

RIGA FEDE DISEASE : A CASE REPORT

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ABSTRACT: The natal and neonatal teeth have been reported to cause ulceration on the ventral surface of the tongue in neonates and infants, which may affect the child’s feeding habits. This appearance was described by Riga and Fede and hence been termed as Riga-Fede disease. We present a case report of a 3month old male infant presenting with a neonatal tooth in the lower jaw and ulcerated ventral surface of the tongue causing difficulty in feeding.

KEYWORDS: Riga-Fede , Ulceration, Natal teeth, Neonatal teeth

INTRODUCTION

The presence of teeth in the newborns is uncommon, varying from 1:6000- 1:800.¹ Natal teeth are those which are present at birth and Neonatal teeth are those which erupt during the first 30 days of life. They can cause certain amount of morbidity to the newborns and infants ranging from pain during suckling, swallowing to nutritional deficiencies and occasional aspiration of the sparsely attached natal tooth or teeth.

Case Report

A 3 month old male infant was brought to the Dept of Oral Medicine and Radiology with a chief complaint of a tooth present in the mandibular anterior region(Figure 1) which erupted 10 days after the birth causing difficulty in feeding the child. Also the mother reported that child had discomfort during suckling. On intraoral examination a tooth was present in the mandibular anterior region of jaw which was milk white in color, was immobile and hard on palpation In relation to the tooth an irregular shaped ulcer(Figure 2) was present on the ventral surface of the tongue measuring approx 3x4cm in its greatest diameter. Anamnesis was non contributory. Treatment plan formulated was extraction of the tooth(figure 3,4).Upon follow-up examination after 1 week the ulceration was found to be completely healed .

Discussion

The lesion was first described by Antonio Riga in 1881 and Francesco Fede done subsequent histological studies in 1890.²Calderelli (1857) first described the condition in a cachectic infant which was later referred to by several Italian authors as ‘*afta cachectica*’.Riga-Fede is a rare condition of benign ulceration caused by repetitive trauma to the lingual tissues by the tooth in children younger than two years of age.³ Most frequently it involves the ventral surface of the tongue or the lingual fraenum because the tongue is raked over the teeth.

The terms natal and neonatal tooth proposed by Massler and Savara (1950) were limited only to the time of eruption and not to the anatomical, morphological and structural characteristics.⁴ Morphologically, natal and neonatal teeth may be conical or may be of normal size and shape and opaque yellow-brownish in color.⁵

Spouge and Feasby (1966) classified these teeth on the basis of clinical characteristics, into: Mature—when they are fully developed in shape and comparable in morphology to the primary teeth; immature—when their structure and development are incomplete.⁶ Hebling(1997)classified natal teeth into 4 clinical categories: 1. shell-shaped crown poorly fixed to the alveolus by gingival tissue and absence of a root; 2. solid crown poorly fixed to the alveolus by gingival tissue and little or no root; 3. eruption of the incisal margin of the crown through gin- gival tissue; 4. edema of gingival tissue with an unerupted but palpable tooth⁷

Etiology is unknown,but some factors may be related to this which includes superficial position of the tooth germ, infection or malnutrition, febrile states, hormonal stimulation, hereditary transmission of a dominant autosomal gene, osteoblastic activity inside the tooth germ and hypovitaminosis. The most acceptable theory is based on the result of the superficial localization of the dental follicles probably related to a hereditary factor.¹

Syndromes associated with natal and neonatal teeth include Ellis-van Creveld (chondroectodermal dysplasia), Pachyonychiacongenita (Jadassohn -Lewandowsky) Hallerman - Streiff (occulomandibulodyscephaly with hypotrichosis), Rubinstein - Taybi, Steatocystoma multiplex, Pierre-Robin, Cyclopia, Pallister - Hall, Short rib - polydactyly type II, Wiedeman - Rautenstrauch (neonatal progeria), Cleft lip and palate, Pfeiffer, Ectodermal dysplasia, Craniofacial dysostosis, Multiple steacystoma, Sotos, Adrenogenital, pidermolysis bullosa simplex including Van der Woude and Walker-Warburg Syndromes.⁸



Fig.1. Neonatal tooth in mandibular anterior region



Fig.2. Ulceration present on ventral surface of tongue in relation to neonatal tooth

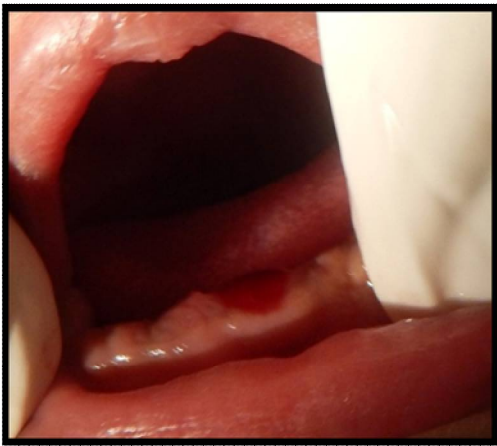


Fig-3 and Fig.4. Extraction of tooth and extracted neonatal tooth respectively

Differential diagnosis includes granular cell tumour, myofibroma, sarcoma, extra-nodal lymphoma, congenital syphilis, tuberculosis, agranulocytosis, traumatic ulcer.⁹ According to Zhu & King (1995) RFD by itself is not an indication for extraction.¹⁰ Conservative approach can be used to deal with small ulcers. Grinding of sharp edges of the teeth and composite coverage are conservative treatment options. Composite resin coverage of the incisal edges, grinding of sharp incisal edges and topical application of Dologel grinding of the sharp incisal edges and topical application of steroids have been the various modalities of treatment carried out in order to resolve the lesions. If the ulcerated area has been large even a rounded incisal edge would be the preferred choice.¹¹ Extraction may be needed to alleviate feeding difficulties or complications like Riga-Fede disease. Extraction may also be indicated if child's age is ten days or above and child has appropriate amounts of Vitamin K in the blood. Otherwise prophylactic administration of vitamin K (0.5 - 1.0 mg, I, m) is advocated before and after extraction, since vitamin K is essential for the production of prothrombin in the liver as there could be risk of haemorrhage.

CONCLUSION

Failure to diagnose or treat such a lesion can result in poor nutritional status of the child, resulting in growth retardation either it be physical or mental. therefore it is of utmost importance for an oral physician to take a proper history so as to recognise the condition early and manage effectively.

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