Benign Lesions of the Larynx

Ollipi.mahalakshmi¹, R. Bhanu Murthy²

¹(ENT, Viswabharathi Medical College /Dr. ntruhs, India) ²(ENT, HOD and professor, ViswabharathiMedical College /Dr. ntruhs, India)

Abstract:

Background: Benign laryngeal lesion commonly affects the quality of life of the person. Most patients with benign laryngeal disorders present with dysphonia.

Materials and Methods: Benign laryngeal lesions are significant because 29.9% of general population suffer at least one voice disorder in their lifetime. We present a series of 10 cases illustrating the variable presentation of benign lesions of larynx. Study conducted in cases attended to ENT opd with hoarseness of voice and foreign body sensation in the throat from January 2022toJuly 2022

Results: In our study benign laryngeal lesions are most common in males than compared to females. mostcommon age group ofpatients in 45-60 years. most common benign lesion was vocal nodule. presenting symptom was hoarseness of voice.

Conclusion:Benign Non-neoplastic Lesions of Larynx are most common voice problem disorders. Vocal Nodules and Polyps are common lesions and considered for surgery only if initial conservative methods fail. Avoidance of Voice Abuse and Proper Speech Training particularly in professional voice users like teachers and singers will play a very important role in the prevention of these lesions. Endoscopic Micro Laryngeal Excision of Lesions with proper care to vocal ligament will preserve good quality of voice. Benign Laryngeal saccular cystsis rare in adults and is differentiated from other vocal card lesion, are important in planning MLS. Microsurgical Excision without involvement of vocal ligament gives good results and voice restoration in benign lesions of the larynx

Key Word: Benign lesions, Hoarsnessof Voice.

Date of Submission: 03-10-2022

Date of Acceptance: 17-10-2022

I. Introduction

A benign lesion of the larynx was defined by Hollinger (1951) as any mass of tissue in the larynx which does not present characteristics of malignancy. The significance of benign lesions lies in the importance of its function in speaking and the contribution of voice to one's own identity. The benign laryngeal lesions occur in a ratio of 2:3 to the malignant lesions. Various studies opined that true benign neoplastic lesions are uncommon and occur in a ratio of 1:6 to the non-neoplastic lesions

II. Material And Methods

This prospective study was carried out on patients of Department of ENT atViswabharathi Medical College and General Hospital, Penchikalapadu fromJanuary 2022 to July 2022. A total 10 cases were included in this study

Inclusion criteria:

- All age groups of both the sexes. Iatrogenic lesions of larynx
- Patients with positive clinical findings on Indirect
- Laryngoscopy Recurrent cases are included.

EXCLUSION CRITERIA:

- Malignant tumours Excluded.
- Patients who do not come for follow up were excluded
- Vocal card palsy and trauma cases were excluded.

History of illness casereports: Case1: 58 years male patient presented with hoarseness of voice since 8 months, there was no stridor. Occasional difficulty in breathing present. Physical examination and air way and routine blood investigation were within normal limits. Laryngeal endoscopy revealed smooth, round mass arising from the anterior aspect of the right laryngeal ventricle above the right vocal cord planned for micro laryngeal surgical excision and biopsy. HPE shows cyst wall lined by oncocytic respiratory epithelium



Saccular cyst of the larynx

Case2: Male patient aged 55 years presented with compliant of hoarseness of voice, easy fatigue on phonation, low voice quality for past 6 months. Discomfort and pain in the throat were present. Video Laryngoscopy examination showed pedunculated polyp with wide base at the junction of ant 1/3 with posterior 2/3 of right cord. Endoscopic Micro Laryngeal Excision done. Histopathology shows Vocal Polyp



Vocal polyp

Case 3: A female patient aged 36 years presented with compliant of hoarseness of voice, discomfort in throat for the past 10 months. History of voice abuse was present. Video Laryngoscopy showed nodule at the junction of anterior 1/3 with posterior 2/3 of both vocalcords. Endoscopic Micro Laryngeal Excision done and HPE confirmed vocal nodule



Vocal nodule

Case 4: A male patient aged 65 years presented with change of voice and dysphagia for solids and lump in throat for four 8months duration. Video laryngoscopy showed smooth swelling over the lingual surface of epiglottis obscuring the view of glottis. Endoscopic Micro Laryngeal Excision of the lesion during surgery showed putty like material from the mass. HPE suggestive of Epidermoid cyst of epiglottis and extending on to vallecula



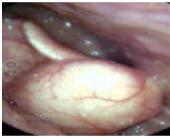
Epidermoid cyst

Case 5: A male patient aged 60 years presented with change of voice six months duration. Examination with Video Laryngoscopy showed warty pale irregular white plaque over anterior 2/3 of right vocal cord. Endoscopic Micro Laryngeal Excision of lesion was done and sent for HPE, suggestive of Leukoplakia of right vocal cord



Leukoplakia of vocal cord

Case 6:male patient aged 50years presented with throat discomfort for the past 3 months that worsened in the supine position. The clinical examination revealed cysticlesion on lingualsurface of the epiglottis. Excisiondone and sent for HPE examination showed epiglottic cyst



Epiglottic cyst

Case 7: A female patient aged 30 years presented with complaint of change of voice, breathlessness forsix months. Video Laryngoscopy showed polypoidal mass with smooth surface over anterior commissure and on right cord. Endoscopic Micro Laryngeal Excision of mass done and sent for Histopathological examination, suggestive of Fibro angioma vocal cord.

Case 8: a female patient aged 45 years presented with complaint of voice change for 8 months, history of voice abusewas present. video laryngoscopy showed nodule at the junction of the anterior 1/3 and posterior 2/3 of both vocal cords. micro laryngeal excision was done sent for HPE and confirmed vocal nodule

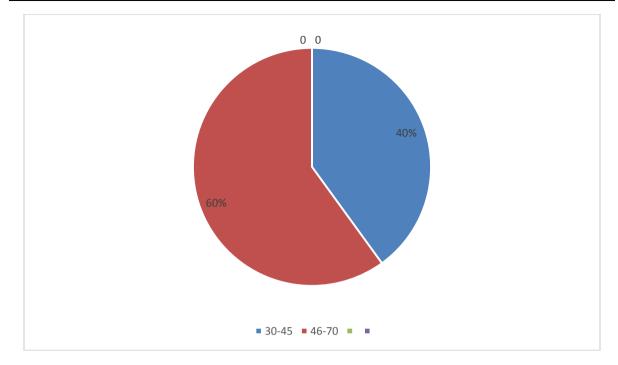


Vocal nodule

Investigation of cases: All the Cases were Investigated with CBP, Screening Tests X-ray Chest and CT SCAN of Larynx in cases it is needed

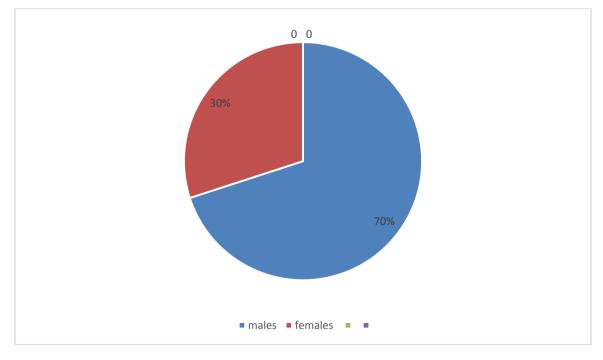
Age Distribution of Patients:

Age group	No of the patients	Percentage
30-45	4	40%
46-70	6	60%



Sex distribution of patient

SEX	Males	Females
number	7	3
Percentage	70%	30%



Histopathological report

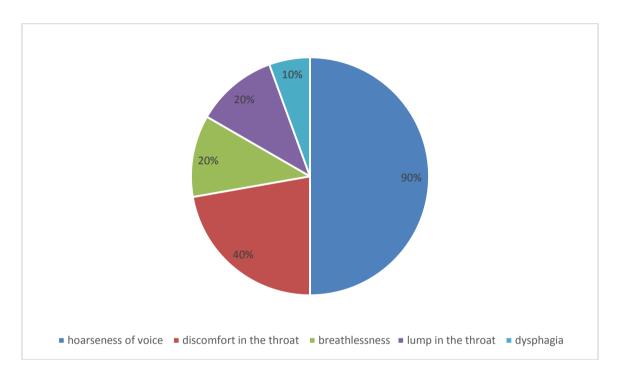
HPE report	No of cases
Vocal nodule	4
Vocal polyp	1

Saccular cyst	1
Epidermoid cyst of the epiglottis	1
Leukoplakia	1
Fibro angioma	1
Epiglottic cyst	1

Vocal nodule was the most common presentation

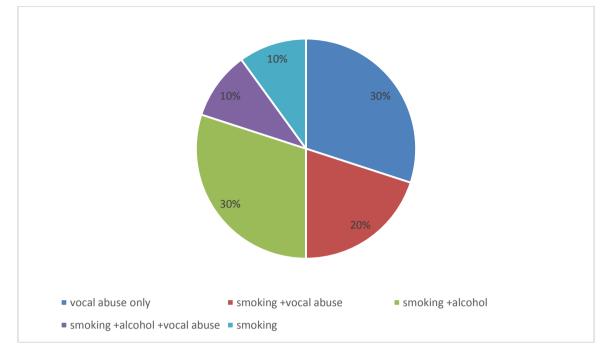
Presenting complaints

Complaint	Present	Absent	Percentage
Hoarseness of voice	9	1	90%
Discomfort in the throat	4	6	40%
Breathlessness	2	8	20%
Lump in the throat	2	8	20%
Dysphagia	1	9	10%



Hoarseness of voice is the most common presenting symptom

Predisposing factors:



Vocal abuse is the most common predisposing factor

III. Discussion

Vocal nodule appearssymmetrically on the free edge of vocal cord, at the junction of anterior one-third, with the posterior two-thirds, as this is the area of maximum vibration of the cord and thus subject to maximum trauma. vocal polyp is unilateral arising from the junction of anterior 1/3, with the posterior 2/3

Leukoplakia a localized form of epithelial hyperplasia involving upper surface of one or both vocal cords. It appears as a white plaque or warty growth on the cord without affecting its mobility.it is a precancerous condition

The laryngeal saccule is an opening in the anterior middle third of the roof of the laryngeal ventricle. It is lined by ciliated respiratory epithelium with 50 to 100 mucous glands. The function of the saccule is the lubrication of the vibrating vocal folds. Blockage of the saccule opening with continued secretion of mucous leads to a saccular cyst. Cyst confined to the larynx or spread through the thyrohyoid membrane into the neck. Lateral saccular cysts extend posteriorly and superiorly to the aryepiglottic fold. Anterior saccular cysts extend medially into the laryngeal lumen between the true and false vocal fold .it consist of 25% of all laryngeal cysts. They are easily managed endoscopically when properly diagnosed early in the course of the disease

Epiglottic cysts are benign lesions on the lingual or laryngeal aspect of the epiglottis and are often a result of mucus retention

IV. Conclusion

Benign Non-neoplastic Lesions of Larynx are most common voice problem disorders. Vocal Nodules and Polyps are common lesions and considered for surgery only if initial conservative methods fail. Avoidance of Voice Abuse and Proper Speech Training particularly in professional voice users like teachers and singers will play a very important role in the prevention of these lesions. Endoscopic Micro Laryngeal Excision of Lesions with proper care to vocal ligament will preserve good quality of voice. Benign Laryngeal saccular cystsare rare in adults and is differentiated from other vocal card lesion, are important in planning MLS. Microsurgical Excision without involvement of vocal ligament gives good results and voice restoration in benign lesions of the larynx

References

- Holinger, L.D. et al. Laryngoceles and saccular cysts. Ann. Otol. Rhino. Laryngol. 1978; 87: 675-685.
- [2]. Desanto, L.W. Laryngoceles, laryngeal mucoceles, large saccules, and laryngeal saccular cysts: a developmental spectrum. Laryngoscope 1974; 84:1291 1296.
- [3]. Newman, B.H., Taxy, J.B. and Laker, H.I. Laryngeal cysts in adults: a clinicopathologic study of 20 cases. Amer. J. Clin. Pathol. 1984; 81(6): 715-720.
- [4]. Szwarc, B.J. and Kashima, H.K. Endoscopic management of a combined laryngocele. Ann. Otol. Rhinol. Laryngol. 1997; 1tt6: 556-559.
- [5]. Sinha A, Kacker SK, Pramanik KN. Pathology and etiology of vocal nodules Indian J Otol 1966;

[1].

- [6]. Kambic V, et al. Vocal cord polyps: Incidence, histology and pathogenesis. J LaryngolOtol 1981; 95:609-18.11 PMID: 10081278 [PubMed - indexed for MEDLINE
- [7]. Dikkers FG, et al. Benign lesions of the vocal folds. Histopathology and Phonotrauma. Ann OtolRhinolLaryngol1995;104:698-703.

Ollipi.mahalakshmi, et. al. "Benign Lesions of the Larynx." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 21(10), 2022, pp. 01-07.