



SYMPTOMATIC VALLECULAR CYST- HOW I DO IT?

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ABSTRACT

Vallecular Cysts are usually retention cysts of the minor salivary glands. They arise due to blockage of mucous gland duct. Other names for vallecular cyst are mucus retention cyst, pre –epiglottic cyst, base of the tongue cyst and the ductal cyst .Congenital cysts of the larynx are rare, presenting either in infancy or in adults. Small vallecular cysts are asymptomatic; as it gets bigger due to mucous accumulation it may cause stridor or difficulty in swallowing. Common site of occurrence is lingual surface of epiglottis. Here we report a case of adult vallecular cyst presented with complaints of change in voice, slight discomfort while swallowing and breathing which was treated surgically in a unique way by using an endoscope and micro debrider .The conventional modalities of management of vallecula cyst include marsupialisation, de-roofing or excision or electrocautery.

KEYWORDS: Vallecular Cyst, Epiglottis, Micro debrider, Salivary glands.



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INTRODUCTION

Vallecular cysts are mostly the ductal variety of laryngeal cysts. Obstruction of the mucous glands leads to cyst formation and continued secretion leads to a corresponding increase in size of the cyst. Mode of presentation depends upon the position and size of cyst. They classically appear as dome-shaped mucosal swellings ranging from 1 or 2mm to several centimetres in size. The lesion characteristically is fluctuant, but some mucocoeles appear firm on palpation^[1]. Vallecular are otherwise called epiglottis mucus retention cyst or base of tongue cyst which are formed due to obstruction or dilation of ducts of mucus gland or lingual tonsillar crypts. Vallecular cysts are rare and are typically not associated with other anomalies or syndromes. Vallecular cysts are usually benign in pathology. However, with the passage of time, an increase in the size of the cyst might give the patient more symptoms. Large cysts may cause dysphagia and voice change. Majority of patients presenting with vallecular cysts are in the paediatric age group, most of them being infants, in infants and children it may also present with upper aero-digestive tract obstruction and stridor. In adults, vallecular cysts are most often asymptomatic and discovered on routine laryngoscopy or during induction of anesthesia. Symptomatic vallecular cyst are usually removed surgically either by marsuipilation or electrocautery.

CASE REPORT

A 31 year old male presented to our OPD with complaints of change in voice, slight discomfort while swallowing & breathing for 1 year. Patient on examination had a muffled voice. On Indirect Laryngoscopic examination there was a large globular and translucent mass, with smooth surface measuring 5x3 cm was seen occupying both vallecula and midline pushing the epiglottis posteriorly and completely occluding the laryngeal inlet. On Video Laryngoscopy both vocal cords appeared normal and mobile. Mass on palpation was cystic. X ray also showed cystic appearance. Diagnosis of Vallecular cyst was made and excision of cyst was planned. All

the routine pre-operative investigation was done and the patient was prepared for the surgery. On table patient was put in tonsillectomy position and the soft palate retracted with catheters through both nasal cavity. 0 and 70 degree nasal endoscopy was used to visualise the cyst and with the help of power-assisted microdebrider the whole mass was removed. Hemostasis was achieved with electrocautery. Patient recovered well and was relieved from his symptoms.

DISCUSSION

Vallecular cysts are retention cysts of the minor salivary glands in the vallecula and base of the tongue^[2]. Vallecular cysts, also called epiglottic mucus retention cysts, arise when the duct of a mucous gland or lingual tonsillar crypt becomes obstructed and dilates^[3,4]. Obstruction of the mucous glands leads to cyst formation and continued secretion leads to a corresponding increase in size of the cyst^[2]. Ductal cysts are the most common laryngeal cysts and occur most frequently at the true vocal fold, followed by the epiglottis and vallecula^[5,6]. Several classification system and theories concerned with etiology have been postulated. The first classification was by Myerson who divided them as 4 types. Retention, Congenital, Traumatic, and lymph or blood cysts^[9]. But the most popular one was postulated by Desanto as ductal cyst (75%) and saccular cysts (25%). Vallecular cysts resembling tonsillar crypts due to associated lymphoid tissue have been separately classified as lymphoepithelial cysts and may also occur in the aryepiglottic fold, vestibule, and piriform sinus^[5]. Nearly two-thirds of vallecular cysts are asymptomatic and are diagnosed incidentally on routine laryngeal examination^[5]. In adults, vallecular cysts are most often asymptomatic and discovered on routine laryngoscopy or during induction of anesthesia^[7]. The incidence of vallecular cysts on laryngoscopy has been reported as 1 in 1,250 to 1 in 4,200, but the true incidence is difficult to estimate^[8]. The differential diagnoses include internal thyroglossal duct cysts, dermoid cysts, lingual thyroid, teratomas, lymphangiomas and

haemangiomas . The conventional modalities of management of vallecular cyst include marsupialisation, de-roofing or excision^[5] .These are done with electrocautery^[2]. In our case 31 year old has presented with symptoms of difficulty to breath and voice change owing to vallecular cyst. We have

removed the mass with power-assisted microdebrider with the help of 70° endoscope for visualisation. The usage of 70 degree gives us an accurate view of the site and the microdebrider can remove the whole of the mass without any remnants.

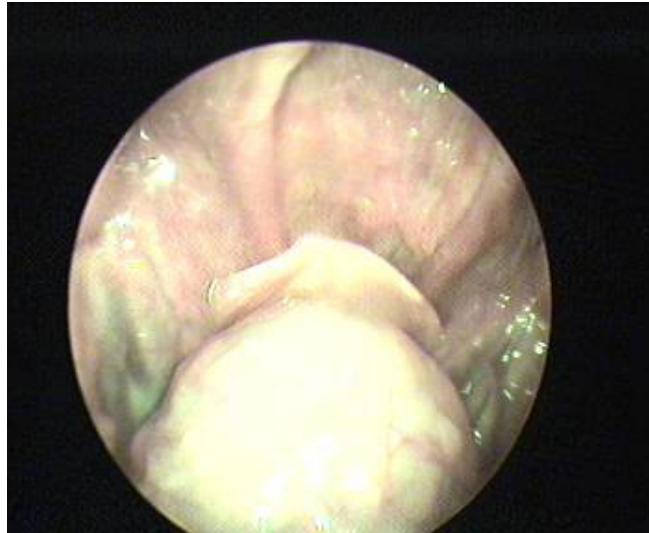


Figure 1

large globular and translucent mass, with smooth surface measuring 5x3 cm was seen occupying both vallecula and midline pushing the epiglottis posteriorly and completely occluding the laryngeal inlet.



Figure 2

Post operative picture



Figure 3
X ray also showed cystic appearance

CONCLUSION

Vallecular cyst are very uncommon , usually symptomatic in children and not in adults, here a 31 year old patient is presenting with symptom of change in voice , difficulty to breathe and swallow. The common surgical methods to remove Vallecular cyst are

marsupialisation, de-roofing or excision. These are done with Carbon –di-oxide laser or electrocautery. In our case we have removed the mass with power assisted micro debrider with the help of 0 and 70 degree endoscope for better visualisation.

REFERENCES

1. K.M.K. Masthan, N. Aravindha Babu, Abhinav Jha And M. Elumalai, Steroids Application In Oral Diseases, Int J Pharm Bio Sci 2013; 4(2): (P) 829 - 834
2. Sathish Bhandary, Innovative Surgical Technique in the Management of Vallecular Cyst. OJHAS: Vol. 2, Issue 3: (2003 Jul-Sep).
3. Berger G, Averbuch E, Zilka K, Berger R, Ophir D. Adult vallecular cyst: thirteen-year experience. *Otolaryngology*. 2008;138(3):321–327.
4. Gutiérrez JP, Berkowitz RG, Robertson CF. Vallecular cysts in newborns and young infants. *Pediatric Pulmonology*. 1999;27(4):282–285.[PubMed]
5. Arens C, Glanz H, Kleinsasser O. Clinical and morphological aspects of laryngeal cysts. *European Archives of Oto-Rhino-Laryngology*. 1997;254(9-10):430–436.[PubMed]
6. DeSanto LW, Devine KD, Weiland LH. Cysts of the larynx—classification. *Laryngoscope*. 1970;80(1):145–176.[PubMed]
7. Jonathan J. Romak Steven M. Olsen, Cody A. Koch, and Dale C. Ekbom. Bilateral Vallecular Cysts as a Cause of Dysphagia. *Int J Otolaryngol* 2010.
8. Mason DG, Wark KJ. Unexpected difficult intubation. Asymptomatic epiglottic cysts as a cause of upper airway obstruction during anaesthesia. *Anaesthesia*. 1987;42(4):407–410.[PubMed]
9. Myerson MC. cysts of the larynx. *Arch.oto laryngol* 1933;18:281-290