

# Self-resolving congenital form of oral lymphoepithelial cyst: case report

## Spontan düzelen konjenital oral lenfoepitelyal kist: Olgu sunumu

Ayat Gamal-AbdelNaser<sup>1</sup>

<sup>1</sup>Dept. of Oral Medicine and Periodontology, Cairo University Faculty of Dentistry, Cairo, Egypt

### Abstract

Oral lymphoepithelial cyst is a rare benign cystic lesion affecting the oral cavity; mainly the floor of the mouth. It was reported to affect patients with a wide age range extending from childhood to geriatrics. It is treated by conservative surgical excision with excellent prognosis. A case of 2-month old infant presented with a congenital asymptomatic white dome-shaped swelling in the floor of the mouth. The lesion was reported to resolve spontaneously with no intervention. To the best of our knowledge, this is the first report of a congenital oral lymphoepithelial cyst. We recommend the follow up of the cases of infants and children as resolution may occur spontaneously with no need for intervention.

**Key words:** benign lymphoepithelial cyst, branchial cleft cyst, self-limiting

### Öz

Oral lenfoepitelyal kist, ağız zemini başta olmak üzere oral boşluğu etkileyen nadir bir benign kistik lezyondur. Çocukluktan geriatriye kadar geniş bir yaş aralığına sahip hastaları etkilediği bildirilmiştir. Konservatif cerrahi eksizyon ile mükemmel prognozla tedavi edilir. İki aylık bir bebek ağız zemininde doğuştan asemptomatik beyaz kubbe şeklinde bir şişlik ile başvurdu. Lezyonun hiçbir müdahale olmadan kendiliğinden gerilediği bildirildi. Bilgimize göre bu olgu, bildirilen ilk spontan gerileyen konjenital oral lenfoepitelyal kist olgusudur. Müdahaleye gerek kalmadan kendiliğinden düzelmeye olabileceği için bebek ve çocuk vakalarının takibini öneririz.

**Anahtar kelimeler:** iyi huylu lenfoepitelyal kist, brankial yarı kisti, kendini sınırlayan

### Introduction

Oral lymphoepithelial cyst (LEC) is a rare benign lesion affecting the oral cavity. The floor of the mouth is the most commonly affected intraoral site. It affects a wide age range extending from 2 to 75 years of age. Rare cases

**Corresponding author:** Ayat Gamal-AbdelNaser, Department of Oral Medicine and Periodontology, Cairo University Faculty of Dentistry, Cairo, Egypt. Phone: +20 01001874257, E-mail: ayat.gamal@dentistry.cu.edu.eg

**Received:** 31 December 2020 **Accepted:** 25 March 2021

**Conflicts of Interest:** None

**Funding:** None

**How to cite this article:** Gamal-AbdelNaser A. Self-resolving congenital form of oral lymphoepithelial cyst: case report. Mucosa 2021;4:27-29



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

of children have been reported.<sup>1</sup>

### Case report

This report presents a case of a healthy 2-month-old female who was born with a whitish lump under her tongue. The mother reported that the lesion did not affect suckling or cause any pain to the infant.

Examination revealed a well defined, sessile, solitary, round, soft, white, non-tender, non-fluctuant swelling of 0.5 cm diameter, in the floor of the mouth near the orifice of the right submandibular salivary gland duct. (Fig. 1)

The differential diagnosis of the lesion included lymphoepithelial cyst and dermoid cyst. The dermoid cyst is characterized by its rubbery consistency and its location strictly in the midline. As both conditions did not fit the case, lymphoepithelial cyst was believed to be the most probable diagnosis.

An excisional biopsy was indicated as the treatment of choice. However, the risk for performing surgery under general anesthesia for the 2-month-old baby was outweighed by the benefits of performing periodic follow up for the asymptomatic lesion to monitor the progression of lesion size and symptoms till the case becomes operable. The parents provided their informed consent for this management plan. After two weeks of the first visit, the lesion spontaneously resolved



**Fig. 1.** Clinical presentation of the oral lymphoepithelial cyst

during the patient's sleep. The mother reported that the patient woke up free of any oral lesions.

### Discussion

To the best of our knowledge, this is the first report for a congenital form of oral LEC. The mean age of the affected patients has been highlighted in the literature as the fourth decade of life; however reports include cases ranging from 2 to 75 years old.<sup>1</sup> Some sporadic cases were reported for patients under 10 years of age.<sup>1-3</sup> However, only McDonnell<sup>2</sup> reported a case of a 5-year-old child who had the lesion "shortly after birth". It also constituted the only article to report spontaneous resolution of the lesion. The author assumed the lesion was exposed to minor trauma causing either rupture into the mouth or herniation through the thin overlying mucosa causing its resolution.<sup>2</sup>

As the name refers, oral lymphoepithelial cyst represents a cystic lesion with both epithelial and lymphocytic components.<sup>4</sup> It has been hypothesized to be caused by either the inclusion of epithelial cells in lymphoid aggregates followed by cystic growth<sup>5</sup>, or being a pseudocyst caused by plugging of the crypt opening of lymphatic tissue by desquamated epithelial lining causing swelling.<sup>6</sup>

Reports show that it affects the floor of the mouth the most, followed by the lateral border of the tongue then the ventral surface and soft and hard palates.<sup>1</sup> The preference of the floor of the mouth was attributed to the hypothesis that the cyst originates from the excretory duct of the sublingual salivary gland or from ectopic minor salivary glands.<sup>7</sup>

Clinically, oral LEC is characterized by its presentation as a dome-shaped submucosal nodule with normal non-ulcerated covering mucosa. It has a yellow to white color and soft to firm cheese-like consistency.<sup>1</sup>

Diagnosis of oral LEC is based only on its clinical picture and behavior-namely its color and asymptomatic slowly growing nature- together with its histopathological picture. Imaging techniques are not used for diagnosis; as ultrasonography, computed tomography and magnetic resonance imaging were

reported to be non-conclusive.<sup>1</sup>

Accordingly, a decision should be made to stick to follow up or to perform conservative surgical excision or marsupialization under local anaesthesia. The management decision is based on the judgement of the lesion size and symptoms.<sup>8</sup> Intralesional injection of sclerosing agent was also a proposed line of treatment.<sup>9</sup>

Generally, the lesion has favorable prognosis of no recurrence.<sup>1</sup> However, if traumatized or irritated, the lesion either resolves -as in the hereby presented case- or becomes symptomatic secondary to proliferation of lymphoid tissue.<sup>10</sup>

Although it is always addressed as a rare lesion, the prevalence of oral LEC is thought to be underestimated due to scarcity of reports of such cases. This may be attributed to the small size of the lesions, asymptomatic nature and -according to this report- its occasional self-limiting nature.<sup>10</sup>

**Informed consent:** The author certifies that he has obtained all appropriate consent forms from the parents of the patient.

**Peer-review:** Externally peer-reviewed

**Authorship contributions:**

Conception and design, or analysis and interpretation of data: AG

Drafting the manuscript or revising the content: AG

Final approval of the version to be published: AG

## References

1. Yang X, Ow A, Zhang CP, et al. Clinical analysis of 120 cases of intraoral lymphoepithelial cyst. *Oral Surg Oral Med Oral Pathol Oral Radiol* 2012;113:448-52.
2. McDonnell D. Spontaneous regression of a yellow sublingual swelling : a case report. *Pediatr Dent* 1972;12:388-9.
3. Flaitz C. Oral lymphoepithelial cyst in a young child. *Pediatr Dent* 2000;22:422-3.
4. Bhaskar SN. Lymphoepithelial cysts of the oral cavity. *Oral Surg Oral Med Oral Pathol* 1966;21:120-8.
5. Gold C, Levittown N. Branchial cleft cyst located in the floor of the mouth. *Oral Surg Oral Med Oral Pathol* 1962;15:1118-20.
6. Knapp MJ. Pathology of oral tonsils. *Oral Surg Oral Med Oral Pathol* 1970;29:295-7.
7. Chaudhry AP, Yamane G, Scharlock E, SunderRaj M, Jain R. A clinicopathological study of intraoral lymphoepithelial cysts. *J Oral Med* 1984;39:79-84.
8. Castro JGL, Ferreira GM, Mendonca EF, de Castro LA. A rare occurrence of lymphoepithelial cyst in the palatine tonsil: a case report and discussion of the etiopathogenesis. *Int J Clin Exp Pathol* 2015;8:4264-8.
9. Kim MG, Lee NH, Ban JH, Lee KC, Jin SM, Lee H. Sclerotherapy of branchial cleft cysts using OK-432. *Otolaryngol Head Neck Surg* 2009;141:329-34.
10. Acevedo A, Nelson JF. Lymphoepithelial cysts of the oral cavity: report of nine cases. *Oral Surg* 1971;31:632-6.