

INTRODUCTION

Natal and neonatal teeth are a rare phenomenon in dentistry. Natal teeth, which are present at birth, and neonatal teeth, which erupt in the first 30 days of life, occur in 1:2000-3500 births. Most often these are the true primary teeth of the patient.

Natal and neonatal teeth tend to be underdeveloped, mobile and discolored (Figures 1 and 2). The teeth can also cause issues for a nursing mother and her baby. Riga-Fede disease may occur, a sublingual ulceration of the tongue from the continuous rubbing of the teeth. The cause of this eruption disturbance is unknown. Natal or neonatal may be lost prematurely or will remain in the oral cavity until the normal exfoliation window (Figure 3).

At our pediatric dental clinic at the University of Mississippi Medical Center, we were consulted a minimum of 18 times regarding natal and neonatal teeth between May 2020 and May 2024. The goal of this study is to determine if any similarities exist between these patients and if so, could these determinants be a cause of natal and neonatal teeth.

METHODS

This retrospective study aimed to determine the frequency at which natal and neonatal teeth occurred in patients and if there are any similarities between the patients with regards to gender, geographic identifiers, race/ethnicity, weight, maternal age at time of birth, medical and dental diagnoses and treatment history.

With the following parameters, data was pulled by the University of Mississippi Medical Center's Center for Information and Analytics from the electronic medical record. Records to be included were dated 5/1/2020 to 5/1/2024 and diagnosed with CPT code K00.6 within ages of 0-1 year.

After applying inclusion and exclusion criteria, 27 patient records were identified. Once chart review was completed, 19 of the 27 records were patients with diagnosed natal or neonatal teeth. The parameters above were then pulled for these records.



Figure 1: Patient with neonatal teeth #E, F, O and P.



Figure 2: Pink hue with excess tissue natal teeth #O and #P.



Figure 3: 4 year-old female with natal teeth #O and #P.

RESULTS

After data collection, the records show the following trends:

- Hispanic or Latino patients have the highest frequency of natal or neonatal teeth (57.9%).
- White and Black children are seen in near equal proportions with natal and neonatal teeth.
- Females are more likely to have natal or neonatal teeth (63.2%).
- Maternal ages ranged from 14-40 years of age.
- 47.3% of patients affected had an additional medical diagnosis.
- Patients studied were from 9 differing counties in Mississippi.

DISCUSSION

Natal and neonatal teeth are uncommon, yet the patients of Mississippi show several trends. Reviewing the records included show patients of Hispanic or Latino descent have the highest probability of this condition. Additionally, females are more likely to have natal or neonatal teeth which matches previous research.

90% of the time, the natal or neonatal tooth is the true primary tooth of the patient. Most often, the primary mandibular central incisor is impacted followed by the maxillary central incisor region.

It is common to see natal and neonatal teeth with syndromic conditions, specifically Ellis-van Creveld (chondroectodermal dysplasia) and Hallerman-Streiff. However, none of the subjects of this study had that associated medical diagnosis. Of the 19 records reviewed, 3 patients had atrial septal defect and 2 subjects had hydronephrosis. It is not well documented in the literature that there is a link between the medical conditions seen in this study and natal/neonatal teeth.

9 different counties in Mississippi were represented in the records reviewed with varying fluoridated water status. Future research could include if fluoridated water consumption or lack thereof during pregnancy is associated with natal/neonatal teeth. Though trends are seen in the records reviewed, further research is needed to better understand the etiology of natal/neonatal teeth.

REFERENCES

Maheswari NU, Kumar BP, Karunakaran, Kumaran ST. "Early baby teeth": Folklore and facts. J Pharm Bioallied Sci. 2012

Mhaske S, Yuwanati MB, Mhaske A, Ragavendra R, Kamath K, Saawarn S. Natal and neonatal teeth: an overview of the literature.

Nowak A. Casamassimo P. The Handbook of Pediatric Dentistry. 5th ed. Chicago: American Academy of Pediatric Dentistry. 2018.