



CLINICOPATHOLOGICAL PROFILE OF BENIGN LESIONS OF LARYNX

Pathology

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ABSTRACT

OBJECTIVE:The aim of the study was to determine risk factors, relationship between social and demographic profile and compare endoscopic findings with histopathological study of benign lesions of larynx.

METHODOLOGY: It is a Observational, prospective based study. The chart of 52 patients who presented to GMCH, ENT OPD with complaint of hoarseness of voice, throat pain, foreign body sensation, vocal fatigue were evaluated on the basis of history taking, clinical examination and endoscopy between (JAN 2020 to JUNE 2021).

RESULTS: Among 52 patients, male preponderance was observed. Majority of the patients were in the age group of 31–40 years. Vocal cord nodule were observed to be the commonest type of lesions. In our study, hoarse-ness found to be the commonest symptoms. The diagnosis based on laryngeal endoscopy were highly accurate with 98% diagnostic accuracy.

CONCLUSION: Laryngeal lesions lead to symptoms that cause mental and social discomfort to patients. There early diagnosis by laryngeal endoscopy can help in definitive management and good prognosis.

KEYWORDS

Hopkinslaryngoscopy, benign laryngeallesions, diagnosis, treatment.

INTRODUCTION:

Benign lesions of the larynx constitute an interesting array of lesions. These lesions are defined as an abnormal mass of tissue in the larynx, the growth of which exceeds and is uncoordinated with that of the normal tissue and persist in the same excessive manner after cessation of stimuli which evoke the changes.^[1]

Benign lesions of the larynx generally produce a common symptomatology known as dysphonia^[2]. The symptoms which they produce by interference with the routine functioning of the vocal cord mechanism and respiratory tract, along with the necessity to distinguish them from malignant laryngeal lesions, makes these lesions important to a laryngologist.

The significance of benign lesions of larynx lies in the importance of its function in speech and the contribution of voice to one's own personality. These lesions may affect voice quality and excessive growth may cause respiratory distress. Vocal nodules, polyps or a cyst does not rule out malignancy, unless the lesion is resolved with treatment or it is pathologically benign^[3].

Benign lesions of the larynx are classified into the commonly occurring non-neoplastic lesions and relatively rare neoplastic lesions. The commonly encountered benign lesions of the larynx are: vocal cord polyps, vocal nodules, tuberculosis of larynx, laryngocele, laryngeal web, epiglottic cysts and subglottic haemangioma. Neoplastic lesions include papilloma, adenoma, chondroma and other non-neoplastic lesions like intubation granuloma, contact ulcer granuloma are relatively uncommon.^[4]

The incidence of benign non-neoplastic lesions is more than the benign neoplastic group. The maximum numbers of cases are seen in the age group between 31 and 40 years. Male predominance is seen over the females with a ratio of 2.82:1 (m:f). True benign tumours constitute 5% or less of all the laryngeal tumours. Out of them papilloma is the most common benign tumour, which accounts for 85% of cases.^[1]

The common factors responsible for the development of benign lesions are vocal abuse, misuse, overuse, speaking in unnatural tones, exposure to various irritants like smoke, dust, fumes, alcohol etc. Allergy and infective conditions of larynx (as Human papilloma virus in respiratory papillomatosis) are also responsible alone or in combination with other factors for the development of such lesions.^[6-10]

First line treatment for benign lesions is behavioural intervention with speaking and singing therapy. When maximal behaviour intervention does not achieve satisfactory improvements in voice, surgical treatment may be considered^[11,12] As such the standard treatment of choice in all the types of benign tumours of the larynx should consist of a triad of approach by microlaryngeal surgery (either microscopic or endoscopic, with or without use of lasers), voice rest and vocal rehabilitation.^[13]

Keeping in view the above facts the present study was under taken to determine the clinical spectrum of the various types of benign lesions of the larynx. Moreover, relation of benign lesions to age, sex and occupation has also been discussed. There is a need to detect these lesions early so that curative measures can be taken to improve quality of life.

METHODOLOGY:

A total of 52 patients who presented to GMCH, ENT OPD with complaint of hoarseness of voice, throat pain, foreign body sensation, vocal fatigue were evaluated on the basis of history taking, clinical examination and endoscopy between (JAN 2020 to JUNE 2021)

INCLUSION CRITERIA:

Patients in the age group 18 yrs and above.

EXCLUSION CRITERIA:

Patients with clinical diagnosis of malignancy of larynx, pt with neurological lesion, nasal or nasopharyngeal pathology leading to change in voice.

RESULTS

AGE: 52 cases of benign lesions of larynx were studied during the study period. Maximum number of cases i.e., 22 cases (44%), belonged to 31 – 40 years of age group and minimum number of cases i.e., 3 cases (6%), belongs to 21 – 30 years of age group. Youngest patient was 22 years old and eldest patient was 64 years old.

GENDER: There were more number of males (34) than females (16) in our study. The M:F ratio was 1:0.47.

OCCUPATION: Out of the 52 cases examined, majority of patients i.e., 21 cases (40.00%) were teachers and the least i.e., 2 cases (4%) were singer and students. Among males, business class was dominating with 15 cases (44.00%) and among females, teacher were predominant with 8 cases (50.25%).

PREDISPOSING FACTORS: All cases i.e., 52 (100%), showed vocal abuse while finding predisposing factors, followed by LPR 28(56.00%), alcohol 21(42%) smoking i.e., 17 cases (34%) and URTI 7 cases (14.00%).

SYMPTOMS: All 52 cases (100%), presented with hoarseness of voice, followed by 32 cases (64%) with foreign body sensation in throat, 29 (58.00%) with difficulty in swallowing, 21 cases (42.00%) with difficulty in breathing & 21 cases (42%) with throat Pain.

PROVISIONAL DIAGNOSIS: Maximum number of cases i.e., 19 (36.50%) were diagnosed with vocal cord nodule, 12 cases (23.08%) diagnosed with vocal cord polyp followed by 7 cases (13.00%) diagnosed with Reinke's edema, cyst in 8 cases (11.54%) and 3 cases

intubation granuloma (5.77%) and papilloma, 2 (3.85%) cases of contact ulcer were diagnosed.

Vocal nodule, reinke's edema and contact ulcer were bilateral in distribution. other lesions were unilateral.

Out of 52 cases, 45 cases (86.54%) were given pre op speech therapy, 46 cases (88.46%) underwent MLS followed by post op rehabilitation. 28 cases were given medical management.

PROVISIONAL DIAGNOSIS:

Vocal cord nodule were 19, polyp 12, reinke's edema 7, cyst 8, intubation granuloma 3, papilloma 1, contact ulcer 4.

On HPE out of 8 cysts on laryngoscopy 6 cysts were confirmed and 2 were papilloma.

CONCLUSION

Laryngoscopic examination is 98 % accurate.

Table 8: Treatment given

Causes	Pre Op Speech Therapy (n=45)		MLS (n=46)		Post Op Rehabilitation (n=46)		Medical management (n=9)	
	No.	%	No.	%	No.	%	No.	%
Right Vocal cord polyp	4	8.89%	4	8.70%	4	8.70%	-	-
Left Vocal cord polyp	8	17.78%	8	17.39%	8	17.39%	-	-
B/L Vocal cord Nodule	19	42.22%	15	32.61%	15	32.61%	-	-
Reinke's edema	7	15.56%	4	8.70%	4	8.70%	7	77.78%
Right Vocal cord cyst	3	6.67%	3	6.52%	3	6.52%	-	-
Left Vocal cord cyst	4	8.89%	4	8.70%	4	8.70%	-	-
Intubation granuloma	-	-	3	6.52%	3	6.52%	-	-
Contact ulcer	-	-	2	4.34%	2	4.34%	2	22.22%
Papilloma	-	-	3	6.52%	3	6.52%	-	-

	Provisional Diagnosis (70 degree laryngoscope)		Histopathological Diagnosis	
	No.	%	No.	%
Contact Ulcer	2	3.85%	2	3.85%
Cyst	8	15.38%	6	11.54%
Intubation Granuloma	3	5.77%	3	5.77%
Nodule	19	36.54%	19	36.54%
Papilloma	1	1.92%	3	5.77%
Polyp	12	23.08%	12	23.08%
Reinkes Edema	7	13.46%	7	13.46%
Total	52	100%	52	100%