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AETIOPATHOGENESIS OF HOARSENESS OF VOICE: A CLINICAL STUDY

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ABSTRACT

Background: Hoarseness is a frequent ENT symptom with a wide etiological spectrum from benign inflammation to malignancy. **Objective:** To assess the etiological profile, risk factors, and clinical characteristics of patients presenting with hoarseness. **Methods:** A descriptive study of 120 patients with hoarseness lasting >1 week was conducted. Demographics, risk factors, ENT findings, and laryngoscopic evaluations were recorded. **Results:** Most patients were aged 41–50 years and males predominated. Smoking was the major modifiable risk factor. Laryngoscopy revealed ulceroproliferative growths, inflammatory lesions, nodules, and vocal cord paralysis. **Conclusion:** Hoarseness is frequently associated with preventable risk factors and requires early laryngoscopic evaluation for timely diagnosis and management.

KEYWORDS : Hoarseness, Dysphonia, Laryngoscopy, Vocal Fold Lesions, Smoking

INTRODUCTION

Hoarseness, defined as an alteration in voice quality, pitch, or loudness, results from disruptions in vocal fold vibration and may indicate local or systemic pathology. Dysphonia can range from benign inflammatory conditions to neoplastic lesions and neurological disorders. Early evaluation, especially when hoarseness persists beyond 2 weeks, is crucial to detect serious etiologies such as malignancy. Hoarseness etiologies and prevalence patterns vary across populations, and understanding these local patterns can improve clinical outcomes. Dysphonia has been classified into inflammatory, neoplastic, neurogenic, functional, and systemic causes.[10]

MATERIALS AND METHODS

Study Design and Setting

This descriptive observational study was conducted over 24 months in the ENT outpatient department of a tertiary care hospital.

Study Population

120 patients older than 12 years, presenting with hoarseness persisting for more than one week, were enrolled.

Inclusion Criteria

- Age > 12 years
- Hoarseness > 1 week
- Written informed consent

Exclusion Criteria

- Congenital voice disorders
- Central nervous system speech defects
- Hoarseness < 1 week
- Non-consenting patients

Data Collection

Patients underwent detailed history, ENT examination, indirect laryngoscopy, and flexible laryngoscopy. Demographic data, occupation, personal habits, and socioeconomic status were recorded. Data analyses involved descriptive statistics using SPSS v23.

RESULTS

Demographics

- **Mean Age:** 36.1 ± 13.6 years
- **Most Affected Age Group:** 41–50 years
- **Gender:** 66.7% male
- **Occupation:** 45% labourers
- **Residence:** 55.8% rural

Risk Factors and Presenting Symptoms

- **Smoking:** 40.8%
- **Tobacco Chewing:** 20.8%
- **Vocal Abuse:** 15.8%
- **Common Symptom:** Hoarseness with cough

Laryngoscopic Findings

- Ulceroproliferative growths: 32.5%
- Inflammatory congestion: 30.8%
- Vocal nodules: 12.6%
- Vocal cord paralysis: 13.3%
- Polyps/cysts: less frequent

DISCUSSION

This study highlights that hoarseness commonly affects middle-aged men involved in vocally demanding occupations with tobacco exposure. Inflammatory and edematous changes represent common benign etiologies consistent with other case series. Rathi et al. observed similar demographic patterns and risk factors, with smoking as a prominent predisposing factor.[1] Chronic laryngitis, benign vocal cord lesions, and malignancies have all been documented as frequent contributors to hoarseness in clinical populations.[7,8,16] Dysphonia causes include irritant/ inflammatory factors, neoplasia, neurogenic pathology, and functional disorders.[10] Early laryngoscopic assessment enables targeted diagnosis and management, reducing delays and preventing progression to serious disease.

CONCLUSION

Hoarseness is a multifactorial symptom often linked to modifiable risk factors, particularly smoking and vocal misuse. Inflammatory changes and neoplastic lesions constituted major etiologies in this cohort. Persistent hoarseness warrants early evaluation with laryngoscopy to ensure prompt diagnosis and intervention.

Recommendations

1. Promote smoking cessation and voice hygiene education.
2. Evaluate persistent hoarseness (>2 weeks) with laryngoscopy.
3. Early specialist referral for suspected malignancy.
4. Regular screening in vocally demanding professions.

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Ethical Approval: Approved by Institutional Ethics Committee.
Consent: Written informed consent obtained from all participants.

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