

## Cystic Lesions (Bumps) of Newborn Oral Cavity

*Natal/Neonatal Teeth, Eruption Cyst/Eruption Hematoma, Dental Lamina (Gingival) Cyst, Epstein Pearl, Bohn's Nodule, Congenital Epulis of Newborn*

A cyst is a sac that may be filled with air, fluid or other material. It can form in any part of the body, including bones, organs and soft tissues. Most cysts are noncancerous (benign) and most cystic lesions in the oral cavity of newborns are self-correcting within the first few months of life, requiring no intervention (surgical or other) to achieve resolution.

**Natal and Neonatal Teeth** are teeth that a child is born with or that erupt into the mouth within the first month of life (respectively). These teeth, almost always, are teeth of the child's primary dentition (and are NOT extra teeth). Because of this, if the decision is made to wiggle these teeth free, then the child will likely have spaces in the area of those teeth until those teeth are replaced naturally, when the adult teeth erupt into the mouth at approximately age 7 or age 8.



### Treatment options:

- 1) If the teeth erupt horizontally or are so loose that there is concern the child could aspirate the teeth into the lungs, the recommendation will usually be to remove these teeth.
- 2) If the teeth are positioned well in the mouth and are not mobile (or are only very slightly mobile), the recommendation will usually be to allow the teeth to remain in place, so that they can participate as a normal complement of the primary dentition.

Note: Occasionally these more rigid teeth can cause damage to the tongue of a child that is nursing or bottle fed, especially if they are pointy or sharp. If this were to occur, a condition known as Riga Fede Disease, the two options for treatment are tooth extraction, or to have the teeth polished smooth with the dentist's drill.





An **Eruption Cyst** is a non-threatening cyst (fluid-filled membrane) that appears along the gums, usually over an erupting baby tooth in an infant. This can also develop over an erupting adult tooth. However, this is much less common. Though they usually self-resolve, they can become symptomatic/painful, especially for a kiddo trying to chew on harder foods.



Occasionally, the cyst is filled with blood, in which case the lesion is called an **Eruption Hematoma**.



A **Dental Lamina Cyst (Gingival Cyst)** is a raised nodule on the alveolar ridges of infants, similar in appearance to an eruption cyst. It is derived from the dental lamina, and appears as small, isolated or multiple whitish papules located along the midline of the palate or on the crests of alveolar ridges. These cysts rupture/disappear within 5 months of birth without any treatment (the cyst wall fuses with the oral epithelium and slowly releases its contents).



**Epstein Pearls** are small keratin-filled nodules, often seen on the soft tissue of the roof of the mouth and are caused by entrapped epithelium during the development of the palate.

**Bohn's Nodules** are keratin-filled nodules found at the junction of the hard and soft palate and along buccal and lingual parts of the alveolar ridges, away from the midline (remnants of salivary glands).

**Epstein pearls** and **Bohn's Nodules** are benign growths, usually self-resolve by 4 months of age, and are most commonly located on the palate and on the alveolar ridges, respectively.

Bohn's nodules

Epstein Pearl

**Congenital Epulis of Newborn** is a benign (noncancerous) tumor of the oral cavity and is extremely rare. It appears as a normal-to-reddish colored, aggressive-looking smooth-surfaced benign mass, most commonly occurring along the maxillary anterior alveolar ridge. It presents with variable size (a few millimeters to 7+ centimeters), but is often large, so much so that its size may lead to mechanical obstruction, respiratory distress and difficulty feeding. This type of lesion has a female predilection with the female to male ratio being 10:1.



Although the clinical presence of congenital epulis may be concerning, it ceases to grow following birth and is entirely benign, with some cases self-resolving. The usual treatment, however, is simple surgical excision, trying to avoid completely developing dentition. Because some of these lesions will self-correct, it is recommended that in the case of lesions less than 2 cm in its largest dimension, where there is no interference with respiration or feeding, that non-surgical management to avoid general anesthesia in a neonate should be considered. There is no propensity for recurrence with excision.