

CASE REPORT

A RARE CASE OF LARGE EPIGLOTTIC CYST

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ABSTRACT: Epiglottic cysts are generally benign lesions, which can affect all age groups. Depending on their location and size they can cause airway obstruction and potentially lead to sudden death. I report a case of 45 year old male attended to my clinic with Cyst epiglottis. His complaints were feeling of lump in the throat and occasional attacks of choking especially during sleep. The patient was successfully treated surgically with no recurrence in the 2years follow-up.

KEYWORDS: Epiglottic cysts-Large sized- symptom range-Complications/sudden death-Treatment.

INTRODUCTION: Epiglottic cysts are abnormalities of the larynx, which have been classified by their location and by their etiology. They are benign tumors whose clinical presentations vary in accordance to their size and exact location. Although epiglottic cysts have been described in all ages, they seem to be more prevalent in the sixth decade. Early diagnosis and treatment will reduce the incidence of airway complications leading to sudden death. Additionally, avoidance of certain substances such as muscle relaxants in patients known to have these lesions will often be necessary; otherwise, collapse of surrounding structures, that would otherwise maintain a patent airway, will be compromised in the unconscious and relaxed patient.

CASE REPORT: A 45 yrs old patient attended to my clinic with complaints of lump in the throat for the past 6months and attacks of occasional choking especially during sleep in the recent past. There is no history of fever, pain, cough or dysphagia.

On examination there is 1 to 1.5 inch diameter mass moving in and out with swallowing movements in to the oral cavity from behind the tongue. The 1/3rd of the mass presents out of the soft palate region with swallowing movement. The physical appearance of the mass is that of a thick walled cyst. On further clinical and endoscopic examination, showed the cyst is on lingual side of Epiglottis. Needle aspiration showed mucous material.



Fig. 1: Pre-op lesion



Fig. 2: Pre-op lesion

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Case was subjected for Surgical Unroofing under Local anaesthesia with standby General anaesthesia. Patient is well cooperative for the procedure and all necessary precautions were taken for haemostasis in case of sudden bleeding and also to prevent accidental aspiraton in to lungs. But there was very minimal bleeding and no aspiration. Appropriate medical treatment was given to tackle pain and secondary infection. And the patient was observed for 12hours and discharged. Further periodic follow-ups showed no recurrence.

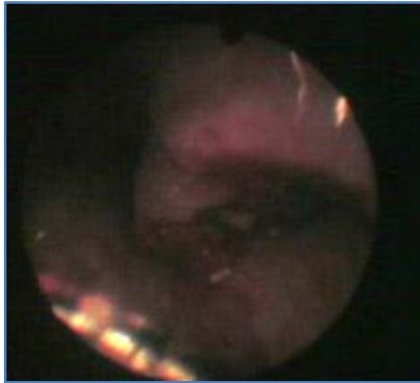


Fig. 3: Post-op Picture

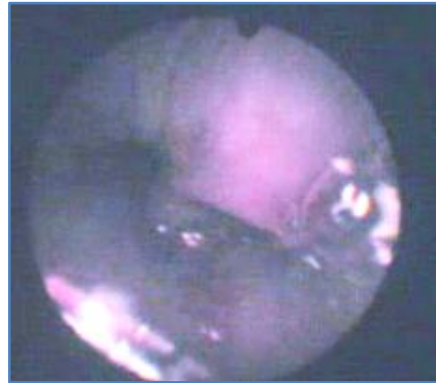


Fig. 4: Post-op Picture

DISCUSSION: Cysts of the epiglottis are benign lesions, which can be found at any age, but with increased frequency in adults.^{[1][2][3][4][5]} The most common location for these lesions is the lingual surface of the epiglottis,^{[1][3][4]} and less commonly, on the laryngeal surface.^[1] Cysts arising from the lingual surface (epi-laryngeal) mostly consist of small masses which are confined to the sub-mucous layer and do not extend through the cartilage.^[1] On mirror laryngoscopy, these epi-laryngeal cysts are described as solitary, spherical, or pedunculated swellings that occupy the valleculae.^[1] On the other hand, cysts arising from the laryngeal surface (intra-laryngeal) have been classified as either simple or plunging cysts.^[1] The simple cyst is the least common type of epiglottic cyst. It has a tendency to invade the lumen of the larynx, leading to deformation and displacement of the epiglottis. Often, it is described as a solitary and unilocular mass that appears smooth and pale on laryngoscopy.

The plunging cyst is similar; however, it is bilocular and characterized by having a connection through the thyro-hyoid membrane, allowing it to extend into the preepiglottic space. This extension may present as a pulseless, painless swelling that is often palpable on the upper part of the neck. Plunging epiglottic cysts may suddenly change in size with exertion of pressure over the external swelling as well as with maneuvers such as the valsava maneuver or by a simple neck extension. Intra-laryngeal cysts of the epiglottis have the greatest association with sudden laryngeal obstruction.^[1] Epiglottic cysts have also been classified into congenital, dermoid, and retention cysts, with the latter being the most common.^[6] The pathophysiology underlying these cysts is thought to be inflammation of the larynx leading to obstruction of gland ducts and in turn causing retention of mucus and ultimately the formation of cysts.^{[2][3][4][6][7]} The lining of these cysts is most often formed by stratified squamous epithelium and rarely by cuboidal, columnar or ciliated type.^{[2][3]}

Epiglottic cysts are most often asymptomatic, hence found incidentally during physical examination or intubation procedures.^[3] Depending on size, symptoms vary from dysphasia, foreign body sensation, hoarseness, cough, and even risk of sudden laryngeal obstruction, which may lead to

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death.^{[1][2][4][7]} During induction of anesthesia, symptomless, undiagnosed epiglottic cysts may cause great complications when muscular relaxation may drive the cyst into the larynx causing partial or complete obstruction, which may lead to the inability to ventilate and the development of respiratory failure.^{[5][6]} Another potential complication of unsuspected epiglottic cysts is acute infection and abscess formation. This may lead to airway edema and subsequent respiratory compromise.^[3] Therefore, it is important to identify patients with asymptomatic epiglottic cysts on routine throat examination. This may allow treatment and prevention of potentially fatal complications. Treatment of epiglottic cysts depends on size, location, and clinical symptoms. In larger lesions, surgery may be necessary.^{[3][7]}

Treatment options include endoscopic Excision, Marsupialization, and Unroofing. Use of a carbon dioxide laser is an option. Simple aspiration is not recommended due to high recurrence rates. Recurrences can be minimized by the complete removal of the cyst wall.^{[3][7]} Prophylactic antibiotics and adequate hydration are recommended after surgery to avoid acute epiglottitis.^[7]

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