobility, however, at this time there was no swelling associated with it. As risk of aspiration of such teeth is high, hence, a decision of extraction of the tooth was made. 2% lignocaine with adrenaline was used for local infiltration after application of topical anesthesia and the tooth was extracted (Fig. 2b), post-operative hemostasis was achieved (Fig. 2c). There was no root formed seen in the extracted tooth (Fig. 2d). The socket was thoroughly curetaged to assure that no odontogenic remnants are left. The patient was kept on follow up and on subsequent visit, the arch was completely healed (Fig. 3).

Fig. 1: Showing lower lingual swelling with gingival abscess
Discussion

The presence of neonatal and natal teeth in the oral cavity of a neonate requires certain fundamental considerations to be followed. It is difficult to ascertain whether the tooth/teeth in consideration is a prematurely erupted primary tooth or a supernumerary. The mobility of the teeth, root formation and the current age of the child are few of the factors that are looked upon while deciding whether to extract the teeth or not. If the teeth are not mobile then retention of the teeth in the oral cavity is the primary treatment so as to avoid the future space problems, and esthetic concerns. Extraction of such teeth is indicated only in cases of hypermobility which is more than 1mm and with high chances of aspiration. Another reason to extract such teeth is to alleviate the feeding difficulties and to prevent from ulcerating conditions like Riga Fede disease. Till date there is no exact etiology found for this condition, however, its relation with certain factors like nutritional deficiency, endocrine disturbances and environmental factors like polychlorinated biphenyls (PCBs), dibenzofurans (PCDFs), and heredity are seen. In the current case, the child was born full term by caesarian delivery and was not related with any underlying abnormal medical history.

At times, the neonatal/ natal teeth can be left non-extracted, if they are not associated with any pathological findings and do not interfere with the feeding. In such a case, the incisal edges of the teeth shall be smoothened to aid in proper feeding and avoid the injury to maternal breasts and infant’s tongue. The use of feeding splint for such condition was first advocated by Bjuggren. Another modality is covering the incisal portion of the tooth with composite resin material.

Conclusion

Neonatal teeth may at times be associated with other pathologic lesions. Careful examination, diagnosis and management of these teeth is important for the pediatric dentists as although the incidence is low, yet, when encountered deserves appropriate care and attention.

Clinical Significance

Presence of natal or neonatal teeth is alarming for the parents. A pediatric dentist should have knowledge about the presenting illness and management strategies of these teeth.

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