Natal Teeth : A Rare Case Report

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Abstract

Child development from conception through the birth and especially till first few years of life is marked by many milestone continuous changes. Tooth eruption follows a chronology corresponding to the date when a particular tooth erupts into the oral cavity. Teeth erupting at birth are quite rare and are referred to as natal teeth. Natal teeth may be associated with many etiologies like genetic, heredity, environmental and endocrinal or can be a part of syndromes. We are reporting here an unusual case of natal teeth without any congenital abnormality. Epidemiological, etiological, and therapeutical aspects of this developmental disturbance of teeth eruption is reviewed in order to establish guidelines for the dentist and neonatologist to manage this problem with minimal damage to the future teeth and the psychological aspects in relation to family of patient.

Key words: Natal Teeth; Eruption; Endocrinology.

Introduction

Child development from conception through the first years of life is marked by many changes which follow a particular pattern. Developmental milestone of first tooth eruption occurs at about six months of age. The expectations about the eruption of the first teeth are great [1]. The presence of teeth in newborns is quite uncommon, varying from 1:6000 to 1:800 and of two or three teeth [2]. Natal and neonatal teeth are observed at birth or during the first 30 days of life respectively. In addition to cosmetic and psychological problems, they can cause feeding problems, ulceration of the ventral part of tongue and frenulum, discomfort and ulceration to mother's breast in case of breast fed infant, loosening of natal tooth/teeth and risk of aspiration. Ninety percent of these teeth are primary. Natal teeth are associated with genetic conditions like Hallermann-Strieff syndrome, Ellis Van Creveld syndrome, pachyonychia congenital, Down's syndrome, cleft

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Corresponding Author: Brijendra Singh, Additional Professor, Department of Anatomy, AIIMS, Jodhpur – 342005 E-mail: drbrijendrasingh@gmail.com lip, cleft palate, cyclopia and some endocrinal problem like hypothyroidism [3]. We are reporting an interesting case of natal teeth in a normal infant.

Case report

A five day old healthy male infant, first baby to non-consanguineously wed parents, a normal vaginal delivery with a birth weight of 2.9 kilogram. There was no history of pathological neonatal jaundice or swelling in the neck or stridor or any respiratory distress. There was no history of difficulty in feeding or lethargy or temperature instability. The baby had passed meconium after 48 hours of life. There was no history suggestive of hypothyroidism or hyperthyroidism in the mother too. The mother was not exposed to any drug or environmental toxin known to cause any problems in the foetus. The baby was noted to have one bigger tooth and one smaller in the lower jaw from birth [Figure 1].

On examination, the baby was normothermic with cylindrical body, fine facies and well hydrated tongue and skin. The hair was coarse and blackish in colour. The anterior fontanel was of 3 x 3 cm size. The posterior fontanel was 1 x 0.5cm in size. There was no sutural separation on skull examination. There were two mandibular central incisors which were firmly attached and yellowish in colour. (There were no ulcerations in the base of the tongue nor did



Fig. 1 photograph showing two mandibular incisor teeth of five day male child.

the mother have any soreness of nipple.) There was mild pallor but no icterus, clubbing, lymphadenopathy, or dependent oedema in the baby. Anthropometric measurements of baby revealed a length of 51 cm, weight of 2.8 kilogram, head circumference of 34.5 cm, and chest circumference of 32 cm. The infant's sitting height, measured from crown to rump, is approximately 34 cm. The upper segment to lower segment ratio was 1.67. The natal teeth were not causing any problem in feeding.

Supernumerary teeth were excluded by an oral radiograph. Hemogram revealed a hemoglobin level of 10.5 g/dl and a differential count of 68% neutrophils, 8% eosinophils, 24% lymphocyte. Peripheral smear revealed normocytic normochromic red blood cells with mild eosinophilia and few reactive lymphocytes, and adequate number of platelets. The thyroid profile revealed normal thyroid stimulating hormone (TSH) level which was 0.93 ng/ml. Neurosonogram was normal. The thyroid profile of the mother was normal.

Discussion

The presence of natal and neonatal teeth is definitely a disturbance of biological chronology whose aetiology is still unknown. It has been related to several factors, such as superficial position of the germ, infection or malnutrition, febrile states [4] eruption accelerated by febrile incidents or hormonal stimulation, hereditary transmission of a dominant autosomal gene [5] osteoblastic activity inside the germ area related to the remodelling phenomenon and hypovitaminosis [6].

In our case two mandibular incisor were present at time of birth come in category of natal teeth but aetiology of them is not known because antenatal period and delivery of mother was normal as well as mother didn't have any medical problems. On investigation child was also found to be normal, all other parameter of baby according to age were in normal range except this dentition raised question of its origin.

Although eruption of the lower deciduous incisors is normal at birth in many mammals, natal teeth are rare in humans. The incidence of natal teeth ranges from 1:2,000 to 1:3,500 live births [7]. The most commonly affected teeth are the lower primary central incisors (85%), followed by the maxillary incisors (1%), mandibular canines and molars (3%), and maxillary canines and molars (1%) [8]. The eruption of more than two natal teeth is rare. Masatomi et al. reported an infant with fourteen natal teeth [9].

The presence of natal and neonatal teeth may be a source of doubt about the future treatment plan. In the decision of maintaining or not these teeth in the oral cavity, some factors should be considered, such as implantation and degree of mobility, inconveniences during suckling, interference with breast feeding, possibility of traumatic injury, and whether the tooth is part of the normal dentition or is supernumerary [1].

If the erupted tooth is diagnosed as a tooth of the normal dentition, each of the other situations mentioned above should be considered. The maintenance of these teeth in the mouth is the first treatment option, unless this would cause injury to the baby. When well implanted, these teeth should be left in the arch and their removal should be indicated only when they interfere with feeding or when they are highly mobile, with the risk of aspiration [3]. In our case teeth were tightly implanted in socket, not mobile and not cause any problem in feeding so as per guideline no intervention was done.

References

- Cunha RF, Boer FAC, Torriani DD, et al. Natal and neonatal teeth: review of the literature. American Academy of Pediat 23:2, 2001, pg- 158-162.
- 2. Goncalvage FA, Birman EG, Sugaya NN, Melo AM. Natal teeth:review of the literature and an unusual case. Braz Dent J 1998; 9; 53-56.
- 3. Venkatesh C, Adhisivam B. Natal teeth in an infant with congenital hypothyroidism. Indian Journal of Dental Research, 22(3), 2011; pg 551-552.

- 4. Boyd, JD, Miles, AE. Erupted teeth in ciclops faetus. Br Dent J 91:173, 1951.
- 5. Shafer WG, Hine MK, Levy BM. Distúrbios do desenvolvimento das estruturas bucais e parabucais. In:Tratado de Patologia Bucal. 4a Ed. Rio de Janeiro: Guanabara; 1985:2-79.
- 6. Anderson RA. Natal and neonatal teeth: histologic investigation of two black females. J Dent Child 49:300-303, 1982.
- 7. Leung AK. Natal teeth. American Journal of Diseases of Children. 1986:1 40:249-251.
- 8. Zhu J, King D. Natal and neonatal teeth. ASDC J Dent Child. 1995;62: 123-128.
- 9. Masatomi Y, Abe K, Ooshima T. Unusual multiple natal teeth: case report. Pediatric Dentistry. 1991:1 3:170-172.

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