

Bilateral Dental Lamina Cyst of a Newborn Infant

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Abstract

Dental lamina cyst of infant is a benign lesion of the oral mucosa. Though it is not very rare in occurrence but due to its self limiting nature it is not commonly seen by dentists. This article presents a case of dental lamina cyst in a 2 months- old child.

Keywords: Dental lamina cyst, epulis, natal teeth, ranula

INTRODUCTION

Abnormalities in the oral cavity of infants are not uncommon, but most are self-limiting and usually disappear without any treatment. However, the diagnosis and differentiation of these from nontransient ones is important for proper treatment and also the reassurance of anxious parents. Some of the common abnormalities are natal teeth, cleft palate, congenital epulis, and inclusion cyst. Oral inclusion cysts are described as white, raised, multiple nodules of maxillary and mandibular alveolar ridges and midpalate region.^[1] Common inclusion cysts are dental lamina cysts, Epstein's pearls, and Bohn's nodules. All neonatal cysts are keratin-filled nodules and these terms were used interchangeably earlier, but now these are differentiated on the basis of location and origin. Fromm in the year 1967 classified oral inclusion cysts depending on their location:

Epstein's pearl – cyst found on midline raphe or near the junction of the hard and soft palate.

Bohn's nodules – located on buccal and lingual areas of the dental ridges.

Dental lamina cysts – located over the alveolar ridge.^[2]

The reported prevalence of alveolar cysts in newborns ranges from 25% to 53%^[3] while for palatal ones is about 65%.^[4] Although the prevalence is high, these cysts are rarely seen by the dentist or pediatrician because they are transient structures that disappear within 2 weeks to 5 months of age.

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Their transient nature is thought to be due to the fusion of the cyst wall with the oral epithelium and subsequent discharge of the cystic content.^[5] Dental lamina cysts of newborn also called gingival cysts of newborns, usually occur in multiples but occasionally can present as a solitary nodule and appear as white or pink small nodules approximately 1 to 3 mm in diameter. It is probable that these lesions originate from remnants of the dental lamina.^[6] These are generally asymptomatic and do not produce any discomfort for the infant.

CASE REPORT

A 2-month-old child reported with her/his mother to a private clinic in Kolkata with the chief complaint of small whitish swelling in the oral cavity noted 15 days after birth. The child was born on full term, and medical history was noncontributory. On clinical examination, round fluctuant swelling of 2.5 mm in maximum diameter was found on the alveolar ridge of mandibular arch in 74 and 84 regions [Figures 1 and 2]. On soft-tissue examination, no abnormality was found at any other site of the oral cavity. Based on clinical examination and characteristic features, a diagnosis of the gingival cyst was made. As reported by the parent, there was no discomfort in feeding. Since this lesion is self-limiting, no treatment was given, and the child was kept on follow-up.

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Figure 1: Showing dental lamina cyst.

Differential diagnosis

Bohn's nodule – Bohn's nodules are mucous gland cysts, frequently located on the buccal or lingual aspects of the alveolar ridges and rarely on the palate, histologically consist of mucous glands and ducts. They are numerous, grayish white, and firm in consistency.^[7]

Congenital epulis or congenital granular cell lesions are rare granular cell hamartomas in newborns that most commonly present as smooth masses on the maxillary alveolar process reference 12. However, they often regress spontaneously, but, in few cases, they may be a few centimeters in size causing breathing and feeding difficulties in child, thus necessitating a surgical procedure.^[8]

Congenital ranula

Ranulas are usually painless, fluctuant, with a blue translucent color swelling, and slow-growing mass of the floor of the mouth.^[9] Congenital ranulas are rare.

Epstein's pearl

Epstein's pearls are predominantly located along the midpalatine raphe and probably derive from residual epithelial cells arising from embryonic palatine processes.^[7]

Natal teeth

Natal teeth are teeth present at birth, and “neonatal teeth” are teeth that erupted within the first month of life. They are accompanied by various difficulties, such as pain on suckling and refusal to feed, faced by the mother and the child due to the natal tooth/teeth.^[10] They represent early eruption of normal primary teeth and are associated with developmental anomalies and syndromes.

DISCUSSION

Dental lamina cyst of a newborn is a true cyst as it is lined by thin epithelium and has a lumen filled with desquamated keratin, occasionally containing inflammatory cells. These cystic lesions are easily detected by their characteristic clinical appearance in the oral cavity of the infants, so histopathological confirmation is usually not required. No treatment is usually required as these lesions almost invariably

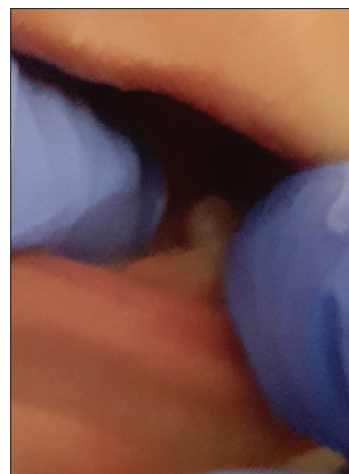


Figure 2: Dental lamina cyst.

disappear by spontaneous regression within 2–4 weeks without any complications. However in some cases, surgery may be required if any discomfort, pain, or bleeding occurs.

CONCLUSION

Although these cystic lesions can be easily diagnosed on the basis of their clinical presentation, they do not pose any threat to life or affect the quality of life in most cases and no treatment is required as they regress spontaneously, but their knowledge is important for differential diagnosis and assuring the anxious parents.

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Conflicts of interest

There are no conflicts of interest.

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