

## NEONATAL SUBLINGUAL TRAUMATIC ULCERATION (RIGA – FEDE DISEASE)\*

### A Case Report

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**SUMMARY:** Uzamiş M, Turgut M, Ölmez S. (Department of Pediatric Dentistry, Hacettepe University Faculty of Dentistry, Ankara, Turkey). Neonatal sublingual traumatic ulceration (Riga-Fede Disease): a case report. Turk J Pediatr 1999; 41: 113-116.

Early eruption of primary teeth rarely occurs and is referred to as "natal or neonatal teeth". These teeth may cause some complications, including ulceration of the sublingual area, pain during suckling and future nutritional problems. A two-month-old infant suffering from sublingual area ulceration due to two neonatal teeth was examined. His teeth were extracted and healing of the ulcerated area was observed within the first week. *Key words:* neonatal teeth, Riga-Fede disease, sublingual ulceration.

Normal eruption of primary teeth begins with the eruption of mandibular incisors at about six months of age<sup>1</sup>. Prematurely erupted primary teeth, referred to as "natal or neonatal teeth", were first introduced by Massler and Savara<sup>2</sup>. "Natal teeth" are defined as teeth which are present in the oral cavity at birth; those that erupt within the first month of life are defined as "neonatal teeth"<sup>2</sup>.

The incidence of natal and neonatal teeth reported in the literature has varied from 1 in 1,000 to 3,500, with females affected more frequently<sup>2,3</sup>. The occurrence of neonatal teeth is undoubtedly less than that of natal teeth<sup>2</sup>.

According to scanning electron microscopic (SEM) studies, neonatal teeth exhibit enamel anomalies. It has been concluded that these anomalies may be related to injury of the ameloblasts due to an early closure of the mandibular suture. This early closure may be responsible for premature eruption<sup>4</sup>.

In polarized light and microradiographic studies, these teeth showed enamel hypoplasia and dentinal disturbances, including the formation of osteodentin and irregular dentin in the cervical portions and interglobular dentin in the coronal region<sup>5</sup>.

Although mandibular primary central incisors are most often involved, there are a few cases of natal canine<sup>5</sup> and molars in the literature<sup>6,7</sup>.

Natal and neonatal teeth may create a problem during breast feeding, lacerate breasts and create a risk for future nutritional problems. Since these teeth may be loose and movable, there is a danger of swallowing or aspirating them<sup>2</sup>.

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Additionally; they may cause an ulceration of the tongue and sublingual area. Ulceration of the tongue and sublingual area caused by natal or neonatal teeth is referred to as Riga-Fede disease. Elzay<sup>8</sup> has referred to this lesion as traumatic ulcerative granuloma with stromal eosinophilia. Other authors have termed it "Riga's disease", "sublingual growth in infants", "sublingual ulcer", "sublingual granuloma" and "reparative lesion of the tongue"<sup>9-11</sup>. Recently, a more appropriate descriptive term is defined by Goho<sup>12</sup> as "neonatal sublingual traumatic ulceration".

The following case documents neonatal sublingual traumatic ulceration caused by two neonatal teeth.

### Case Report

A two-month-old male infant was referred to Hacettepe University, Faculty of Dentistry, Department of Pediatric Dentistry suffering from two prematurely erupted primary teeth. The mother reported that these teeth had erupted within the first month after birth. She was complaining of the baby's lack of weight gain and of pain during breast-feeding.

Clinical examination revealed two neonatal teeth on his mandibular central incisor region. There was also a 2x2 cm. sublingual ulceration extending from the anterior border of the tongue to the lingual frenulum (Fig. 1).

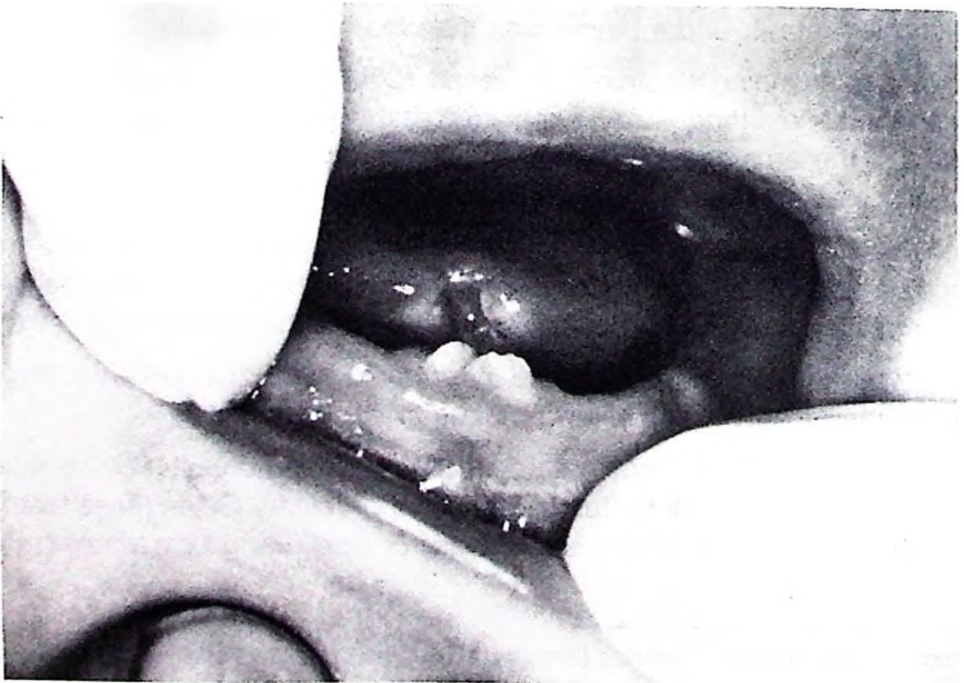


Fig. 1: Two neonatal teeth and tongue-sublingual ulceration.



The neonatal teeth showed moderate mobility and palpation of the ulcerated area elicited a response from the baby indicating pain.

The periapical radiograph confirmed that these teeth were supernumeraries with well-formed crowns and partially developed roots.

The ulcerated area was large and required a rapid healing to prevent future nutritional problems. After consultation with his pediatrician, it was decided to extract the teeth. Local anesthesia (Ultracaine) was given after application of topical anesthesia containing 10 percent lidocaine (Xylocaine) and the teeth were extracted with forceps.

At the first recall appointment one week later, the extraction area had healed rapidly and the ulceration had nearly resolved (Fig. 2). The patient is being followed for future complications.



Fig. 2: One week later, the ulcerated area nearly resolved.

## Discussion

to date, there are few reports about ulceration of the tongue and sublingual area caused by natal or neonatal teeth (Riga-Fede disease)<sup>1, 2, 8, 12</sup>.

Treatment of Riga-Fede disease consists of either smoothing the rough incisal edges of natal or neonatal teeth or placing composite (a restorative material) over them, or extraction<sup>12-15</sup>.

In cases of mild to moderate trauma, conservative treatment choices may be preferred. However, if the ulceration area is large and a rapid healing is required to relieve pain and restore proper suckling, the more appropriate treatment choice is extraction<sup>12</sup>.

Since the ulcerated area on the tongue and sublingual area was large in our case and the baby exhibited pain during suckling, we preferred to extract the neonatal teeth.

The baby is being followed to observe any changes in the next erupting teeth and dentition.

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