

Salivary gland lymphoepithelial cysts

Heike Varnholt, MD;
Lester D.R. Thompson, MD, FASCP;
Liron Pantanowitz, MD

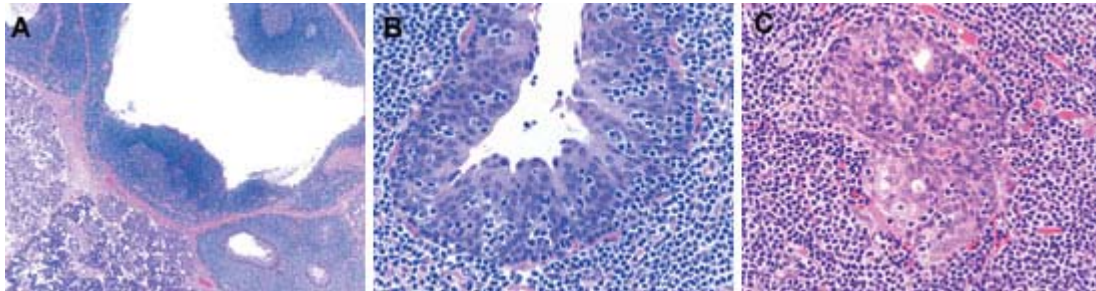


Figure. A: Lymphoepithelial cyst of the parotid gland is surrounded by dense reactive lymphoid tissue. B: This squamous cyst lining is infiltrated by small lymphocytes. C: In this epimyoeipithelial island, there is an intimate relationship between the epithelium and the lymphoid cells.

Lymphoepithelial cysts are benign, slowly growing unilocular or multilocular lesions that may appear in the head and neck. Among the reported head and neck sites are the salivary glands (typically the parotid gland) and the oral cavity (usually the floor of the mouth). These cysts are usually seen in adults and only occasionally in children. They range in size from 0.5 to 5.0 cm, and they can cause considerable cosmetic deformity and physical discomfort.

Lymphoepithelial cysts have been associated with human immunodeficiency virus (HIV) infection as part of a diffuse infiltrative lymphocytosis syndrome. They can also arise in HIV-negative patients who have Sjögren's syndrome, Mikulicz's disease, and myoepithelial sialadenitis. HIV infection should be suspected in a patient who has multiple bilateral lymphoepithelial cysts of the major salivary glands, especially the parotid glands. Ultrasound imaging is a good diagnostic modality. Fine-needle aspiration can be both diagnostic and therapeutic.

These cysts are lined with a squamous or glandular epithelium, and they are surrounded by dense polymorphous (polyclonal) lymphoid tissue (figure, A). Prominent epithelial infiltration by lymphocytes is characteristic (figure, B), as is the presence of epimyoeipithelial islands, which are epithelial cell nests extensively infiltrated by lymphocytes (figure, C).

The differential diagnosis of lymphoepithelial cysts includes Warthin's tumor, salivary duct retention cyst (mucocele), dysgenetic polycystic disease of the salivary gland, and mucosa-associated lymphoid tissue (MALT) lymphoma. Patients with salivary gland lymphoepithelial cysts are at increased risk for the development of lymphoma. Therapeutic approaches include periodic observation for any significant changes, needle aspiration, external radiotherapy, and/or surgical enucleation.

Suggested reading

Batsakis JG, Raymond AK. Sialocysts of the parotid glands. *Ann Otol Rhinol Laryngol* 1989;98(6):487-9.

Chetty R. HIV-associated lymphoepithelial cysts and lesions: Morphological and

immunohistochemical study of the lymphoid cells. *Histopathology* 1998; 33(3):222-9.

Rojas R, Di Leo J, Palacios E, et al. Parotid gland lymphoepithelial cysts in HIV infection. *Ear Nose Throat J* 2003;82(1): 20, 22.
