Hidden in the Vallecula: Uncovering a Silent lump

First Author	Dr. Badavath Divya Rekha; Assistant Professor, Department of E.N.T., MRMCW; Mobile - 9494871477
Second Author	Dr. B. Vani; Assistant Professor, Department of E.N.T., MRMCW; Mobile - 8319004718
Third Author	Dr. Shalini Singh Sisodia, Professor, Department of E.N.T., MRMCW; Mobile - 8008798517
Fourth Author	Dr. P. Sai Mahesh, Senior Resident, Department of E.N.T., MRMCW; Mobile - 7801011296
Fifth Author	Dr. S. Ramakrishna, Professor and HOD, Department of E.N.T., MRMCW; Mobile - 9849390659
Name of Corresponding Author	Dr. Badavath Divya Rekha; Assistant Professor, Department of E.N.T., MRMCW; Mobile - 9494871477

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Full Address for Hard Copy with Name: House no. 42-471 Shirdi hills, road no. 6, jagathgiri gutta, Allwyn colony, Kukatpally, Hyderabad 500037

Mobile No. 9494871477

[1]badavathdr@gmail.com
[2] bwani2017@gmail.com
[3]Sisodiashalini@gmail.com

Abstract- Vallecular cysts (VC) are generally asymptomatic, A 24-year-old female patient came to our Otorhinolaryngology Out-patient department (OPD) with complaint of difficulty and pain while swallowing, video-laryngoscopy (VLS) was suggestive of cystic swelling over the lateral wall of right side of vallecula, later under General Anesthesia (G.A.) micro-laryngoscopy was done and marsupialization of cyst was done and sent for Histopathological examination (HPE).

Key words- Dysphagia, vallecular cyst, Micro-laryngoscopy

Abbreviations: Vallecular cyst(s) – VC; Video-laryngoscopy – VLS; Histopathological examination – HPE; General Anesthesia – G.A.; Out-patient department – OPD; Malla Reddy Medical College for Women - MRMCW

INTRODUCTION

VCs arise due to obstruction of the mucous gland duct. Ductal cysts are usually small, approximately 1–5 mm in diameter. Adult VCs are frequently asymptomatic. When seen in adults, possible symptoms include globus, voice changes, dysphagia, hoarseness, and airway obstruction. The lesion is usually fluctuant and some may appear mucoceles at palpation. VCs are benign in pathology and are not associated with other anomalies or syndromes [1]. They can become infected and this can lead to acute epiglottis with or without abscess formation and this situation may be associated with life-threatening acute airway obstruction [2]. Giant VCs have been observed at the time of induction of G.A. It can result in difficulties in endotracheal intubation. Tracheotomy is sometimes necessary for airway management. Surgical procedures include deroofing, marsupialization, excision with snare, and laser vaporization or excision [3, 4].

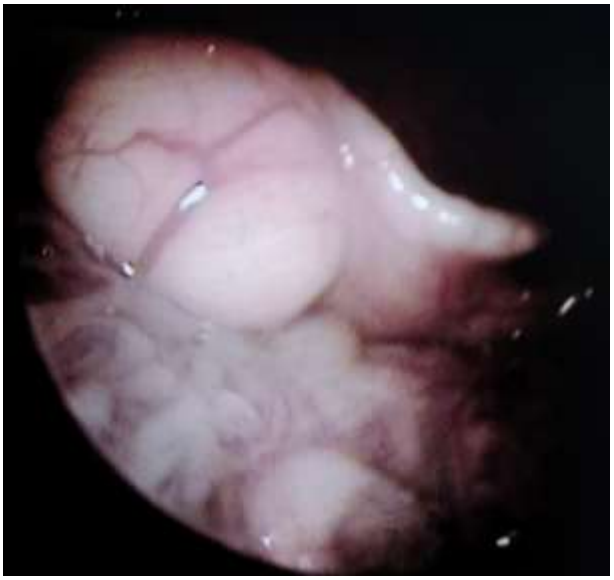

Figure 1: VLS image showing Vallecular cyst originating from the left vallecula

CASE STUDY

A 24-year-old female patient presented to our ENT OPD in Malla Reddy Medical College for Women (MRMCW) with complaint of foreign body sensation in the right side of throat associated with pain and difficulty in swallowing for 1 year. Examination revealed a well-defined cystic lesion arising from the right vallecular space on routine VLS. The cyst was reddish in color, congested in appearance and measuring an approximate size of 4x3 cm. No other obvious findings were noted in other laryngeal structures.

Patient was evaluated with required blood investigations and planned for Micro-laryngoscopy. Under GA, patient was made to lie in supine position, Direct laryngoscope was placed to visualize attachment of vallecular cyst and excised along the contents and sent for HPE.

HPE was suggestive of a cyst wall lined by stratified squamous epithelial wall showing a fibro-collagenous tissue infiltrated by chronic inflammatory infiltrate comprising of lymphocytes, plasma cells and blood vessels giving impression of Benign epithelial cyst.

Figure 2: Post operative image of excised vallecular cyst

DISCUSSION

Laryngeal cysts are classified into ductal and saccular types. Ductal cysts result from the obstruction and retention of mucus in the submucosal gland ducts, whereas saccular cysts develop from the saccule and may extend into the ventricle. Approximately 75% of laryngeal cysts are ductal. VCs commonly occur on the lingual surface of the epiglottis. They can occur at any age and are generally sporadic in nature [5].

VCs are often asymptomatic, but when symptoms manifest, they can include stridor, cough, dysphonia, foreign body sensation, hoarseness, and dysphagia. Infection of the cyst can cause swelling and inflammation in nearby structures. Vallecular cysts are benign, mucus filled lesions that typically originate from the lingual surface of the epiglottis or base of the tongue. However vallecular cysts are associated with upper respiratory tract symptoms. In our case, patient had complaint of foreign body sensation, dysphagia, odynophagia, voice change. In our patient of 24-yr-old female, cyst was identified with complaint of persistent pain and difficulty in swallowing.

CONCLUSION

VCs represent a rare yet manageable condition. This case report highlights the significance of including VCs in the differential diagnosis of dysphagia and acknowledges the complexities involved in their management. Endoscopic marsupialization emerged as a highly effective treatment option with minimal complications observed in our patient. Awareness of this uncommon condition is pivotal for ENT specialists, particularly in scenarios involving difficult intubation. Timely recognition and appropriate surgical intervention are crucial in achieving favorable patient outcomes, as evidenced by the resolution of symptoms and absence of recurrence in our case. Continued research and clinical vigilance are essential to further refine diagnostic approaches and optimize treatment strategies for VCs, ensuring improved patient care and outcomes in the future.

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