

Improving Conservative Treatment of Chronic Rhinitis

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Abstract: Chronic rhinitis is an inflammatory process that affects the patient's nasal mucosa. The disorder develops against the background of infectious, allergic, toxic and other factors. There are many forms of the disease (some classifications include dozens of varieties of the pathological condition). Each of them requires a specific approach to therapy. The disorder is accompanied by serious disorders in nasal breathing, which are transient or permanent. Depending on the clinical situation. Symptoms of the pathological process are nasal discharge, impaired sense of smell, etc. In the absence of adequate therapy, the disease leads to many complications. Including dangerous (respiratory tract, heart). Examination and treatment is the work of an ENT doctor, an otorhinolaryngologist.

Key points: Causes, Types, Symptoms, Complications, Diagnosis, Treatment, Prognosis.

Causes of chronic rhinitis

Chronic rhinitis is a multifactorial disease. It develops against the background of infection, allergic reaction of the body, toxic effects on the tissues of the nose, nasal passages, etc. Infectious and allergic factors are especially common, accounting for about 70% of all clinical cases. According to statistics, chronic rhinitis occurs in almost 12% of adults.

However, it usually occurs in a mild or moderate form. It does not attract the attention of the patient. Treatment is started on time, which leads to further stabilization of the pathological process or its progression.

It is very important to determine the exact cause of the pathological process, since the nature of the treatment requires mandatory consideration of the nature of the disorder. Vasomotor rhinitis is treated differently from infectious rhinitis. Infectious is different from allergic and others. An otolaryngologist assesses the situation. A specialist in children or adults.

Pathogenesis of the disease

Chronic rhinitis, as a disease of the nasal mucosa, develops for many reasons. Often, infectious forms of the pathological process are observed. The inflammatory process develops in response to the penetration of septic substances into the structures of the nasal mucosa. Most often, the following microorganisms and viruses are considered the culprits of the disease:

- a. influenza viruses;
- b. parainfluenza viruses;
- c. adenoviruses;

- d. coronaviruses;
- e. respiratory syncytial viruses;
- f. rhinoviruses;
- g. staphylococci;
- h. streptococci;
- i. fungal agents (most often the genus *Candida*).

Also, the culprits of the pathological process can be representatives of specific flora: *Candida*, *Chlamydia*, etc. They provoke potentially more severe purulent forms of the inflammatory process, which require urgent and rather intensive antibacterial treatment.

Other culprits of the disease may be a chronic inflammatory process in the nose:

local and general allergic reactions (in the latter case, inflammation of the nasal cavity is complicated, rhinitis itself is one of the syndromes, along with others);

regular use of nasal drops based on xylometazoline or other compounds, regular use of such drugs, vasoconstrictors provoke the development of vasomotor rhinitis;

use of certain other medications, such as hormonal agents, that can cause the growth of nasal mucosal tissue;

Often, the triggers are climatic conditions, air humidity, environmental dust, other forms of pollution, high or low temperatures, which are also factors in the development of vasomotor and other forms of chronic rhinitis in a patient.

Determining the exact cause always requires instrumental and laboratory diagnostics and a complete history. The conditions that preceded the development of the disease in the patient. All this is the work of an otolaryngologist. You cannot diagnose the condition yourself.

Increased risk factors for disease

The occurrence of pathology, prolonged runny nose, occurs against the background of the influence of direct causes, as well as an increase in risk factors. Risk factors create additional conditions for the development of the pathological process. Among them:

other diseases of the respiratory tract, such as sinusitis (rhinitis can develop secondarily), as well as diseases of the auditory tube (eustachitis), etc.;

severe acute rhinitis, which can become chronic without adequate therapy;

long-term course of rhinitis or frequent exacerbations of the pathological process, in which case there is a risk of gradual chronicity of the disease with subsequent frequent relapses;

abuse of vasoconstrictor drops;

hormonal disorders occur mainly in women, in men, mainly during puberty, then hormonal levels stabilize and become much more stable;

impaired nasal breathing due to congenital or acquired anomalies of the facial skeleton, for example, a deviated nasal septum that restricts normal nasal breathing due to improper distribution of air flow;

decreased local and general immunity of the patient;

Genetic predisposition and heredity also play a negative role in the development of a chronic ongoing inflammatory process.

It is necessary to correct risk factors as much as possible: normalize the condition of the nasal septum, treat diseases of the ENT organs, etc. These are issues that should be resolved under the supervision of a qualified otolaryngologist.

Classification, forms of chronic rhinitis

The disorder is classified on a number of grounds: the severity of the pathological process, the course of the disease, and changes in the nasal cavity.

The most informative criterion is the nature of the changes developing in the patient. Based on this, several types of pathological processes are called.

Simple or chronic catarrhal rhinitis develops after an infectious or allergic process. It is accompanied by disturbances in normal nasal breathing and signs of local inflammation. It usually occurs in attacks, for short periods (for example, a few weeks), after infectious processes or in contact with allergens. In the absence of adequate therapy, it can develop into another, more severe form. This form can also be called infectious rhinitis. Since it is not an allergy, but an infection, it often provokes this disorder.

Chronic allergic rhinitis occurs almost as often as the septic variety. It is characterized by the rapid development of exacerbations (the clinic develops within a few minutes). Most often - a complicated course. The disease is a personal sign of allergies. Often there are other symptoms and syndromes: eye damage, swelling of the throat, larynx, dermatoses (skin lesions), as well as more serious disorders (Quincke's edema, anaphylaxis). There is a clear connection between damage to the nasal passages and contact with allergens. If you do not contact them, relapses do not develop.

Chronic vasomotor rhinitis develops due to impaired local blood flow in the nasal cavity. Blood stagnation occurs, part of the liquid sweats through the vascular wall and enters the submucosal layer. As a result, severe edema occurs. normal nasal breathing is disturbed. Vasomotor rhinitis develops for many reasons: due to a previous infection, against the background of air humidity, at high or very low ambient temperatures, if the air is contaminated with something. Also, with regular use of vasoconstrictor drops.

There are other forms of the disease. Chronic hypertrophic rhinitis develops in response to the use of medications and can form spontaneously. In this case, the lesions of the nasal mucosa increase in size and intensify, which affects normal nasal breathing. It becomes completely impossible. The disease has no visible periods of exacerbation and remission.

Symptoms are always present, which affects the patient's well-being. In chronic atrophic rhinitis, the opposite phenomenon is observed. The volume of the mucous membrane of the nasal cavity is sharply reduced. Because of this, the ability to smell is impaired. Regular bleeding is observed.

A separate form of atrophic rhinitis is ozena or fetal runny nose. Such forms can only be treated surgically. Fortunately, according to our estimates, hypertrophic and atrophic forms account for no more than 29%, and ozena accounts for about 1% of the total number of clinical cases.

Depending on the stage of the course, we can talk about two forms of the pathological process:

true chronic rhinitis in remission, when symptoms are minimal or there are no signs of the pathological process at all;

exacerbation of chronic rhinitis, when the clinic flares up with renewed vigor.

In some cases, the course is continuous. There is no clear distinction between exacerbations and remissions.

The disease can be divided according to its severity. There are mild, moderate and severe forms of the pathological process. All classifications are used equally to clearly and clearly describe the nature of the disease.

Symptoms of chronic rhinitis

Signs of an inflammatory process may include:

- a. disruption of normal nasal breathing, manifested frequently or occasionally, depending on the clinical situation;

- b. foreign body sensation, swelling and pressure inside the nasal cavity;
 - c. burning and itching (predominant in an allergic reaction) are painful;
 - d. sneezing;
 - e. with nasal discharge, catarrhal or other inflammation, the mucus is usually transparent, with atrophic processes, purulent forms of inflammation, the mucus has a yellow or green color, the formation of foul-smelling crusts is possible;
 - f. watery eyes (may be a sign of an allergic reaction);
 - g. in case of infection - increased body temperature, weakness, drowsiness and other symptoms of a respiratory viral infection.
- *There are also specific manifestations of the pathological process. So, with atrophic rhinitis, frequent bleeding is observed. Thinning of the nasal mucosa affects the ability to smell. If atrophy is characterized by relatively normal breathing, then hypertrophy mainly limits the ability to breathe through the nose. Vasomotor rhinitis also manifests itself as congestion, but only under certain conditions. For example, in winter, when the heating is turned on. It is necessary to take into account all the nuances of the pathological condition.*

Complications of the pathological process

The negative consequences of a long-term runny nose include damage to the respiratory tract and heart. Not to mention the pathological process itself with the risk of bleeding, negative psychological state, etc. Often, patients with long-term inflammation of the nasal passages develop the following problems:

- a. sinusitis, a complication that accompanies inflammation of the sinuses, occurs unpredictably;
- b. tracheitis, inflammation of the trachea;
- c. damage to other respiratory organs (bronchitis, laryngitis, pneumonia);
- d. heart disease due to insufficient oxygen supply and insufficient gas exchange in the myocardium;
- e. brain diseases due to chronic hypoxia.

If purulent discharge or bacterial damage is observed, there is a risk of septic complications (sepsis itself, the development of an abscess, damage to the central nervous system and other problems). Complications can be prevented only with timely and competent treatment of the pathological process.

Diagnosis of the disease

Diagnosis and examination of chronic rhinitis is the work of an otolaryngologist. Routine, instrumental and laboratory methods are used for examination. Among the possible options:

- a. verbal questioning of the patient, checking complaints: is there any discharge, what kind, how long ago did it start, what other symptoms are there;
- b. collecting anamnesis to better understand the likely nature of the pathological process;
- c. visual assessment of the condition of the nasal passages in the immediate area of inflammation: the presence or absence of atrophy, other diseases characteristic of various forms (rhinoscopy is performed);
- d. X-ray of the nasal sinuses;
- e. nasal swab to identify a possible infectious process;

laboratory diagnostics: general and biochemical blood tests, examination of allergic markers (high levels of basophils, eosinophils and other indicators), etc.

The examination tactics are developed by the doctor.

Treatment of chronic rhinitis

Treatment of the nose is carried out taking into account the form of the pathological process:

- a. for the allergic form, antihistamines, hormonal drugs in the form of drops, sprays, preparations for internal and parenteral (intravenous) administration are indicated;
- b. Antibiotics, antivirals, immune response stimulants, and nonsteroidal anti-inflammatory drugs are indicated for infection;
- c. atrophic processes require the use of special drops to normalize local nutrition of the mucous membrane;
- d. in the vasomotor form, changes in environmental conditions, air humidification, temperature control, and discontinuation of vasoconstrictor drops are indicated.

Atrophic, hypertrophic, vasomotor forms often require surgical correction. It is necessary to expand the nasal passages. Vasotomy is performed: classical, laser or radio wave. The task is to remove the altered tissues and blood vessels. The techniques are minimally traumatic.

Regardless of the type of chronic rhinitis, symptomatic therapy is also carried out. Inhalations with saline or saline solutions and hormonal agents are indicated to stimulate nerve endings and restore the sense of smell. In some cases, nasal lavage is performed. It can be even worse. In each case, the nature of the therapy is determined by a specialist doctor, taking into account the clinical situation.

Disease prognosis and prevention

The prognosis depends on the form of the pathological process. There are varieties that lengthen the nose for years. However, with proper treatment, correction leads to complete normalization of the situation. It should be remembered: the longer the disease lasts, the more difficult it is to correct it.

Prevention of the pathological process includes timely treatment of diseases of the ENT organs, as well as correction of allergic reactions and avoidance of allergens. If symptoms of a runny nose appear, you should consult a specialist as soon as possible. This will help determine the cause of inflammation of the nasal passages and how to quickly deal with the disorder.

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