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LARYNGEAL CYSTS

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ABSTRACT

Background: Laryngeal cysts are rare benign tumors. They can be congenital or acquired.

Materials and methods: The study was conducted in the Department of ENT and Head and Neck Surgery, Government Medical College Jammu over a period of eight years from March 2010 to March 2018. Detailed pre-operative history was taken from the patients .Symptoms were noted. Detailed clinical examination was done. All cysts were excised by direct laryngoscopy under G.A. Excision of minor cysts and marsupialization of larger ones was done. All vocal cord cysts were removed by direct laryngoscopy except for two large Aryepiglottic cysts and one large cyst on lingual surface of epiglottis which were marsupialized.
On follow-up till the end of study, recurrence if any was noted.

Results: Out of 20 patients studied, 12(60%) patients were in the age group of 1-20 years. Only 1 patient was less than 1 year age.The average age was 19 years. M: F ratio was 1.22:1.Out of 20 patients, 9(45%) had vallecular cysts, 8(40%) had vocal cord cysts whereas remaining 3(15%) had cysts on aryepiglottic folds. The most common presenting symptom was foreign body sensation in the throat seen in 10(50%) patients followed by hoarseness of voice. On follow up of the patients , no case of recurrence was seen.

Conclusion: Excision of smaller cysts and marsupialosation of larger one is the treatment of choice for laryngeal cysts..

Keywords: cysts, laryngeal, vallecular.

INTRODUCTION

Laryngeal cyst is a rare entity and constitutes only 4.3% to 6% of all benign laryngeal tumours.[1] These can be congenital or acquired. Congenital cysts are rare and are most commonly located in ventricular bands or aryepiglottic folds. The clinical presentation of this benign tumour varies in relation to its size and location. The majority of cysts originate from the epiglottis. Originates from sequestration of embryonic cells in the saccule or laryngeal ventricle.

Diagnosed in neonatal period as a consequence of breathing difficulties. Retention cysts or acquired cysts are squamous or columnar, originating from obstruction of seromucinous salivary glands. [2]

Squamous variant is commonly seen on the lingual surface of the epiglottis, vallecula, aryepiglottic folds, squamous lined portion of vocal cords. Most common location is undersurface of the anterior part of the cords. On laryngoscopy, vocal cord cyst appears similar to vocal cord polyp, differentiated on microscopic examination.[3] Although the vocal polyps arise from medial margin of vocal cords, laryngeal cysts usually arise from the upper surface of vocal cords. Cysts of the ventricular band can be misinterpreted as neoplasm. Cysts are more common above the age of 60 years and are lined by columnar or oncocytic cells.[4]

Laryngeal cysts present with symptoms like hoarseness, local foreign body sensation, pain,

difficulty in swallowing and dyspnea. Very few studies have been published on laryngeal cysts in India. In this study, we report twenty cases of laryngeal cysts with their clinical signs and symptoms, location, age and gender predisposition.

MATERIALS AND METHODS

The study was conducted in the Department of ENT and Head and Neck Surgery, Government Medical College Jammu over a period of eight years from March 2010 to March 2018. Detailed pre-operative history was taken from the patient including family history, medical history and smoking history.

Symptoms such as hoarseness of voice, foreign body sensation, pain in throat, difficulty in swallowing, difficulty in breathing were noted. Detailed clinical examination was done. All cysts were excised by direct laryngoscopy under G.A. Excision of minor cysts and marsupialization of larger ones was done. All vocal cord cysts were removed by direct laryngoscopy except for two large aryepiglottic cysts and one large cyst on lingual surface of epiglottis which were marsupialized.

On follow-up till the end of study, recurrence, if any was noted.

RESULTS AND OBSERVATIONS

Age and genderwise distribution of patients

Out of 20 patients studied, 12(60%)patients were in the age group of 1-20 years. Only 1 patient was less than 1 years age. He was a child of 35 days old age who presented with respiratory obstruction and had a large epiglottic cyst. Rest 7(35%) patients were in the age group of 21-40 years. The average age was 19 years.[Figure 1]

Out of 20 patients, 11 were males and 9 were females with M: F ratio of 1.22:1.

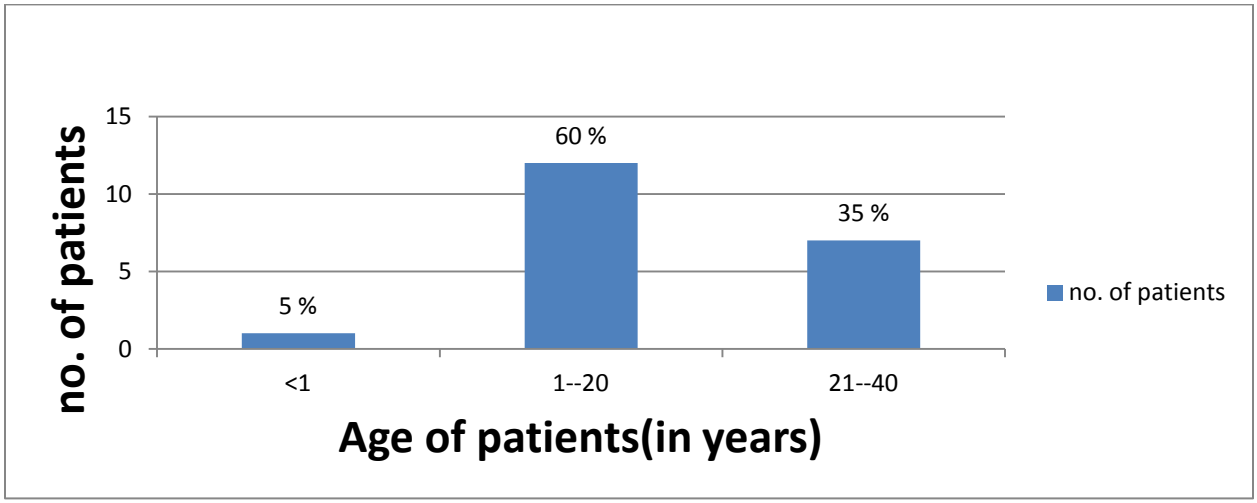

Figure 1: Age wise distribution of patients

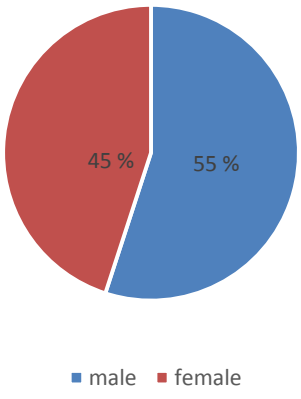

Figure 2: Genderwise distribution of patients.

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Site of cyst

Out of 20 patients included in the study, 9(45%) patients had vallecular cysts, 8(40%) had vocal cord cysts whereas remaining 3(15%) had cysts on aryepiglottic folds. [Figure 3][Figure 4]

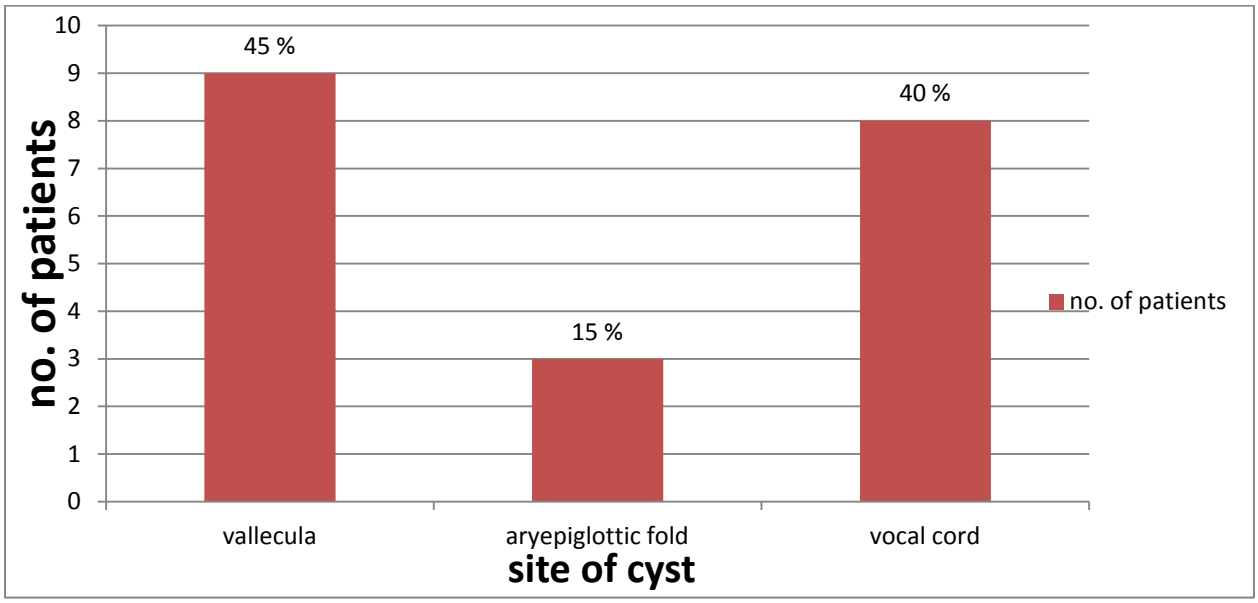

Figure 3: Distribution of patients according to site of cysts.

Figure 4: Vallecular cyst.

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Presenting symptoms

The most common presenting symptom was foreign body sensation in the throat seen in 10(50%) patients followed by hoarseness of voice, pain in the throat, difficulty in swallowing and dyspnea in that order. Figure 5 shows distribution of patients according to presenting symptoms.

On follow up of the patients, no case of recurrence was seen.

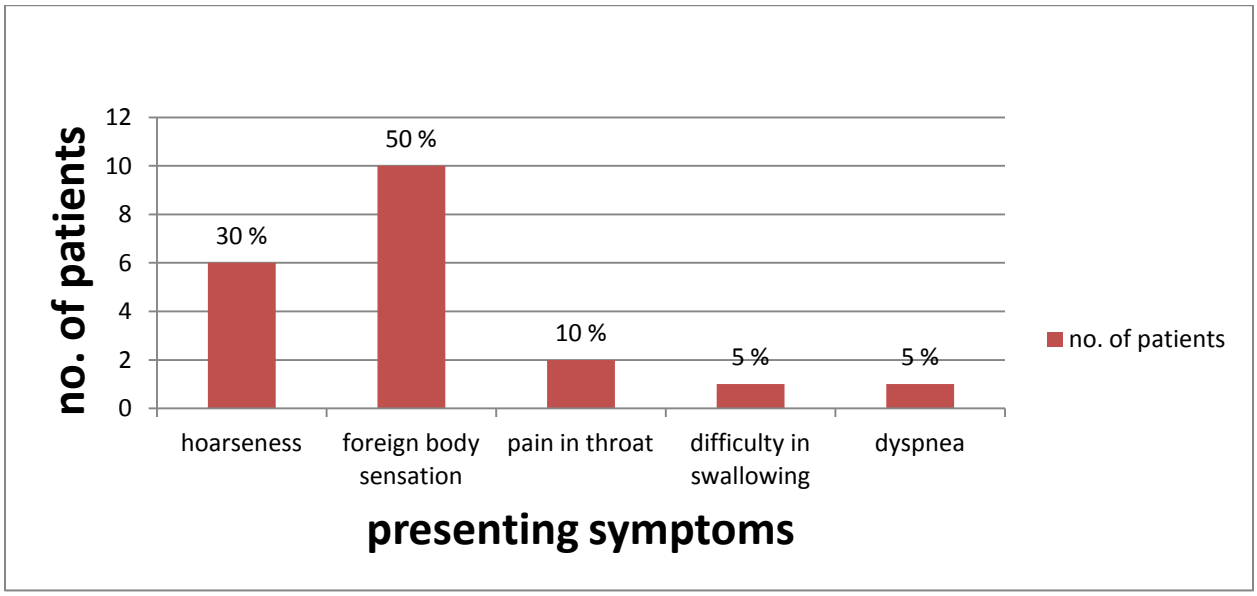

Figure 5: Distribution of patients according to presenting symptoms.

DISCUSSION

Laryngeal cyst was first described by Verneuil in 1857 while doing postmortem examination of an infant.occuring over a wide age range, they are frequently reported in epiglottis and true cords.

Various classification systems exist for laryngeal cysts including epiglottic cysts. In 1922, Myerson classified these cysts into retention, embryonic, vascular, and traumatic types.[5] This classification system didn't gain popularity because of its complex nature and lack of clinical utility. A much useful classification was provided by DeSanto et al. in 1970,[6] who broadly divided them into two types: 1) Ductal-type and 2) Saccular-type. The obstruction of excretory duct of submucosal glands resulted in the ductal variety; whereas the saccular-type was considered to have developed as a result of excessive extension of the saccule of the ventricular fold in the larynx. Later in 1984, Newman et al. did a clinicopathological study of 20 cases of laryngeal cyst in adults and accordingly categorized the lesions into epithelial, tonsillar, and oncocytic types.[7] A detailed history taking and meticulous clinical examination form the key to the correct diagnosis of an epiglottic cyst. Often the first clue may be provided by indirect laryngoscopic examination. Xray may mimic acute epiglottitis with a thumb sign. CT scan demonstrates a hypodense mass at the tongue base. Ring-shaped contrast enhancement may occur in an infected cyst.[8] Even an asymptomatic epiglottic cyst provides a potential challenge to anaesthetist while induction of anaesthesia. Muscular relaxation offered may cause falling back of the cyst causing partial or total obstruction of larynx leading to difficulty in ventilation and respiratory failure.

Treatment of epiglottic cysts depends on their size and on the clinical symptoms. Surgery is necessary for large epiglottic cysts.

CONCLUSION

On the basis of present study, it can be concluded that maximum number of patients were in the age group of 1-20 years with an average age of 19 years. Most common site of occurrence of cyst was vallecula (45%) followed by vocal cords(40%).The most common presenting symptoms noted in the patients were foreign body sensation(50%) followed by

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hoarseness of voice (30%).Once excised or marsupialised on MLS , recurrences are uncommon.

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