

## Lymphoepithelial Cyst of the Vallecles: A Case Report and Literature Review

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### Abstract

Lymphoepithelial cysts of the vallecles are rare benign lesions, their incidence and prevalence are not well studied. The clinical picture in adults is usually asymptomatic, the positive diagnosis is made during an indirect or direct laryngoscopy of the larynx. paraclinical assessment is based on computed tomography or magnetic resonance imaging. The therapeutic management is surgical may be indicated in extreme urgency in the face of total obstruction of the airways. Left untreated, the progression may be to complications dominated by infection.

**Keywords:** Cysts of the vallecles, lymphoepithelial cyst, Adult, Diagnosis, Treatment.

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### INTRODUCTION

Lymphoepithelial cyst of the vallecles is a rare benign tumor, most often asymptomatic in adults. Present of great therapeutic urgency in infants and for large cysts.

We report the case of a patient with a lymphoepithelial cyst of the vallecles with a review of the literature.

### CASE REPORT

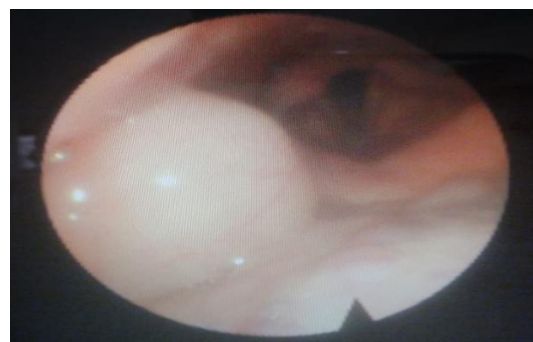
This is a 50-year-old patient, with no pathological history of chronic smoking, presents for a consultation for a bilateral nasal obstruction of progressive aggravation for 03 months, sensation of foreign bodies in the oropharynx with slight difficulty in the swallowing without dyspnea, hemoptysis, or odynophagia, all of which evolve in a context of general condition conservation.

Endoscopic examination of the nasal cavities and upper aerodigestive tract revealed translucent polyps at the level of the two nasal cavities classified as stage II. At the level of the right valley, the presence of a cystic mass with a smooth, translucent surface, around 1.5 cm, without inflammatory signs opposite (Fig-1). The rest of the laryngeal structures are morphologically and dynamically normal.

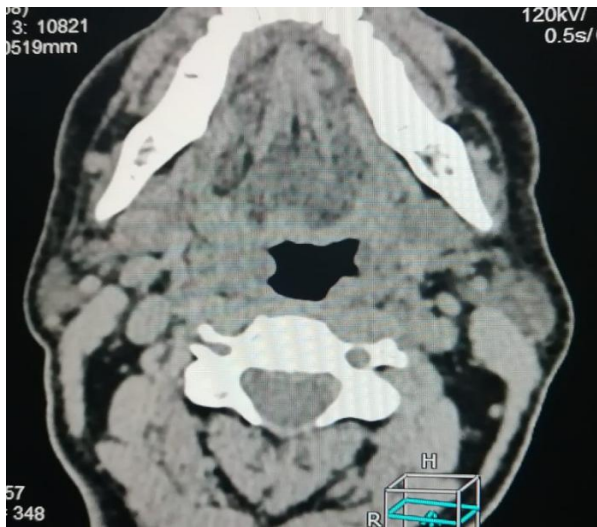
A CT scan is performed confirming the presence of a well-defined cystic mass, hypodense of  $1.5 \times 1.5$  cm pedicled to the right vallecle, the rest of the laryngeal structures are normal (Fig 2 & 3).

Paraclinical exploration of the nasal cavities retained the diagnosis of stage II nasal polyposis for which the patient would benefit from medical treatment.

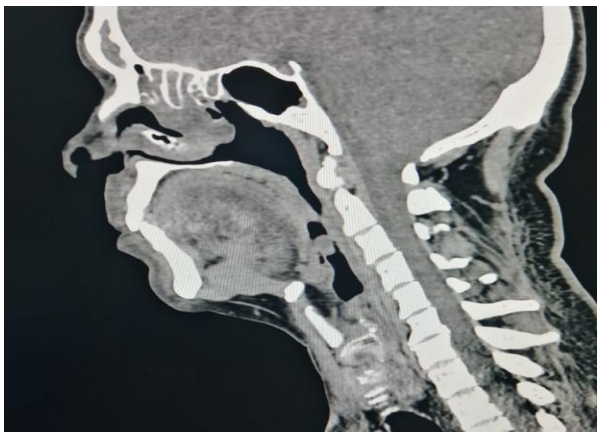
The patient underwent a direct laryngoscopy in suspension under general anesthesia which allowed the removal of the cystic lesion entirely by laryngeal micro-instruments. Hemostasis was obtained by electrocoagulation. Histological study of the surgical specimen showed the appearance of a benign lymphoepithelial cyst, with no associated signs of malignancy. The evolution has been good.



**Fig-1: Clinical picture of left vallecular cyst as seen on indirect laryngoscopy**



**Fig-2: Axial CT images of the larynx showing a vallecular cyst**



**Fig-3: Coronal CT images of the larynx showing a pedicled vallecular cyst**

**Comment**

Lymphoepithelial cysts of the valleculae are rare benign lesions, which pose the same problem as laryngeal cysts even though they do not anatomically belong to the larynx. Their incidence and prevalence have not been well studied according to the literature [1]. They are recognized by several names, the term lymphoepithelial cyst was first introduced by Bernier and Bhaskar in 1958 [2].

Several theories try to explain the formation of these cysts at the level of the valleculae, according to the literature the ducts of the mucous gland or the lingual tonsil crypt can be blocked by inflammation, irritation or trauma, thus causing dilation and cystic formations [3].

The symptomatology of lymphoepithelial cysts of the valleculae differs according to age. In infants, there is congenital respiratory stridor, dyspnea and feeding difficulty requiring urgent management in older children, feeding difficulties and stunted growth are the most common symptoms [4].

The clinical picture in adults is usually asymptomatic, large cysts manifest as a pharyngeal foreign body sensation, chronic irritating cough, high dysphagia or a feeling of food attachment, and rarely respiratory discomfort. Rarely, the laryngeal cyst can present as sudden death in an adult and hemoptysis is an unusual symptom [5].

The positive diagnosis is made during an indirect or direct laryngoscopy of the larynx showing a pedunculated or sessile cystic formation starting from Vallecula without abnormalities of the other laryngeal structures.

The paraclinical assessment is based on computed tomography or magnetic resonance imaging which remains the reference examination, the cyst is iso-intense in T1 and hypersignal in T2 [6].

X-ray exploration localizes the lesion, shows its extent, differentiates fluid-filled cysts from air-filled laryngoceles, and makes the differential diagnosis with ectopic thyroids.

Complications are dominated by infection of the cyst which can spread to surrounding structures and cause edema and inflammation. The risk of malignant transformation remains possible according to the literature [7]. The differential diagnoses are thyroid duct cyst, hemangioma, dermoid cyst, and cystic tumors, such as teratomas [8].

The therapeutic management is surgical performed by endoscopic route, several techniques are described: needle aspiration, marsupialization with cold instruments, robot-assisted surgery or laser excision with CO2 laser which has ablative and hemostatic properties and which also makes it possible to control the depth of penetration into the tissues [9].

It is always preferable to perform a complete excision of the cyst, except for cysts with a large implantation base for which marsupialization must then be as large as possible to avoid recurrence. Exceptionally in these cases some authors have proposed a trans hyoid approach [10].

**CONCLUSION**

It is a rare benign condition, usually asymptomatic. It must be known by practitioners because it can threaten the vital prognosis by total obstruction of the airways which requires urgent therapeutic management.

**REFERENCES**

1. Torun, M. T., Seçkin, E., Tuncel, Ü., Kılıç, C., & Özkan, Ö. (2015). A rare entity: Adult asymptomatic giant vallecular cyst. Case reports in otolaryngology, 2015.

2. Bernier, J. L., & Bhaskar, S. N. (1958). Lymphoepithelial lesions of salivary glands. Histogenesis and classification based on 186 cases. *Cancer*, 11(6), 1156-1179.
3. Kothandan, H., Ho, V. K., Chan, Y. M., & Wong, T. (2013). Difficult intubation in a patient with vallecular cyst. *Singapore Med J*, 54(3), e62-e65.
4. Kulkarni, A., & Karnik, P. (2011). A vallecular cyst as a cause of hemoptysis in an adult. *Int J Head Neck Surg*, 2, 158-60.
5. Alsaleh, S. A., & Al-Ammar A. Y. (2008). Hemoptysis in an adult with a vallecular cyst: A rare presentation. *Saudi Medical Journal*, 29(10):1497-1500.
6. Nouri, H., Raji, A., Elhattab, Y., Rochdi, Y., & Ait M'barek, B. (2006). Symptomatic vallecular cyst in adults: report of two cases. *La Lettre d'Oto-rhino-laryngologie et de chirurgie cervico-faciale*, 304-305.
7. Hoang, T. M., & Kim, B. B. (2015). A case report of a vallecular cyst and literature review. *Journal of Oral and Maxillofacial Surgery*, 73(9), 1766-e1.
8. Leibowitz, J. M., Smith, L. P., Cohen, M. A., Dunham, B. P., Guttenberg, M., & Elden, L. M. (2011). Diagnosis and treatment of pediatric vallecular cysts and pseudocysts. *International journal of pediatric otorhinolaryngology*, 75(7), 899-904.
9. Harrison, D. F. N., & Harrison, D. F. N. (1995). *The anatomy and physiology of the mammalian larynx*. Cambridge University Press.
10. Leuin, S., Cunningham, M., Volk, M. S., & Hartnick, C. (2008). Transhyoid approach to excision of recurrent vallecular pseudocysts. *The Laryngoscope*, 118(1), 124-127.