Indian Journal of Basic and Applied Medical Research;

Otorhinolaryngology Special Issue - March 2020: Vol.-9, Issue- 2. P. 56 - 58

DOI: 10.36848/IJBAMR/2020/16522.55994

Original article:

Prospective study of benign looking vocal fold lesions on rigid Hopkins 70 degree endoscopy in tertiary care hospital

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Abstract:

Introduction: Voice change and related complaints like breathing difficulty, cough, forceful production of voice, vocal fatigue and foreign body sensation are common complaints otorhinolaryngologist come across in everyday OPD.

Material and methods: The study was conducted at Dr. Hedgewar Rugnalaya, a tertiary health care centre located in Aurangabad city of Maharashtra state. All patients of both genders of age between 18 years to 80 years presented in ENT OPD with complaints related to voice change and rigid Hopkins 70 degree endoscopy showing benign looking vocal cord lesions are eligible for this study. All patients who understood and agreed to the informed consent document were included in the study.

Results : Vocal nodule is the most common preliminary diagnosis on Rigid Hopkins 70 degree endoscope 33 cases(47.8%) followed by vocal polyp 11 cases(15.9%). Vocal cord chondroma is least observed finding.

Conclusion: Non-neoplastic benign lesions are far more common than neoplastic lesions. Males are affected more than females and most common age group involved is 30 - 40 yrs.

Introduction:

Voice change and related complaints like breathing difficulty, cough, forceful production of voice, vocal fatigue and foreign body sensation are common complaints otorhinolaryngologist come across in everyday OPD. ¹Vocal cord lesions are most common culprit behind these complaints. These lesions can be neoplastic or nonneoplastic; can be benign or malignant. Early intervention is necessary to rule out benign from malignant lesions. Indirect laryngoscopy and Rigid Hopkins 70 Degree Endoscopy provide probable diagnosis of vocal cord lesions and Microlaryngoscopic excision with histopathologic confirmation give final diagnosis. ²With this intention, present study was planned to study benign looking vocal fold lesions on rigid Hopkins 70 degree endoscopy.

Material and methods:

The study was conducted at Dr. Hedgewar Rugnalaya, a tertiary health care centre located in Aurangabad city of Maharashtra state. This study was single institutional prospective descriptive type of study carried out in outpatient department, scopy room and operation theatre. This study was conducted over period of two years with sample size estimation 69.

All patients of both genders of age between 18 years to 80 years presented in ENT OPD with complaints related to voice

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change and rigid Hopkins 70 degree endoscopy showing benign looking vocal cord lesions are eligible for this study. All patients who understood and agreed to the informed consent document were included in the study.

Inclusion criteria:

- 1. The patients with the history of complaints related to change in voice.
- 2. Benign looking vocal fold lesion on rigid Hopkins 70 degree endoscopy.
- 3. Patient having symptoms for more than 2 weeks and not responding to medical therapy or speech therapy.
- 4. Patients with age more than 18 years.

Exclusion criteria:

The patients with -

- 1. Acute infections.
- 2. Clearly looking malignancies on rigid Hopkins 70 degree scopy.
- 3. Vocal cord palsy.
- 4. Other neurological diseases.
- 5. Puberty related voice change.

Results

Maximum number of patients with benign looking lesions were found between the age group of 30 to 40 years that is 21 cases (30.4%). 1 case(1.4%) belongs to age group of 0 to 20 years. Youngest patient is of age 20 years and eldest is of age 78 years.

In our study type of benign lesions are more common in rural population as compared to urban population.

Vocal nodule is the most common preliminary diagnosis on Rigid Hopkins 70 degree endoscope 33 cases(47.8%) followed by vocal polyp 11 cases(15.9%). Vocal cord chondroma is least observed finding.

Discussion:

Total number of new patients came to ENT OPD from 1st august 2016 to 31st march 2018 was 28356. Out of these patient total number of patients with complaints related to voice change and videolaryngoscopy showing benign looking vocal cord lesions and need surgical microlaryngoscopic excision were 69. So from this data incidence of benign vocal cord lesions would be 0.24% that is 24 cases over every 10000 new patients consulted in OPD. The reported average incidence of these lesions in the literature varies from 6 to 79.8 cases per year. This apparent decrease in incidence over time is due to increase in awareness regarding voice change and better diagnostic modality available at early presentation. Still vocal abuse, talkative personalities and unhealthy habits might keeping the incidence high.³

Voice change and related complaints like breathing difficulty, cough, forceful production of voice, vocal fatigue and foreign body sensation are common complaints otorhinolaryngologist come across in everyday OPD. Vocal cord lesions are most common culprit behind these complaints. These lesions can be neoplastic or nonneoplastic; can be benign or malignant. Early intervention is necessary to rule out benign from malignant lesions. Early intervention is

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necessary to rule out benign from malignant lesions. Indirect laryngoscopy and Rigid Hopkins 70 Degree Endoscoy provide probable diagnosis of vocal cord lesions and Microlaryngoscopic excision with histopathologic confirmation give final diagnosis.⁵

In study by Pankaj Kumar Doloi et al⁶ most common benign laryngeal lesion noted was vocal polyp (37.5%) followed by vocal fold nodule (27.5%), multiple laryngeal papillomatosis (10%), Haemangioma (10%), epiglottic cyst (5%), vocal cord cyst (7.5%) and intubation granuloma (2.5%).

Conclusion:

Non-neoplastic benign lesions are far more common than neoplastic lesions. Males are affected more than females and most common age group involved is 30 - 40 yrs.

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Date of Submission: 02 January 2020

Date of Acceptance: 12 March 2020

Date of Peer Review: 20 January 2020

Date of Publishing: 30 March 2020

Author Declaration: Source of support: Nil, Conflict of interest: Nil

Ethics Committee Approval obtained for this study? Yes

Was informed consent obtained from the subjects involved in the study? Yes

For any images presented appropriate consent has been obtained from the subjects: NA

Plagiarism Checked: Urkund Software

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