Oral Lesions at Birth

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Abstract

Objective: The aim of this study was to determine the frequency distribution of oral lesions at birth.

Method: All babies delivered in Mashhad sina hospital were examined for oral lesions immediately after birth for one year since 1.1.82. In this cross sectional descriptive study, frequency distribution was detected from data.

Results: During the study period 3298 babies were delivered. Oral lesions included 76% Epstein pearls, 35% Bone nodule, 0.33% ankyloglossia, 0.12% natal teeth, 0.03% congenital epulis, 0.03% cleft lip, 0.06% cleft palate, 0.03% cleft lip and palate.

Conclusion: In this study Epstein pearls were the most common lesion at birth and cleft lip, with or without cleft palate and congenital epulis, were the lowest ones.

Keyword: Newborn, Oral lesion, Routine examination of the newborn

Introduction

Oral structures should be examined routinely at birth and at Conegueuxt child visits. Early examination can reveal abnormalities that require treatment or serve as baseline against which to compare later development.

The oral lesions that present in newborn periods include natal and neonatal teeth, clefts, dental lamina cyst, Epstein pearls, Bohn nodules, alveolar lymphangioma, Tumors (congenital epulis), ankyloglossia, geographic tongue, ranula, mucocele and congenital lip pits (figure) (1,2).

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The aim of this study was to determine the frequency of the lesions in first exam in newborn. This data is important in order to detect differences in geographic areas, diagnosis line tendencies and for clinicians to perform judgment to evaluate the pediatric patients before the biopsy and management of pediatric oral lesions.

**Materials and methods**

All babies delivered in sina hospital were examined for oral lesions as cross sectional descriptive study since 1.1.82 for 12 months. The mouth of the newborn was examined while the child was lying on the examination table. The interior of the mouth was evaluated with a light and tongue blade with well washed hands. Frequency distribution was detected.

**Results**

During one year's study 3298 babies were delivered in sina hospital. As shown in the Table oral lesions include 76% Epstein pearl, 35% Bohn nodule, 0.33% ankyloglossia, 0.12% natal teeth, 0.03% congenital epulis (0.6/1000 live birth), 0.03% cleft lip (0.3 in / 1000 live birth), 0.06% cleft palate (0.6 in / 1000 live birth), 0.03% cleft lip and palate (0.3 in / 1000 live birth).

**Discussion**

The mouth of the newborn is characterized by toothless alveolar pads or ridges in the maxilla and mandible. In a healthy infant, the mother should be present during complete examination; even minor, seemingly insignificant, anatomic variation may worry a family and should be explained.

Several types of dental cysts related to embryonic structures may present at birth. Epstein pearls and Bohn nodules occur in approximately 76% of newborns(3).

Epstein pearls are white yellow cysts occurring along the median palatal raphes or at the junction of the hard and soft palates. They result from remnant of epithelial tissue entrapped during palatal fusion. In this study 76% of newborns had Epstein pearls.

Bohn nodules are white yellow cysts occurring along the lateral aspects of the alveolar ridges and along the periphery of the palate. They may develop from heterotrophic salivary gland tissue or from remnants of the dental lamina. No treatment is necessary. About 35% of our babies had Bohn nodules(figure 3).
The frenulum may lengthen, as the child gets older. This may extend to the tip of the tongue (tongue–Tie) but does not interfere with sucking or later speech and it does not need to be surgically clipped except in severe forms (2,4). Congenital epulis of the newborn is a rare tumor which is usually benign (5,6,7,8,9). (figure 6)

However, surgical excision is generally indicated due to interference with feeding or respiration. Recurrence of the tumor after surgery has not been reported yet. Incomplete or total lack of fusion of the various facial processes can result in different types of clefting. Oral clefts are the most common of all birth defects (11). (figure 7,8).

The first description of a case is attributed to Neumann in 1871. The word “epulis” is derived from Greek and means “on the gum” or “gum boil”. Epulis is also known as a congenital gingival granular cell tumor because of its histological features. Since 1871, 216 cases have been reported. Female babies are affected 8-10 times more often than males (10). Epulis is located on the maxillary ridge twice as often as on the mandible, mostly as single tumors but rarely as multiple tumors. Macroscopically, epulis is a pedunculated tumor with a smooth or lobulated surface. The histologic basis of the tumor is the alveolar mucosa. The size varies from a few millimeters to 9 cm in diameter. After birth, the tumor normally does not increase in size. Macroscopic examination shows a central mass of granular cells. This mass is surrounded by a stratified squamous mucosa. The histogenesis of the tumor is unknown. Spontaneous regression of congenital epulis has been reported in four cases. Surgical excision was performed before delivery in one infant.

Clefting of the lower lip or jaw are less than clefting in the maxillary area. Cleft lip can be unilateral or bilateral, an incomplete cleft as a small notch to a complete one. Boys are affected more frequently than girls. Girls are more frequently affected by cleft palate with or without cleft lip. The exact etiology of palatal clefting is unclear; however, it is believed to be a multifactorial disruption of embryologic morphogenesis. Possible causes include maternal drug exposure, a syndrom malformation complex, or genetic factors. Cleft lip and cleft palate are highest among Asians and lowest among blacks.
The incidence of cleft lip, with or without cleft palate is about one in 750 white births; the incidence of cleft palate alone is about one in 2500 white births (2). In our study cleft palate and cleft lip alone were 0.6 and 0.3 in 1000 live birth respectively.

Premature eruption of primary teeth occurs in the united States in approximately one in 2000 to 3500 live birth. Teeth present at birth are called natal teeth, teeth that erupt within 30 days after birth are called neonatal teeth (figure 9).

Natal teeth
In approximately 15% of reported cases a family history of the premature eruption exist. The affected teeth are the lower central incisors, but cases with 12-16 teeth reporting the prevalence of natal and neonatal teeth is different from one in 1000 to one in 3392 live birth (12,13,14,15).

Our study was 1.2 in 1000 live births.

As a result Epstein pearls were most common and cleft lip with or without cleft palate and congenital epulis were the lowest ones in oral lesion at birth in Sina hospital during one year.

Acknowledgement
We are specially thankful to Miss Hydarian, nursery nurse of Sina hospital for her cooperation.

Table 1: Frequency distribution of oral lesion at birth in Sina Hospital in 1382.

<table>
<thead>
<tr>
<th>Item</th>
<th>No (%)</th>
<th>In 1000 live births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epstein pearls</td>
<td>2512 (76)</td>
<td>760</td>
</tr>
<tr>
<td>Bohn nodule</td>
<td>1154 (35)</td>
<td>350</td>
</tr>
<tr>
<td>Ankyloglossia</td>
<td>11 (0.33)</td>
<td>3.3</td>
</tr>
<tr>
<td>Natal teeth</td>
<td>4 (0.12)</td>
<td>1.2</td>
</tr>
<tr>
<td>Cleft palate</td>
<td>2 (0.06)</td>
<td>0.6</td>
</tr>
<tr>
<td>Cleft lip</td>
<td>1 (0.03)</td>
<td>0.3</td>
</tr>
<tr>
<td>Cleft lip and palate</td>
<td>1 (0.03)</td>
<td>0.3</td>
</tr>
<tr>
<td>Congenital epulis</td>
<td>1 (0.03)</td>
<td>0.3</td>
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</tbody>
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References
خلاله

توزیع فراوانی ضایعات دهانی در موقع تولد در اولین معاونه فیزیکی نوزاد

دکتر اشرف محمد زاده، دکتر نعیم همدانی امیرمجدی

مقدمه: هدف از این مطالعه تعیین توزیع فراوانی ضایعات دهانی در موقع تولد و در اولین معاونه فیزیکی به طور رونین در همه مولودین انجام می‌شود.

روش کار: به‌مدت یک سال از تاریخ 28/02/98 تا 29/02/99، همه مولودین که در بیمارستان سیدنا مولود شدند و سپس جرایح قهوه، جوب، زبان و دستهای شسته معاونه گرد در حالی که روی تخت خوابیده، بدون قرار داشتن، مورد معاونه روتین قرار گرفتند و ضایعات دهانی مشاهده شدند. نتیجه: توزیع فراوانی آن‌ها تعیین شد.

نتایج: در طی یک سال دوره مطالعه، 2398 نوزاد کل در بیمارستان متولد شدند. ضایعات دهانی مشاهده شدند.


نتیجه کلی: در این مطالعه پکاله‌ها مولودین ابتدایی به عنوان شایع‌ترین ضایعه دهانی در موقع تولد، شکاف کام و لب توم شدید که شایع‌ترین ضایعه دهانی در موقع تولد و شبکه‌ها لب یا بدون شکاف کام و لب توم مشاهده شد.

واژه‌های کلیدی: توزیع، ضایعات دهانی، معاونه فیزیکی روتین