ISSN: 2181-0664
DOI: 10.26739/2181-0664
www.tadqiqot.uz

UMJ

UZBEK MEDICAL JOURNAL

Volume 7, Issue

2025

ISSN 2181-0664

Doi Journal 10.26739/2181-0664

ЎЗБЕК ТИББИЁТ ЖУРНАЛИ

7 ЖИЛД, 3 СОН

УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ

ТОМ 7, НОМЕР 3

UZBEK MEDICAL JOURNAL

VOLUME 7, ISSUE 3

ТОШКЕНТ-2025

ЎЗБЕК ТИББИЁТ ЖУРНАЛИ

УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ | UZBEK MEDICAL JOURNAL

№3 (2025)

РЕДАКЦИОННАЯ КОЛЛЕГИЯ:

Контакт редакций журналов. www.tadqiqot.uz
ООО Tadqiqot город Ташкент,
улица Амира Темура пр.1, дом-2.
Web: http://www.tadqiqot.uz/; Email: info@tadqiqot.uz
Тел: (+998-94) 404-0000

Editorial staff of the journals of www.tadqiqot.uz
Tadqiqot LLC the city of Tashkent,
Amir Temur Street pr.1, House 2.
Web: http://www.tadqiqot.uz/; Email: info@tadqiqot.uz
Phone: (+998-94) 404-0000

МУНДАРИЖА | СОДЕРЖАНИЕ | CONTENT

CHRONIC HYPERPLASTIC LARYNGITIS

https://doi.org/10.5281/zenodo.21605732

Khushvakova Nilufar Zhurakulovna
DSc Professor, head of department
Head of the Department of Otolaryngology Samarkand State Medical University
nilumedlor@mail.ru
https://orcid.org/0009-0000-6717-2067
Xamidova Farida Mo'minovna
Samarkand State Medical University, Department of Pathological Anatomy, section biopsy course. Ph.D. (DCs) Associate Professor
https://orcid.org/0000-0001-6084-7025
Xamidova.f@05mail.ru
Bo'riyeva Dilnoz Baxriddinovna
Termez University of Economics and Service Faculty of Medicine
Email - buriyevadilnoz29@gmail.com
https://orcid.org/0009-0000-9739-3397

Abstract: Chronic Hyperplastic (Hypertrophic) Laryngitis (CHL) is a long-standing inflammatory disease of the laryngeal mucosa characterized by thickening and hyperplasia of the epithelium, stromal fibrosis, and persistent mucosal irritation. CHL is clinically important because it is often associated with leukokeratosis and leukoplakia, which are considered precancerous conditions of the larynx. Early diagnosis and appropriate management decrease the risk of progression to epithelial dysplasia or laryngeal carcinoma.

Keywords: chronic hyperplastic laryngitis,laryngeal epithelial hyperplasia,vocal fold pathology,
mucosal thickening,leukoplakia,leukokeratosis,precancerous laryngeal lesions,chronic laryngeal inflammation.

ХРОНИЧЕСКИЙ ГИПЕРПЛАСТИЧЕСКИЙ ЛАРИНГИТ

Хушвакова Нилуфар Журакуловна
DSc, профессор, заведующая кафедрой
Заведующая кафедрой оториноларингологии Самаркандского государственного медицинского университета
nilumedlor@mail.ru
https://orcid.org/0009-0000-6717-2067
Хамидова Фарида Муминовна
Самаркандский государственный медицинский университет, кафедра патологической анатомии, курс биопсии
PhD (DSc), доцент
https://orcid.org/0000-0001-6084-7025
Xamidova.f@05mail.ru

Буриева Дилноза Бахриддиновна
Термезский университет экономики и сервиса, медицинский факультет
Email: buriyevadilnoz29@gmail.com
https://orcid.org/0009-0000-9739-3397

Аннотация. Хронический гиперпластический (гипертрофический) ларингит (ХГЛ) — это длительно протекающее воспалительное заболевание слизистой оболочки гортани, характеризующееся утолщением и гиперплазией эпителия, стромальным фиброзом и постоянным раздражением слизистой. Клиническая значимость ХГЛ обусловлена тем, что он нередко сочетается с лейкокератозом и лейкоплакией, которые рассматриваются как предраковые состояния гортани. Ранняя диагностика и своевременная терапия позволяют снизить риск прогрессирования до эпителиальной дисплазии или рака гортани.

Ключевые слова: хронический гиперпластический ларингит, гиперплазия эпителия гортани, патология голосовых складок, утолщение слизистой оболочки, лейкоплакия, лейкокератоз, предраковые поражения гортани, хроническое воспаление гортани.

XRONIK GIPERPLASTIK LARINGIT

Xushvakova Nilufar Zhurakulovna
DSc, professor, kafedra mudiri
Samarqand Davlat Tibbiyot Universiteti Otorinolaringologiya kafedrasi mudiri
nilumedlor@mail.ru
https://orcid.org/0009-0000-6717-2067
Xamidova Farida Mo‘minovna
PhD (DSc), dotsent
Samarqand Davlat Tibbiyot Universiteti, Patologik anatomiya kafedrasi, biopsiya kursi
https://orcid.org/0000-0001-6084-7025
Xamidova.f@05mail.ru
Bo‘riyeva Dilnoz Baxriddinovna
Termiz Iqtisodiyot va Servis Universiteti, Tibbiyot fakulteti
Email: buriyevadilnoz29@gmail.com
https://orcid.org/0009-0000-9739-3397

Annotatsiya. Xronik giperplastik (gipertrofik) laringit (XGL) — uzoq davom etadigan yallig‘lanish kasalligi bo‘lib, gortan shilliq qavatining qalinlashuvi, epiteliy giperplaziyasi, stroma fibrozlanishi va doimiy irritatsiya bilan xarakterlanadi. XGL klinik jihatdan ahamiyatlidir, chunki u ko‘pincha leykeratoz va leykloplakiya bilan bog‘liq bo‘ladi — bular gortanning o‘sma oldi (prekansyer) holatlari sifatida qaraladi. Erta tashxis va to‘g‘ri davolash epitelial displaziya yoki gortan karsinomasiga o‘tish xavfini kamaytiradi.

Kalit so‘zlar: xronik giperplastik laringit, gortan epiteliyining giperplaziyasi, ovoz boylamlari patologiyasi, shilliq qavat qalinlashuvi, leykloplakiya, leykeratoz, gortan prekansyer o‘zgarishlari, xronik gortan yallig‘lanishi

Chronic Hyperplastic Laryngitis (CHL) is a long-term inflammatory condition of the laryngeal mucosa characterized by epithelial hyperplasia, thickening, and keratinization. It represents a precancerous or premalignant lesion of the vocal cords and laryngeal epithelium.Chronic laryngitis represents a spectrum of inflammatory disorders of the larynx.The hyperplastic (hypertrophic) form develops after prolonged exposure to irritants such as tobacco smoke, alcohol, polluted air, gastroesophageal reflux, or occupational hazards (chemicals, dust). Repeated epithelial damage triggers compensatory proliferation and keratinization, leading to persistent voice changes and visible mucosal thickening.

CHL is most frequently observed in adults aged 30–60 and is more common in males due to higher smoking prevalence a long-standing inflammatory disease of the laryngeal mucosa characterized by epithelial thickening, hyperplasia, and increased keratin production. This condition is clinically significant because it is closely associated with precancerous changes such as leukoplakia and leukokeratosis, increasing the risk of developing laryngeal carcinoma. The present article reviews the etiology, pathogenesis, clinical presentation, diagnostic approaches, and modern principles of management of chronic hyperplastic laryngitis.

Epithelial tissues cover internal and external body surfaces and play a crucial role in protection, secretion, and absorption. Their high regenerative capacity makes them vulnerable to reactive overgrowth in response to persistent irritation or inflammation. Epithelial hyperplasia represents a non-neoplastic increase in cell number, often serving as a biological defense mechanism. However, prolonged hyperplasia may progress to cellular atypia and increase the risk of neoplastic transformation, especially in high-risk tissues such as the skin, cervix, oral cavity, or larynx. Disrupted vibration of the vocal folds refers to any condition in which the normal oscillatory movement of the vocal cords becomes irregular, incomplete, or unstable. This disturbance impairs the production of clear, smooth sound and often leads to noticeable changes in voice quality.

These pathological changes diminish the natural elasticity of the vocal fold mucosa, making it stiffer and less capable of stretching and recoiling during phonation. As a result, the mucosal wave — a crucial vibratory motion that travels across the surface of the vocal folds — becomes weakened, irregular, or absent. When the wave cannot propagate properly, the vocal folds fail to oscillate in a smooth and coordinated manner, leading to impaired sound production, decreased vocal efficiency, and characteristic alterations in voice quality such as hoarseness, roughness, or instability.

Fibrosis of the lamina propria refers to the abnormal accumulation of dense collagen fibers, fibroblasts, and extracellular matrix components within the lamina propria — the connective tissue layer located beneath the epithelial surface of the vocal folds. This structural alteration significantly changes the biomechanical properties of the vocal folds and interferes with their ability to vibrate normally during phonation.

A sensation of tightness or discomfort in the throat refers to a subjective feeling of pressure, constriction, or unease within the laryngeal or pharyngeal region. This symptom often accompanies disorders that alter the structure, function, or sensitivity

of the upper airway and is frequently reported in patients with chronic laryngeal irritation or vocal fold pathology.

Functional laryngeal discomfort refers to unpleasant sensations in the throat or laryngeal region that arise in the absence of structural pathology, inflammation, or identifiable organic disease. Instead, the discomfort is related to abnormal muscle activity, altered sensory perception, or dysfunctional voice use. nefficient voice production refers to a phonatory pattern in which the voice is generated with excessive effort, poor coordination, or improper use of respiratory and laryngeal mechanisms. This results in reduced vocal efficiency — meaning that the speaker expends more physical effort to produce less acoustic output. Although the vocal folds may appear structurally normal, their functional performance becomes compromised.

Epithelial hyperplasia is a pathological condition characterized by an abnormal proliferation of epithelial cells, resulting in thickening of the epithelial layer. Although commonly associated with chronic irritation, inflammation, or hormonal stimulation, epithelial hyperplasia can occur in various organs and tissues.

While often benign, certain forms may progress to dysplasia and serve as precancerous markers. This article provides an analytical overview of the etiology, mechanisms of development, clinical relevance, and diagnostic strategies associated with epithelial hyperplasia.

Chronic hyperplastic laryngitis is a progressive form of chronic laryngeal inflammation that leads to structural changes in the epithelium. Persistent irritation, smoking, occupational hazards, and acid reflux are considered central contributing factors.

The condition is of particular concern due to its potential to evolve into epithelial dysplasia and, in severe cases, squamous cell carcinoma of the larynx. Early diagnosis and timely treatment play a crucial role in preventing malignant transformation.

The main etiological factors associated with CHL include:

1. smoking and tobacco exposure – the leading cause of chronic irritation and epithelial metaplasia.
2. occupational hazards – exposure to chemical fumes, dust, solvents, and industrial pollutants.
3. chronic infections – recurrent viral or bacterial inflammation of the upper airways.
4. gastroesophageal reflux disease (gerd) – reflux-induced mucosal injury.
5. environmental and lifestyle factors – alcohol consumption, mouth breathing, and low air humidity.
6. voice overuse – common among teachers, singers, and public speakers.

Constant mucosal irritation triggers a cascade of structural changes:

- epithelial hyperplasia – proliferation of basal cell layers leading to thickening of the mucosa.
- hyperkeratosis or parakeratosis – excessive keratin production on the vocal cords.
- fibrosis of the lamina propria – accumulation of collagen and reduced mucosal elasticity.

- disrupted vibration of vocal folds – changes in voice quality, hoarseness, and fatigue.
- potential progression to dysplasia – mild, moderate, or severe epithelial atypia.

The chronicity of inflammation promotes genomic instability and increases the risk of malignant transformation. Mucosal protective agents are pharmacological substances designed to shield the epithelial surfaces of the gastrointestinal tract and upper aerodigestive tract (including the larynx and pharynx) from the damaging effects of acid, pepsin, and other irritants. Their primary function is to strengthen the mucosal barrier, reduce inflammation, and promote healing of irritated or injured tissues. Hyaluronic acid (HA) sprays or solutions are topical preparations designed to hydrate, protect, and promote healing of the mucosal surfaces of the upper aerodigestive tract, including the larynx, pharynx, and vocal folds. Hyaluronic acid is a naturally occurring glycosaminoglycan found in the extracellular matrix, where it plays a critical role in maintaining tissue elasticity, moisture balance, and cellular repair.

Gastroesophageal reflux disease (GERD) is a chronic condition in which gastric contents—primarily acid and digestive enzymes—flow backward from the stomach into the esophagus and, in some cases, reach the larynx and pharynx. This abnormal reflux of acidic material causes irritation, inflammation, and mucosal injury in the upper aerodigestive tract. Laryngopharyngeal reflux (LPR) is a condition in which gastric contents—primarily acid, pepsin, and sometimes bile—travel upward from the stomach into the esophagus and reach the larynx and pharynx. Unlike typical gastroesophageal reflux disease (GERD), LPR often occurs without heartburn, making it harder to diagnose.

Because the laryngeal mucosa is extremely sensitive, even minimal exposure to refluxate can cause significant irritation and inflammation.

Conclusion

Chronic hyperplastic laryngitis is a clinically important condition characterized by epithelial overgrowth and structural changes of the larynx. Its strong association with precancerous lesions necessitates timely diagnosis, comprehensive treatment, and careful follow-up. Eliminating risk factors—especially smoking—and employing modern diagnostic tools such as videostroboscopy and NBI significantly improve outcomes and reduce the risk of malignant progression. Chronic hyperplastic laryngitis represents a significant form of chronic laryngeal inflammation characterized by epithelial thickening, mucosal rigidity, and an increased risk of precancerous transformation. Persistent irritation—from smoking, environmental exposures, vocal overuse, or laryngopharyngeal reflux—plays a central role in the development and progression of epithelial hyperplasia. These pathological changes impair normal vocal fold vibration, resulting in hoarseness, reduced vocal endurance, and a spectrum of functional voice disorders.Accurate diagnosis requires a combination of clinical evaluation, laryngoscopic assessment, and histopathological confirmation, particularly in cases where leukoplakia or keratinizing lesions raise concern for dysplasia. Modern diagnostic tools such as videostroboscopy and narrow band imaging enhance the ability to detect early mucosal abnormalities and guide clinical decision-making.Management

of chronic hyperplastic laryngitis should be multimodal, addressing both the underlying etiological factors and the functional impact on vocal behavior. Lifestyle modification, treatment of reflux, voice therapy, mucosal protective strategies, and, when necessary, surgical intervention collectively contribute to symptom control and mucosal recovery. Long-term follow-up is essential for monitoring disease progression and preventing malignant transformation.Overall, early recognition and comprehensive treatment of chronic hyperplastic laryngitis are crucial for preserving vocal function, reducing morbidity, and minimizing the risk of progression to laryngeal carcinoma.

References:

1. Altman, K. W., Simpson, C. B., Amin, M. R., Abaza, M., Balkissoon, R., & Coyle, S. M. (2011). *Cough and paradoxical vocal fold motion*. Otolaryngology–Head and Neck Surgery, 144(1), 53–57.
2. Belafsky, P. C., Postma, G. N., & Koufman, J. A. (2002). *The validity and reliability of the reflux symptom index (RSI)*. Journal of Voice, 16(2), 274–277.
3. Benninger, M. S., Jacobson, B. H., & Johnson, A. F. (1994). *Vocal arts medicine: The care and prevention of professional voice disorders*. Singular Publishing Group.
4. Brandenburg, J. H. (1985). *Leukoplakia revisited: A clinicopathology study of 300 patients*. The Laryngoscope, 95(9), 1085–1090.
5. Cohen, J. T., Safadi, A., & Fliss, D. M. (2014). *Laryngeal keratosis: Clinical, histological, and molecular aspects*. Head & Neck, 36(10), 1503–1510.
6. Costa, D. A., Matos, L. L., & Pinto, F. R. (2016). *Laryngeal epithelial lesions: Diagnosis, histopathology and clinical correlations*. Brazilian Journal of Otorhinolaryngology, 82(5), 588–598.
7. Ford, C. N. (2005). *Evaluation and management of laryngopharyngeal reflux (LPR)*. JAMA, 294(12), 1534–1540.
8. Koufman, J. A. (1991). *The otolaryngologic manifestations of gastroesophageal reflux disease (GERD): A clinical investigation*. The Laryngoscope, 101(8), 1–78.
9. Martins, R. H. G., Dias, N. H., Gregório, E. A., & Figueiredo, J. A. (2009). *Laryngeal epithelial hyperplasia: Etiological and clinical aspects*. European Archives of Oto-Rhino-Laryngology, 266(6), 857–862.
10. Remacle, M., Matar, N., Lawson, G., & Jamart, J. (2007). *Epithelial hyperplastic lesions of the vocal folds: A review of diagnosis and management*. Current Opinion in Otolaryngology & Head and Neck Surgery, 15(6), 135–142.
11. Rosen, C. A., Anderson, T. D., & Murry, T. (1998). *Evaluating hoarseness: Keeping your patient's voice healthy*. American Family Physician, 57(11), 2775–2782.
12. Sataloff, R. T. (2017). *Professional voice: The science and art of clinical care*. Plural Publishing.
13. Tateya, I., Tateya, T., & Ford, C. N. (2005). *Phonatory effects of mucosal injury and repair in the vocal fold lamina propria*. The Laryngoscope, 115(1), 1–7.

14. Woo, P. (2010). *Stroboscopy and high-speed imaging in voice disorders*. Otolaryngologic Clinics of North America, 43(5), 1103–1122.

ISSN 2181-0664

Doi Journal 10.26739/2181-0664

ЎЗБЕК ТИББИЁТ ЖУРНАЛИ

7 ЖИЛД, 3 СОН

УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ

ТОМ 7, НОМЕР 3

UZBEK MEDICAL JOURNAL

VOLUME 7, ISSUE 3

Editorial staff of the journals of www.tadqiqot.uz
Tadqiqot LLC the city of Tashkent,
Amir Temur Street pr.1, House 2.
Web: http://www.tadqiqot.uz/; Email: info@tadqiqot.uz
Phone: (+998-94) 404-0000

Контакт редакций журналов. www.tadqiqot.uz
ООО Tadqiqot город Ташкент,
улица Амира Темура пр.1, дом-2.
Web: http://www.tadqiqot.uz/; Email: info@tadqiqot.uz
Тел: (+998-94) 404-0000