

Lymphoepithelial Cyst in a 6 week old: Case report

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Introduction

A wide spectrum of oral lesions occurs in children and adolescents, including soft and hard tissue lesions of the oral maxillofacial region. There is limited information on the prevalence of oral lesions in the pediatric population. The largest epidemiologic studies in the United States place the prevalence rate in children at 4 to 10 percent with the exclusion of infants. (1, 2) Although the vast majority of these lesions represent mucosal conditions, developmental anomalies, and or inflammatory lesions, it is imperative to be vigilant for neoplastic diseases. Regardless of the age of the child, it is important to establish a working diagnosis for every lesion. This is based on obtaining a thorough history, assessing the risk factors and documenting the clinical signs and symptoms of the lesion. Based on these facts, a list of lesions with similar characteristics is rank ordered from most likely to least likely diagnosis. The entity that is judged to be the most likely disease becomes the working diagnosis and determines the initial management approach. Common lesions of the newborn include epstein pearls, bohn's nodules, dental lamina cysts, oropharyngeal candidiasis, congenital epulis, natal and neonatal teeth and rarely melanotic neuroectodermal tumor of infancy.

Case Report

A 6 week old newborn presented to the dental clinic at Staten Island University Hospital with her mother for a emergency examination on 10/4/2022. Patient's medical history is healthy and history of present illness as per the pediatrician and parent includes that the patient has the same lesion and was diagnosed with a "pearl that is normal and will exfoliate in a couple weeks." When the mother went to the pediatrician, they recommended consulting dental regarding the white nodule on the floor of the mouth. Figure 1a demonstrates what the lesion looked like clinically. The clinical case was consulted on with a pathologist as well. Given the color, and taut round appearance, the lesion was diagnosed as a lymphoepithelial cyst.



Figure 1a. White lesion noted on floor of the mouth in patient.

Management

The patient was evaluated in the mother's lap to properly assess and stabilize the patient's head. Photo consent was obtained in order to consult with the oral pathologist. When consulting with the pathologist, the list of differential diagnoses included: mucocele due to the proximity to the salivary caruncle and lymphoepithelial cyst. The most common white lesions of the newborn that were relevant to the case were also placed on the differential list if it matched the location and appearance typically presented which included: bohn's nodules, dental lamina cysts, oropharyngeal candidiasis, and neonatal teeth. Bohn nodules are small developmental anomalies located along the buccal and lingual aspects of the mandibular of the neonate. These lesions arise from remnants of mucous gland tissue. Dental lamina cysts may be found along the crest of the mandibular ridges of neonates. These lesions arise from epithelial remnants of the dental lamina. Oropharyngeal candidiasis appears as white plaques covering the oropharyngeal mucosa which, if removed, leaves an inflamed underlying surface. Neonatal teeth erupt in the first month of life. Attachment of neonatal teeth generally is limited to the gingival margin due to little root formation or bony support. These teeth may be a supernumerary or prematurely erupted primary tooth. Natal or neonatal teeth occasionally result in pain and refusal to feed and can produce maternal discomfort because of abrasion or biting of the nipple during nursing. (3)

In this case, it was determined that no biopsy was indicated or intervention at this time. It was explained to mom that we would continue to monitor at this time, and that if the lesion drastically changed a biopsy would be indicated. Diet for newborns and oral hygiene instructions were reviewed with mom and the importance of regular check ups starting at 6 months was emphasized. Prevention for ECC needs to begin in infancy. Physicians, nurses, and other health care workers may have more opportunities to educate the parent/caregiver than dental professionals because of the frequency of contact with the family in the child's first year of life. (4)

Discussion & Conclusion

A wide spectrum of oral lesions occurs in children and adolescents, including soft and hard tissue lesions of the oral maxillofacial region. There is limited information on the prevalence of oral lesions in the pediatric population.

Regardless of the age of the child, it is important to establish a working diagnosis for every lesion. This is based on obtaining a thorough history, assessing the risk factors and documenting the clinical signs and symptoms of the lesion. Based on these facts, a list of lesions with similar characteristics is rank ordered from most likely to least likely diagnosis. The entity that is judged to be the most likely disease becomes the working diagnosis and determines the initial management approach. (3)

Palatal and gingival cysts of the newborn typically present as asymptomatic one to three millimeter nodules or papules. They are smooth, whitish in appearance, and filled with keratin. No treatment is required, as these cysts usually disappear during the first three months of life. (6) This was the case with the patient presented, when they followed up in clinic for a 6 month recall examination and the lesion resolved and was no longer present.

References

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