Natal Teeth: Clinical Study of Seven Cases

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ABSTRACT

Natal teeth are relatively uncommon, appearing in about one in every 2000 to 3000 births. It is underreported because in some cultures great fear and negativity is associated with natal teeth. Natal teeth generally develop on the lower gum, where the central incisor teeth will appear. About 70% of natal/neonatal teeth are firmly fixed but some subsequently become loose. Similarly a small number of initially loose teeth become fixed.

Keywords: Natal teeth, Newborn dentition.

INTRODUCTION

Natal teeth are more common than neonatal teeth with a ratio of about 3:1. Taking only the time of eruption as reference, natal teeth are the teeth observed in the oral cavity at birth. Neonatal teeth are those that erupt during the first 30 days of life.1

Etiology is not known in about 15% of reported cases. Parents, siblings or other relatives have a history of natal or neonatal teeth were reported.2,3

In several cases, the inheritance pattern has been that of an autosomal dominant trait. Three syndromes have been associated with natal teeth: Chondroectodermal dysplasia or Ellis-van Creveld syndrome, oculomandibulodyscephaly with hypotrichosis or Hallermann-Streiff syndrome and pachyonychia congenita or Jadassohn-Lewandowski syndrome. Natal teeth may also be associated with cleft lip and cleft palate.3-5

CASE REPORT

Seven cases of natal teeth were seen in the Department of Oral Pathology and Microbiology at Rungta Dental College of Science, Bhilai.

All the cases were of natal teeth (Fig. 1). Out of seven cases reported, six mothers were the wives of Bhilai steel plant employees. One mother of the child is native of Bhilai. The rest of the six ladies are residing in Bhilai after their marriage for a duration of 2 to 2 and 1/2 years. All the mothers were in an age group of 23 to 28 years. All were delivered cesarian sections around their estimated date of delivery. All the infants were the first born of their mothers. All mothers had taken their calcium and iron preparations prescribed by their respective obstetricians. All the cases were asked about family history.

All cases had two mandibular central incisor teeth. In four infants the teeth were well formed and firmly fixed in the gums. In three cases, natal teeth were small immature conical dental structure of a yellowish-brown color. In these three cases since the teeth were mobile, they were removed within 7 days after birth.

In remaining four cases the natal teeth were causing trauma to the nursing mother. All these cases were advised for extraction of natal teeth. The teeth which were extracted were subjected to histological study. Histologically decalcified section showed immature teeth with an irregular pattern of dentin related to the orientation of the dentinal tubules. The enamel was hypomineralized. All the teeth were with underdeveloped root. As no infant had evidence of associated syndrome, the water used for cooking and drinking from the Bhilai steel plant township was tested for pH value, total alkalinity, calcium level and fluoride level.
DISCUSSION

The etiology of the premature eruption of natal teeth is not known. The presence of natal and neonatal teeth is definitely a disturbance of biological chronology.6,7 It has been related to several factors, such as:7-9

1. Superficial position of the tooth germs
2. Infection
3. Malnutrition
4. Eruption accelerated by febrile incidents or hormonal stimulation
5. Hereditary transmission of a dominant autosomal gene
6. Osteoblastic activities inside the tooth germ area related to bone remodeling phenomenon and
7. Hypovitaminosis10-12

In our study there is no evidence of a correlation between early eruption and some systemic conditions or syndromes. In our study all the infants with natal teeth were otherwise healthy. In all cases the family history was noncontributory.

The environmental factor that may be regarded as a causative factor of natal teeth is the toxic polyhalogenated aromatic hydrocarbons.13-14 They can cross the placenta and their concentrations in the adipose tissue of a newborn is correlated with those in mother’s milk. Experimental studies support these observations. In our study the water analysis report showed all the parameters within normal limit. The pH value of the water was within the desirable requirement of 6.5 to 8.5. The fluoride level was 1.0 mg/l, the total alkalinity as CaCO3 200 mg/l. Calcium level was 75 mg/l.

Most accepted theory is based on the result of a superficial localization of the dental follicles, probably related to a hereditary factor.15

CONCLUSION

In our present study, the natal teeth were not associated with any endocrinal disturbances. All infants were healthy. Most of them showed well-formed firm natal teeth. Since all the other parameters were within normal range, the genetic factor or hitherto unknown environmental factor may have to be probed as a causative factor of natal teeth.

REFERENCES