



## Lymphoepithelial Cyst in Oral Cavity

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### Abstract

The oral lymphoepithelial cyst (OLC) is a rare cyst of the oral cavity. Oral lymphoid tissue is normally found in the area of mouth called Waldeyer's ring that encompasses the posterior aspect of the mouth including primarily the palatine tonsils, lingual tonsils & pharyngeal adenoids. OLC is primly found in floor of mouth, ventral aspect or posteriolateral aspect of the tongue. Histopathological examination reveals a cyst lined by stratified squamous epithelium surrounded by lymphoid tissue. In this paper we are reporting a case of lymphoepithelial cyst located at anterior two-third of tongue. It was treated surgically and no recurrence was noted in follow up.

**Keywords:** Oral lymphoepithelial cyst

**Abbreviations:** OLC: Oral Lymphoepithelial Cyst

involving anterior two-third of the tongue causing functional deficit.

### Introduction

Lymphoepithelial cysts are rare lesion in oral cavity and are located mainly on the floor of the mouth [1-3]. Initially they were first described by Bhaskar & Bernier [4] as 'branchial cyst' in 1959. The common site of presentation is floor of mouth [5] followed by ventral & posterolateral surface of tongue. Other intraoral sites such as soft palate, anterior palatine pillars & buccal vestibule are rarely affected. The age ranges from 14-81 years. They commonly presents as a movable, painless sub mucosal nodule with a yellowish or yellow-white discoloration. Occasionally cysts are transparent. We are describing a case of oral lymphoepithelial cyst which was huge and

### Case

A 8 years old male child presented in A&E with complaint of swelling over his tongue for past 7 years and difficulty in swallowing and speech due to increase in size of swelling noticed for past 1 week. He had history of aspiration of swelling twice at two years of age and second at 7 years of age which temporarily reduced size of the swelling but latter on the size increased in due to re-accumulation of fluid. On examination the child's mouth was found to be wide open with the tongue protruding out as a large, rounded swelling .This appeared to involve the undersurface of tongue and floor of mouth .The swelling was soft and cystic about 5 x 4 x 4

cm. The overlying mucosa was normal and no color change was observed although an area of ulceration was noted on anterior aspect (Figure 1). The clinical diagnosis of lymphangioma or OLC was made. Under general anesthesia the cyst was excised and tongue edged was sutured and specimen was sent for histopathological examination. Gross examination revealed single ovoid grayish brown cystic piece of tissue filled with grayish fluid measuring about 5 x 4.5 x 4cm. Microscopically cystic lesion was lined with stratified squamous and pseudostartified ciliated columnar epithelium. Its wall showed dense lymphoid infiltrate. The pathological diagnosis was OLC. In post-operative period he had re accumulation of fluid which was aspirated. In follow up visit his aliment of teeth was disturbed and swelling was much reduced in size (Figure 2). He was then sent to dentist for future management for dentition.



Figure 1: Pre-operative picture of the patient.



Figure 2: Post-operative picture of patient.

## Discussion

Oral lymphoepithelial cysts are uncommon lesion, constituting 0.18% of all lesions [6]. First case of OLC was described by Gold & Levittown [7,8]. A lymphoepithelial cyst can occur anywhere in the body. After head and neck,

the most frequent sites reported in the literature are the pancreas & thyroid gland. The pathogenesis of OLC is uncertain. According to classical theory by Knapp, OLC that develop in the oral tonsils are pseudo cyst caused by obstruction in the crypt of a tonsil where it accumulates exfoliated epithelial cells/purulent material [9-11]. Another theory suggested that lymphoid tissue of the oral mucosa contains ectopic glandular epithelium which may undergo cystic changes & form the lymphoepithelial cyst [12].

Clinically, an OLC presents as a small asymptomatic, well-circumscribed, yellowish, elevated, mobile sub mucosal lesion of varying size. Most common site is floor of mouth (60%) or on the lateral & ventral surface of tongue [5,8]. In our case, there was a huge swelling which filled patients oral cavity & due to which he had difficulty in deglutition, speech and swallowing which is different from other cases reported earlier. Literature suggests it is more common in males [13] as in our case.

Histologically, the OLC is formed by dilatation of the epithelial crypt normally present in lymphoid tissue, producing a cyst lined by stratified squamous epithelium. The cyst lumen is filled with desquamated keratin & sometimes mucous cells are found in the epithelial lining. Germinal centers are present in the lymphoid tissue of the cyst wall. The fluid is viscous & keratin content is present. The Actual prevalence of OLC is not known as many are not diagnosed. These cysts should be differentiated from other cyst of tongue such as lymphangioma or mucus retention cyst etc. OLC should be considered in differential diagnosis. Treatment of OLC is surgical resection and no recurrence has been noticed.

## References

1. López-Jornet P (2007) Oral lymphoepithelial cyst. *Ann Dermatol Venereol* 134(6-7): 588.
2. Pereira KM, Nonaka CF, Santos PP, Medeiros AM, Galvao HC (2009) Unusual co-existence of oral lymphoepithelial cyst and benign migratory glossitis. *Braz J Otorhinolaryngol* 75(2): 318.
3. Epivatianos A, Zaraboukas T, Antoniadis D (2005) Coexistence of lymphoepithelial and epidermoid cysts on the floor of the mouth: report of a case. *Oral Dis* 11(5): 330-333.
4. Bhaskar SN, Bernier JL (1959) Histogenesis of branchial cyst; A report of 468 cases. *Am J Pathol* 35(2): 407-443.

5. Bouquot J, Nikai H (2001) Lesions of the oral cavity. Diagnostic surgical pathology of the head and neck, Gneppe Ded, WB Saunders, Philadelphia, USA, pp. 141-221.
6. Antoniadis D, Epitavianos A, Zara boukas T (2004) Lymphoepithelial cyst of the oral cavity: literature review & report of four cases, one case with co-existence of epidermal cyst. Oral Surg Oral Med Pathol Oral Radiol Endod 98(2): 209.
7. Gold C (1962) Branchial cleft cyst located in the floor of mouth. Oral Surg Oral Med Oral Pathol 15(9): 1118-1120.
8. Suzuki H, Baba S, Hashimoto K (2000) Lymphoepithelial cyst in the sublingual region: Report of a case & review of literature. Oral Med Pathol 5: 105-108.
9. Shear M, Speight P (2007) Cyst of the oral & Maxillofacial Region. (4<sup>th</sup> edn), Wiley-Blackwell Munksgaard, UK, pp. 238.
10. Giunta J, Cataldo E (1973) Lymphoepithelial cyst of the oral mucosa. Oral Surgery, Oral Medicine, Oral Pathology 35(1): 77-84.
11. Buchner A, Hansen LS (1980) Lymphoepithelial cyst of the oral cavity. A clinicopathologic study of thirty-eight cases. Oral Surg Oral Med Oral Pathol 50(5): 441-449.
12. Bhaskar SN (1966) Lymphoepithelial cyst of the oral cavity: Report of twenty four cases. Oral Surgery, Oral Medicine, Oral Pathology 21(1): 120-128.
13. Vickers RA, Von Der Musli OH (1966) An investigation concerning inducibility of lymphoepithelial cyst in hamsters by autogenous epithelial transplantation. Journal of Dental Research 45(4): 1029-1032.