



CHRONIC ATROPHIC LARYNGITIS, ITS CAUSES AND INFLUENCING FACTORS

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Abstract. This article discusses chronic atrophic laryngitis, its causes and influencing factors. It describes the causes of the disease and new methods of prevention. Information is provided on the influence of concomitant diseases, acquired occupational diseases, weather effects, allergies and other causes in the origin of atrophic laryngitis.

Keywords: angiofibroma, symptoms, diphtheria, bronchial asthma, pharmacotherapy, atrophic laryngitis, dysphonia, nasopharynx

Introduction

Chronic atrophic laryngitis is a form of nonspecific inflammation of the larynx, accompanied by thinning of the mucous membrane, sclerosis of regional capillaries, intralaryngeal muscles and glands. The main symptoms are hoarseness or hoarseness of voice, dryness, burning in the throat, sensation of a foreign body, dry cough. A characteristic feature is an exacerbation of symptoms when inhaling dry air. When diagnosing, medical history data, patient complaints, results of indirect laryngoscopy, laboratory tests, computed tomography and magnetic resonance imaging are used. Treatment is conservative and includes elimination of etiological factors, pharmacotherapy and physiotherapy.

Chronic atrophic laryngitis is the rarest type of inflammation of the larynx - up to 10% of the total number of cases. Inflammatory lesions of this organ occupy first place in the structure of vocal apparatus disorders in the adult population. Chronic laryngitis accounts for 31-47% of all diseases of the larynx and 2-7% of all diseases of the ENT organs.

The highest incidence is observed in people of working age - from 21 to 45 years. In men, pathology occurs 1.2-1.5 times more often than in women. At the same time, female representatives are more prone to dysphonia - pronounced voice disorders are detected in more than 90% of patients.

Results and discussion

As a rule, the pathology develops against the background of previously suffered infectious and inflammatory lesions of the nasopharynx or is combined with them. The isolated form is extremely rare. Taking into account the causes of formation and contributing factors, the following variants of the disease are distinguished:

It occurs against the background of frequent acute respiratory viral infections, a tendency to allergies, a large number of acute laryngitis, specific infectious diseases

(diphtheria, scarlet fever, tuberculosis, syphilis), pathology of the nervous and vascular structures innervating and supplying the tissues of the larynx.

It is caused by natural aging of tissues and an age-related decrease in regenerative capabilities, as well as deterioration of nasal breathing due to defects of the nasal septum, proliferation of adenoid vegetations, polyps and malformations of the nasopharynx.

Atrophy of the laryngeal mucosa is promoted by hormonal dysfunction of the thyroid and pancreas, in particular diabetes mellitus. The use of inhaled glucocorticosteroids in the treatment of bronchial asthma has a similar effect.

This variant of laryngitis can be provoked by cachexia of various etiologies, vitamin deficiencies, and consumption of large amounts of strong alcoholic beverages. Separately, long-term smoking experience is identified as one of the most significant causes of mucosal atrophy.

Excessive dryness, too high a temperature, dustiness of the inhaled air or the content of chemical vapors in it have a direct negative effect on the mucous membranes of the respiratory tract and cause their atrophy. Occupational risk factors also include constant vocal strain, which is typical for singers and people working in conditions of constant loud noise.

Atrophy is a pathological process that is accompanied by a decrease in volume and loss of tissue function, and their fibrous replacement. With the development of the atrophic form of chronic laryngitis, metaplasia of normal columnar ciliated epithelium occurs into squamous keratinizing epithelium. There is hypotrophy and fibrosis of microcirculatory vessels, muscular apparatus and mucous glands. As a result, the secretion quickly dries out and transforms into dry crusts covering the atrophied vocal folds.

Age-related atrophy is the result of normal aging processes, during which the ability of tissues to recover decreases and sensitivity to the effects of other pathogenic factors increases. The trophoneurotic variant is manifested by damage to regional arteries (most often atherosclerotic) and/or nerve endings, which reduces the reparative and functional capabilities of the larynx. Lack of nutrients, vitamins and endocrine pathologies lead to a decrease in local immunity and general defenses of the body, which increases the likelihood of developing inflammatory changes. Occupational hazards and tobacco smoke have a direct cytotoxic effect on epithelial cells, causing their atrophy.

The first symptom of the disease is a change in voice - dysphonia. Patients complain of hoarseness or hoarseness, which is initially observed only after waking up and at the end of the working day. Over time, these symptoms become permanent, their severity increases with vocal strain, adverse weather conditions and during menstruation.

Then dryness, soreness, burning, and a feeling of accumulated mucus or a foreign body in the throat appear. The patient unsuccessfully tries to clear his throat, which provokes an exacerbation of other symptoms of the pathology. Smokers and people working in hazardous industries experience a superficial hacking cough in the morning. A characteristic feature of the disease is a sharp exacerbation of all existing symptoms while staying in rooms with dry air and their reduction in conditions of high humidity.

The main complication of chronic atrophic laryngitis is laryngeal stenosis, which has several development mechanisms. It may be a direct result of atrophy of the vocal folds or spastic contracture of the vocal muscles caused by the patient's constant attempts to clear his throat. The formation of stenosis is the cause of a persistent change in the voice or its complete loss, the appearance of severe shortness of breath, and a feeling of lack of air.

Metaplasia of the epithelial integument that occurs with this form of laryngeal lesions is a prerequisite for the development of tumors. There are both benign neoplasms (polyps, papillomas, angiofibromas) and cancer processes, including sarcoma.

Diagnosis is based on a comparison of anamnestic information and physical examination data, laboratory and instrumental research methods. When interviewing a patient, the otolaryngologist focuses on the sequence of symptoms, previous diseases of the upper respiratory tract, and the presence of other predisposing factors. Further, for the purpose of a comprehensive examination of the patient, the following is carried out:

An objective examination of the larynx reveals its moderate expansion, dryness, thinning and pathological shine of the mucous membranes. The mucous membranes often become dull red, and blood vessels are visible through them. On the surface of hyperemic and atrophied vocal folds there are dry crusts of a yellowish or brown color, which, when rejected, leave areas of hemorrhage.

A general blood test reveals a slight increase in the level of leukocytes with a shift in the leukocyte formula to the left, and an increase in ESR. Against the background of allergic pathologies, eosinophilia occurs. To reliably verify the form of laryngitis, pathological examination of samples of the laryngeal mucosa can be performed.

If it is impossible to carry out a full differential diagnosis, a contrast-enhanced CT scan of the neck is used, which allows one to visualize damage to regional vessels and exclude the presence of tumor formations and foreign bodies. For a detailed study of all regional structures, MRI of the soft tissues of the neck is indicated.

Differential diagnosis is carried out with neoplasms, foreign bodies, primary laryngeal oesophagus. A benign or malignant tumor is indicated by the severity of symptoms on one side, the presence of a dense formation based on the results of palpation of the neck, radiography, MRI and CT.

When a foreign body enters, symptoms appear suddenly, accompanied by a feeling of shortness of breath or stridor. In such cases, an x-ray reveals an object located on the vocal folds. When the larynx is ozen, a specific foul odor is detected in the patient's breath, and the severity of subjective symptoms depends little on environmental conditions.

The main treatment is conservative. Its goal is to relieve symptoms of the disease, restore normal voice function and prevent possible complications. This is achieved by thinning the mucus, moisturizing the mucous membranes and stimulating proliferation processes. The therapeutic program includes:

Involves the use of mucolytics and secretolytics, local use of iodine glycerin, Lugol's solutions, potassium iodide, menthol, aloe extract. Biostimulants, inhalation of a mixture of saline solution and tincture of iodine, and alkaline-oil agents are indicated. To prevent bacterial complications, cephalosporin antibiotics are prescribed.

Conclusion

It involves excluding potential mechanisms of disease formation. Depending on the etiology, full treatment of atherosclerosis, thyroid pathologies, diabetes is carried out, vitamin complexes and folic acid are prescribed. Physiotherapeutic procedures are used - UHF, diathermy, irradiation with a Sollux lamp and others. If necessary, therapeutic measures are taken to restore nasal breathing.

The prognosis for chronic atrophic laryngitis is favorable. With early diagnosis and quality treatment, it is possible to relieve most of the symptoms of the disease and prevent the

development of complications. There is no specific prevention. Nonspecific preventive measures include adherence to an adequate voice regime, full treatment of inflammatory pathologies of the nasopharynx and acute forms of laryngitis, cardiovascular and endocrine diseases, elimination of occupational factors, abandonment of bad habits, early correction of nasal breathing disorders.

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