



ORIGINAL RESEARCH PAPER

Otolaryngology

AN UNUSUAL CAUSE OF SNORING – EPIGLOTTIC CYST

KEY WORDS: Snoring; Epiglottic cyst; Vallecular cyst; Chronic cough

Ponnathpur Lakshmi*

MBBS, MS Ent, Dlo (London) Senior Consultant, Sagar Hospital, Tilak Nagar, Bangalore *Corresponding Author

Shruti Manjunath

MBBS, MS Ent Junior Consultant, Deepak Hospital, Jayanagar, Bangalore

ABSTRACT

Symptoms like snoring and chronic nagging cough lasting for several weeks are common presentations in every outpatient department. Both can have multiple probable causes. These are often taken lightly and the cause is misdiagnosed. Here we present to you one such patient with chronic cough and snoring where the underlying cause was an Epiglottic cyst. Hence, a thorough evaluation to rule out all possible causes including a detailed otorhinolaryngological examination is the dictum for all cases with such symptoms.

INTRODUCTION

Vallecular cysts are rare and benign retention cysts of the larynx occurring as a result of ductal obstruction of the mucous glands or minor salivary glands in the vallecula and base of the tongue.^[1] Laryngeal cysts constitute 4.3% to 6% of all benign laryngeal tumours.^[2] 52% of these arise from the lingual surface of epiglottis in the vallecula^[3]

Epiglottic cysts are usually asymptomatic but they may present with variable degree of respiratory obstruction including stridor, difficulty in deglutition, hoarseness of voice or throat irritation and foreign body sensation.^[4] Very rarely they present with features of obstructive sleep apnoea, chronic cough etc.

Obstructive sleep apnoea (OSA) is characterized by episodic partial or complete obstruction of the upper airways during sleep. It can present with snoring, day time sleepiness, morning headache, and personality changes.^[4]

Chronic cough is cough that lasts for more than 8 weeks. Dozens of conditions can cause a recurrent, lingering cough, but the most common causes are postnasal drip, asthma, gastroesophageal reflux disease (GERD), chronic bronchitis, and treatment with ACE inhibitors.^[5] However other causes should never be ruled out.

A detailed evaluation of the upper airway should always be done in patients with sleep apnoea, chronic cough, throat irritation or foreign body sensation in the throat.

These epiglottic cysts are usually an incidental finding. Treatment options include excision of the entire cyst or marsupialisation.

CASE REPORT

A 42 year old female who is a professional singer presented to our clinic with cough and throat irritation since 4 months. She was treated by several Physicians and Pulmonologists for the same but with no relief. History also revealed that she was suffering from snoring.

On clinical examination, a yellowish globular swelling popped up near the base of the tongue on using a tongue depressor. On indirect laryngoscopy, a yellowish, smooth surfaced globular lesion, partially mobile was seen in the right half of the vallecula. A detailed video laryngoscopy showed that the lesion was arising from the lingual surface of the epiglottis. The mass was firm on palpation. Rest of the structures in the larynx were normal. A provisional diagnosis of Epiglottic cyst/Vallecular cyst was made.

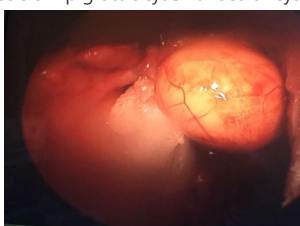


Fig 1 – Epiglottic cyst visualized through the fixed laryngoscope.

Computerised Tomography confirmed our findings. After performing the relevant blood investigations, obtaining surgical fitness and informed consent, the patient was taken up for Microlaryngeal surgery under General Anesthesia.

Patient was intubated using a Mallinckrodt's tube, positioned and a small pack was placed in the supraglottic region. The cyst was visualized through a fixed suspension laryngoscope connected to the operating microscope. The base of the cyst was infiltrated with 2% lignocaine and adrenaline (1cc). The cyst was dissected off the surface of the epiglottis and removed in toto using cold instruments. Minimal bleeding at the base was controlled with an adrenaline pack and hemostasis was achieved.

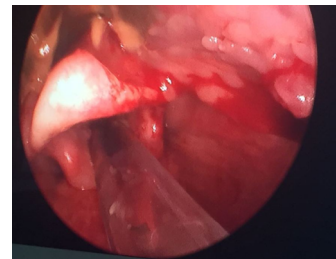


Fig 2 – View of the Epiglottis and rest of the larynx after the cyst was excised.

Patient was extubated after removal of the throat pack. The cyst was 2.5x1.5cm in size.

Specimen was sent for histopathological examination which confirmed the diagnosis of Epiglottic cyst containing mucous.

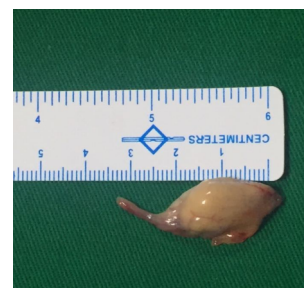


Fig 3 – The Epiglottic cyst measuring 2.5cm x 1.5cm.

Post operative period was uneventful except for pain which reduced gradually within 2 weeks. The patient noticed that her snoring disappeared within a week and the cough subsided in two weeks.

DISCUSSION

A cough can either be a voluntary act or an uncontrollable,

involuntary reflex. The nerves in the larynx and respiratory tract can be irritated by infections, allergies, cold air, tumors, chemical agents or by body fluids such as post nasal drip (upper airway syndrome) or stomach acid which in turn initiates the entire process of cough.^[5] This, therefore warrants a detailed otolaryngological examination as a part of cough evaluation.

Snoring is a common problem of airway resistance and is characterized by noisy breathing during sleep caused by **vibrating tissue in the upper airway (soft palate and uvula)**.^[7]

Obstructive sleep apnoea is characterized by repetitive episodes of complete or partial collapse of the upper airway during sleep resulting in cessation/reduction of the airflow^[8,9]. This causes a progressive hypoxia that stimulates breathing efforts against the collapsed airway, until the person is awakened. Although the pathogenesis of OSA is multifactorial, anatomic defects also play a major role.^[12]

Some of the contributing causes include obesity, facial malformations, thick lateral pharyngeal walls, macroglossia, nasal obstruction, enlarged uvula, micrognathia, laryngeal cysts and tonsillar hypertrophy etc.^[10,11,12,13] Obesity leads to airway narrowing through fatty infiltration of the areas surrounding the airway.^[14]

Therefore, a patient with snoring and features of OSA have to undergo a complete evaluation of the upper airway in addition to a Polysomnography to rule out anatomic aetiology.

Epiglottic cysts are benign, rare ductal cysts that most commonly occur in the sixth decade of life.

Asherson modified De Santo's classification of laryngeal cysts and described three types: (1) ductal cysts, (2) saccular cysts, and (3) thyroid-cartilage foraminal cysts. Ductal cysts occur due to obstruction of collecting ducts of the salivary glands in the larynx and are therefore called retention cysts or mucous cysts. These can occur anywhere in the larynx. Saccular cysts are congenital cysts that arise from the sacculus of the larynx and are more commonly seen in neonates. Epiglottic cysts are ductal cysts and most commonly arise from the lingual surface of the epiglottis. They may extend to the aryepiglottic fold or the laryngeal surface of the epiglottis rarely.^[6]

The clinical presentation ranges from asymptomatic to lethal when the cyst is large enough to cause airway obstruction or if the cyst is infected.^[2]

The Epiglottic cyst is usually diagnosed by an Indirect Laryngoscopy or Videolaryngoscopy and is often an incidental finding.

The differential diagnosis includes thyroglossal cyst, lingual thyroid, lymphangioma, hemangioma, chondroma, and papilloma.^[6]

The treatment includes complete excision of the cyst by using cold instruments or laser. Another procedure that can be done is Marsupialisation.

Our patient presented with unexplained cough and snoring since 4 months and the culprit turned out to be an Epiglottic cyst.

CONCLUSION

In conclusion, a detailed Otorhinolaryngological examination is mandatory for all patients suffering from non-specific problems like snoring and chronic cough.

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