

Case 1

Perinatal Oral Pathology



Figure 1.1.1 Intraoral photograph showing anterior mandibular natal teeth.

A. Presenting Patient

- Seven-day-old male
- Consultative visit requested by neonatologist

B. Chief Complaint

- Neonatologist requests “evaluation of what appear to be teeth erupting on bottom jaw”

FUNDAMENTAL POINT 1

Obtaining a History

- Obtain a thorough history of the pregnancy and birth
- Obtain a thorough understanding of the child’s natal teeth, including when first observed, associated complications with ventilator tubing, or infections (Cunha et al. 2001; Amini and Casamassimo 2010)

C. Social History

- First child
- Twenty-one-year-old single, immigrant mother
- Qualified for public assistance

D. Medical History

- Born two weeks prematurely
- On ventilator for two days
- Currently in pediatric intensive care unit

E. Medical Consult

- Not applicable

F. Dental History

- Teeth present at birth

G. Extraoral Exam

- Head misshapen
- Sparse hair

FUNDAMENTAL POINT 2

Clinical Exam: Significance of Findings

- Determine if the teeth present a problem for nursing due to irritation of child or mother. Also determine the potential risk of aspiration if teeth are mobile
- If removal is contemplated, consider radiographic examination to determine whether teeth are supernumerary or prematurely erupting teeth of the primary dentition

H. Intraoral Exam

- Edentulous maxillary arch
- High maxillary frenum
- Palate intact
- Mandibular arch with teeth in the mandibular left central incisor and mandibular right central incisor positions, partially erupted, brownish in color, rotated and firm to manipulation (Figure 1.1.1)

BACKGROUND INFORMATION 1**Natal and Neonatal Teeth**

- Teeth can be present at birth (natal teeth) or erupt within the first 30 days after birth (neonatal teeth)
- Most natal teeth are members of the normal complement of primary teeth
- Most natal teeth appear in the mandibular anterior region
- Natal teeth may be associated with other disorders, usually those involving the skin, bones, or ectoderm, such as chondroectodermal dysplasia. Therefore, careful systemic evaluation of children with natal teeth is necessary (Moura et al. 2014)

I. Diagnostic Tools

- Occlusal radiograph of mandibular anterior region if deemed necessary (Figure 1.1.2)

J. Differential Diagnosis

- Other congenital neonatal pathology including: Bohn's nodules, Epstein's pearls, and other retention phenomena



Figure 1.1.2 Mandibular occlusal radiograph showing natal teeth.

K. Diagnosis and Problem List**Diagnosis**

- Natal teeth

Problem List

- Potential for nursing difficulty
- Potential for aspiration
- Potential for traumatic ulcer of the ventral surface of the tongue known as Riga–Fede disease (Figure 1.1.3)
- Potential for trauma to the mucosa of the opposing arch

L. Treatment Plan

- Observe for mobility, ulcerations, and nursing difficulty
- Extraction as indicated

M. Prognosis and Discussion

- No literature describes the risk of aspiration of natal teeth, so removal should be based primarily on the appearance, firmness, and likelihood of function of the tooth
- In the event the tooth is a member of the normal complement of primary teeth, parents should be made aware that the loss might result in alteration of spacing and alignment of the remaining primary teeth

N. Complications and Alternative Treatment Plan

- If the infant presents with a ventral tongue ulceration or the mother presents with an ulceration on the breast, incisal edge recontouring can be considered
- The child's vitamin K status should be determined prior to extraction within the first 10 days of life. Intramuscular administration of vitamin K at birth can reduce the risk of bleeding



Figure 1.1.3 Traumatic ulcer (arrow) on the ventral surface of the tongue.

Self-Study Questions

1. What is the probability that natal teeth are members of the normal complement of primary teeth?
2. Where do natal teeth most often occur in the mouth?
3. What is a potential risk of using topical anesthetics in infants prior to extraction of a natal tooth?
4. What are potential etiologies of natal teeth?
5. What are characteristics of other neonatal oral lesions that would help differentiate a natal tooth?

Answers are located at the end of the case