Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Radiology

Epiglottic Cyst in Adults: Incidental Diagnosis, Therapeutic Implications

Aghali Ibrahim[1*], Yassine Baroudi[1], Salah Ben El Hend[1], Badr Slioui[1], Salah Bellasri[1], Redouane Roukhsi[1], Nabil Hammoune[1], El Mehdi Atmane[1], Abdelilah Mouhsine[1]

[1]Department of Radiology, Avicenne Military Hospital, Marrakech, Morocco

DOI: https://doi.org/10.36347/sjmcr.2025.v13i08.005 | **Received:** 27.04.2025 | **Accepted:** 31.05.2025 | **Published:** 04.08.2025

***Corresponding author:** Aghali Ibrahim
Department of Radiology, Avicenne Military Hospital, Marrakech, Morocco

Abstract | **Case Report**

Epiglottic cysts are rare benign lesions, accounting for approximately 4 to 6% of all laryngeal cysts. In adults, they are often discovered incidentally due to their typically silent clinical presentation. We report the case of a 54-year-old patient in whom an epiglottic cyst was incidentally found during an upper digestive endoscopy. Endoscopic examination revealed a well-circumscribed cystic mass, and a CT scan confirmed its benign cystic nature. An endoscopic excision was performed, leading to complete resolution with a favorable outcome. Through this case and a review of the literature, we highlight the clinical, diagnostic, and therapeutic features of epiglottic cysts in adults. This case emphasizes the importance of early recognition and appropriate surgical management of this rare entity to prevent potential complications.

Keywords: Epiglottic Cyst, Endoscopy, CT scan, Larynx, Endoscopic Surgery.

INTRODUCTION

Epiglottic cysts are uncommon benign cystic lesions, accounting for approximately 4 to 6% of all laryngeal cysts. They are often asymptomatic and discovered incidentally, but may sometimes cause obstructive symptoms, particularly in children. In adults, their discovery is rare and presents a differential diagnostic challenge with other laryngeal lesions. We present a clinical case illustrating this diagnosis, supported by a review of the literature.

CASE REPORT

A 54-year-old male with no significant medical history presented with chronic dyspepsia. As part of the evaluation, an esophagogastroduodenoscopy (EGD) was performed, which incidentally revealed a smooth, rounded mass on the lingual surface of the epiglottis. The patient reported no dysphagia, dyspnea, or voice changes.

A nasofibroscopy revealed a well-demarcated, round, yellowish cystic mass arising from the lingual surface of the epiglottis, measuring approximately 2 cm in diameter. The mass partially narrowed the pharyngeal lumen but did not obstruct the airway at the time of examination.

A contrast-enhanced cervical CT scan showed a well-defined, homogeneous, hypodense, non-enhancing cystic lesion measuring 22 × 18 × 15 mm, located on the lingual surface of the epiglottis. No associated abnormalities were observed (Fig.1).

Estimated Volume: **5.13 cm³**, consistent with a unilocular, non-infiltrative cystic lesion.

Endoscopic surgical excision was performed under general anesthesia. Histopathological analysis confirmed the benign nature of the cyst, lined with respiratory epithelium and showing no atypia.

Postoperative recovery was uneventful, and no recurrence was observed at the 6-month follow-up.

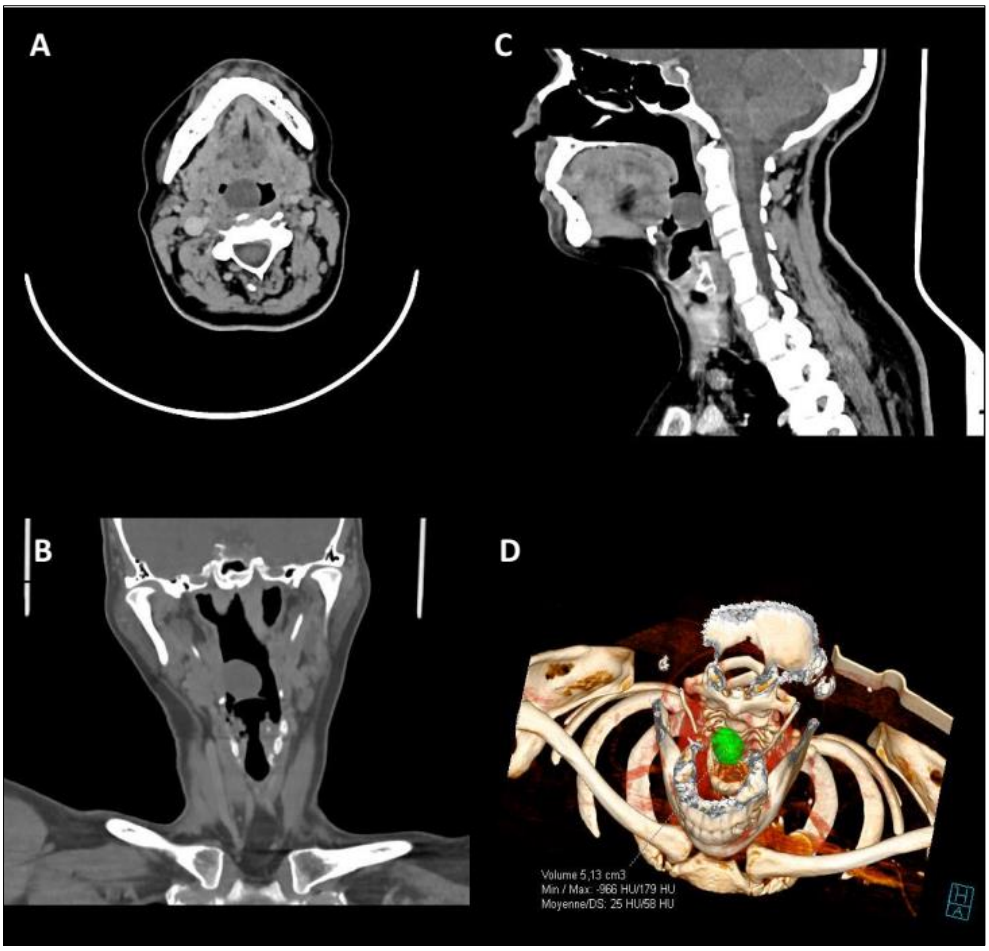

Figure 1: CT scan of the neck (non-contrast), showing an epiglottic cyst in three planes and 3D reconstruction
(A) Axial view: Well-defined hypodense cystic lesion located on the lingual surface of the epiglottis, measuring **22 mm** in transverse diameter.
(B) Coronal view: The lesion extends **18 mm** vertically, partially narrowing the upper airway lumen.
(C) Sagittal view: The anteroposterior diameter measures **15 mm**, with smooth margins and no contrast enhancement, in favor of a benign cyst.
D) 3D volume rendering reconstruction: The cyst is visible as a protrusion on the lingual surface of the epiglottis, clearly delimiting its extent and spatial relationships.

DISCUSSION

Epidemiology and Etiopathogenesis:

Epiglottic cysts are relatively rare, accounting for approximately 0.025 to 0.1% of all benign laryngeal masses [1]. They primarily affect two age groups: infants and middle-aged adults, with a male predominance observed in the adult population. According to a recent retrospective series, the incidence of epiglottic cysts discovered during intubation may be as high as 0.54%, significantly higher than historical estimates [1].

The etiopathogenesis of epiglottic cysts is not fully understood. DeSanto *et al*., (1970) proposed a histopathological classification distinguishing two main types:

- **Ductal cysts:** These result from obstruction of the excretory ducts of submucosal glands and are typically yellowish in color, containing viscous material.
- **Saccular cysts:** Arising from excessive extension of the saccule of the laryngeal ventricles, these often have a reddish or bluish hue and contain clear fluid.

More recent classifications, such as that proposed by Forte *et al*., categorize laryngeal cysts based on their anatomical extent and embryological origin [4].

Clinical Presentation:

The clinical presentation of epiglottic cysts varies significantly depending on their size, exact location, and patient age. In infants, they may cause inspiratory stridor, feeding difficulties, and life-threatening respiratory distress [5]. In adults, symptoms are often more insidious and may include:

- Foreign body sensation in the throat (as in our case)
- Dysphonia or voice changes
- Dysphagia or odynophagia

- Chronic cough
- Respiratory difficulty, especially when lying down
- Snoring or sleep apnea

However, many epiglottic cysts remain asymptomatic and are discovered incidentally during routine endoscopic exams or during intubation for other surgical procedures [3].

Diagnosis:

Diagnosis is primarily endoscopic, allowing direct visualization of the lesion. Nasofibroscopy is usually the first-line examination, enabling evaluation of the cyst's size, location, and impact on the airway.

Imaging plays an important complementary role in the pre-therapeutic workup. Cervical CT helps delineate the anatomical relationships of the cyst and rule out other associated pathologies. MRI, considered superior to CT for the diagnosis of epiglottic cysts according to Lahiri *et al*., [2], offers better tissue characterization and can help differentiate cysts from other lesions such as tumors.

In our case, the combination of nasofibroscopy and CT provided an accurate diagnosis and allowed appropriate surgical planning.

Epiglottic cysts are classified among congenital or acquired upper airway cysts. In adults, they are most often acquired, secondary to obstruction of mucous glands or chronic inflammation.

Differential Diagnosis:

The differential diagnosis includes other cystic lesions (laryngocele, mucocele), benign tumors (polyp, papilloma), malignant tumors (squamous cell carcinoma), and vascular malformations.

Treatment:

Treatment is based on surgical excision, generally via an endoscopic approach. Recurrence is rare if the excision is complete. Endoscopic follow-up is recommended.

CONCLUSION

The epiglottic cyst is a rare but benign condition, whose diagnosis relies on endoscopy and imaging. Management is essentially surgical. Awareness of this entity helps prevent diagnostic errors and ensures appropriate care.

Conflicts of Interest: The authors declare no conflicts of interest.

REFERENCES

1. Batsakis, J. G. (1980). *Tumors of the head and neck: Clinical and pathological considerations*. Williams & Wilkins.
2. Wani, A. A., Wani, M. A., & Ahmad, R. (2012). Epiglottic cyst: A rare cause of airway obstruction in adults. *Egyptian Journal of Ear, Nose, Throat and Allied Sciences*, 13(1), 47–49.
3. Lee, K. J., & Kirchner, J. A. (2001). Benign lesions of the larynx. In *Essential Otolaryngology Head & Neck Surgery* (8th ed., pp. 457–472). McGraw-Hill.
4. Wang, C. P., & Hsu, C. W. (2004). Epiglottic cysts in adults. *Otolaryngology–Head and Neck Surgery*, 130(4), 472–475.
5. Lin, C. C., & Su, W. F. (2013). A case of large epiglottic cyst incidentally found during gastroscopy. *Journal of the Chinese Medical Association*, 76(3), 172–173.