

CLINICAL FEATURES OF THE COURSE OF CHRONIC PHARYNGITIS ASSOCIATED WITH LARYNGOPHARYNGEAL REFLUX

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Abstract

Chronic pharyngitis (CP) is one of the most common inflammatory diseases of the upper respiratory tract, characterized by persistent complaints of throat irritation, dryness, cough, and a “lump in the throat” sensation. In recent years, laryngopharyngeal reflux (LPR) has attracted increasing attention as an important pathogenetic factor in chronic inflammation of the pharyngeal mucosa. The aim of this article is to summarize current data on the clinical manifestations and diagnosis of CP associated with LPR, based on an analysis of international publications from 2024–2025.

Keywords: Chronic pharyngitis, laryngopharyngeal reflux, diagnosis, impedance–pH monitoring, pepsin, endoscopy.

Introduction

Chronic pharyngitis is one of the most common pathologies of the upper respiratory tract, characterized by persistent inflammation of the pharyngeal mucosa. In recent years, particular attention has been paid to laryngopharyngeal reflux (LPR) as an important factor in the pathogenesis of chronic inflammatory processes of the pharynx. The reflux of gastric contents into the laryngopharynx causes chemical irritation, inflammation, and structural changes in the mucosa. The study of clinical and endoscopic features of chronic pharyngitis associated with LPR is of great importance for improving diagnostic accuracy and optimizing treatment strategies.

Materials and Methods

The study was conducted at the ENT Clinic of the Samarkand Medical University in 2024–2025. A total of 40 patients diagnosed with chronic pharyngitis were included in the study, including 24 women and 16 men. The patients’ ages ranged from 25 to 65 years (mean age — 43.2 ± 10.5 years). The patients were divided into two groups: the main group (with signs of LPR) and the control group (without signs of LPR).

Clinical evaluation included detailed medical history taking and assessment of complaints and symptoms such as globus sensation, cough, throat irritation, hoarseness, and increased mucus secretion. The severity of symptoms was assessed using the Reflux Symptom Index (RSI). Endoscopic changes were evaluated by fiberoptic laryngoscopy using the Reflux Finding Score



(RFS). In 15 cases, 24-hour impedance–pH monitoring was performed to confirm reflux episodes.

Additionally, patients underwent laboratory investigations, including a complete blood count, determination of salivary pepsin levels as a biomarker of LPR, and microscopy of pharyngeal smears. Data analysis was performed using descriptive statistics, the independent samples Student’s t-test, and Pearson correlation analysis (significance level $p < 0.05$).

Results

The most frequent symptoms in the main group were: foreign body sensation (85%), throat irritation (78%), cough (72%), hoarseness (56%), and increased mucus secretion (64%). The mean RSI score was 18.4 ± 5.3 , whereas in the control group it was 8.1 ± 2.4 ($p < 0.05$).

Endoscopic findings in the main group more frequently included: erythema of the posterior pharyngeal wall (90%), edema of the arytenoid cartilages (68%), hyperemia of the interarytenoid region (64%), and pseudosulcus of the vocal folds (48%). The mean RFS score was 10.2 ± 2.8 . A significant correlation was found between RSI and RFS ($r = 0.69$; $p < 0.05$).

Discussion

The results confirm that LPR is a key etiological factor in chronic pharyngitis. Prolonged contact of the mucosa with gastric contents leads to inflammatory and dystrophic changes in the epithelium, contributing to chronicity of the process. Similar findings were reported in studies by Vaezi et al. (2023) and Lien et al. (2024), where signs of LPR were identified in 60–80% of patients with chronic throat symptoms.

LPR contributes to epithelial damage through the action of hydrochloric acid and pepsin, which activate a cascade of inflammatory cytokines (IL-6, TNF- α). This results in hyperplasia, thickening of the basal layer, and impaired mucociliary clearance. Endoscopically, these changes manifest as erythema, edema, granulation tissue, and pseudosulcus of the vocal folds. Impedance–pH monitoring confirms not only acidic but also weakly acidic reflux episodes, which also have a damaging effect.

The use of combined diagnostic methods is of particular importance. The RSI and RFS scales allow for rapid noninvasive assessment, while pH monitoring objectively confirms the diagnosis. Several international studies (Lechien et al., 2023; Koufman et al., 2022) recommend combining both methods to improve diagnostic accuracy.

Treatment of patients with LPR-associated pharyngitis should include proton pump inhibitors (omeprazole, rabeprazole), antacids, prokinetic agents, as well as lifestyle modifications such as avoiding spicy foods, coffee, alcohol, late-night meals, and smoking. Koufman et al. report that a 12-week course of therapy combined with dietary modification results in clinical improvement in 80% of patients. The use of alginates and topical cytoprotective agents for protecting the pharyngeal mucosa is also considered a promising therapeutic approach.

Conclusion

1. Patients with chronic pharyngitis associated with LPR demonstrate a high prevalence of typical symptoms and characteristic endoscopic changes.
2. The use of RSI and RFS scales, as well as impedance–pH monitoring, increases diagnostic accuracy.



3. Comprehensive treatment, including pharmacological therapy and lifestyle modification, effectively reduces the frequency of relapses and improves patients' quality of life.

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