

# Modern Views on the Etiology and Pathogenesis of Chronic Tonsillitis in Children

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**Abstract:** Currently, inflammatory diseases of the upper respiratory tract are extremely important. The cause of the development of chronic tonsillitis is a change in the reactivity of the body to microbes. Various complications of chronic tonsillitis lead not only to the fact that ENT doctors, but also other healthcare industries are fixated on this problem. Currently, the treatment of chronic tonsillitis remains an unresolved problem until the end.

Keywords: ENT, chronic tonsillitis, microbes, organism, palatine tonsils.

#### Introduction

Currently, inflammatory diseases of the upper respiratory tract are extremely important. The inflammatory process in the palatine tonsils is a source of toxic effects on the entire body as a whole (A. H. Rajabov, F. I. Inoyatova, Sh. E. Amonov, 2017). In the Republic of Uzbekistan, the incidence of chronic tonsillitis is 18% of the total number of all diseases in representatives of the ENT sphere (A.M. Khakimova, 2011). Currently, the problem of chronic tonsillitis remains relevant due to the fact that Uzbekistan has recorded high rates of morbidity among children. In children, chronic tonsillitis is observed in 12-15% of cases, in adults - in 4-10% of cases (N. Y. Khushvakova, G. B. Davrova, 2014). Chronic tonsillitis occurs as a result of exposure to a large number of factors, and various fog is present in the clinical picture and leads to the development of concomitant pathology.

Statistics reflect more than 120 diseases associated with chronic tonsillitis. Pathology of the tonsils leads to damage to the heart and joints, kidneys and nervous system. Despite the existing modern approaches to the diagnosis and treatment of chronic tonsillitis, this pathology remains one of the urgent problems. Until now, there are not enough measures in practical medicine for the diagnosis and treatment of chronic tonsillitis.

#### Formulation of the problem

Differentiated treatment - based on the analysis of the diagnostic algorithm, highly effective measures are taken to prevent the diagnosis, treat the disease, as well as its occurrence and further development, study its pathogenesis and develop a treatment system, improve measures to improve the quality of life of patients.

Since doctors do not pay enough attention to chronic tonsillitis, it will be necessary to develop and conduct large-scale events and scientific research.

The prevalence of long-term and severe chronic tonsillitis from 6% to 37% in adults and from 15% to 63% in children leads to disability, as well as to complications such as interstitial nephritis, acute pyelonephritis, chronic glomerulonephritis, chorea, neurasthenia, myocarditis,

rheumatic fever, infectious endocarditis. These complications lead to disability of children and young people.

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Chronic tonsillitis is common among children and people of active age, as well as concomitant diseases (acute rheumatic fever, chronic rheumatic disease, pyelonephritis, glomerulonephritis, chorea, etc.) have become a topic of discussion because of its connection with. These complications lead to disability of children, adolescents and youth.

Until now, the search for new methods of treating chronic tonsillitis in otorhinolaryngology remains an urgent problem. Incorrect tactics used in the treatment often leads to severe complications, as well as the development of diseases of vital organs and systems.

The aggravating factors of the development of chronic tonsillitis are purulent processes that are often observed on the upper jaw, dental diseases, persistent inflammatory processes in the nose, as well as bacterial autoallergia. Phagocytosis is an important link in the pathogenesis of chronic tonsillitis. Bacteria secrete factors that weaken complement activation.

Chronic tonsillitis leads to the formation of complications that lead to disability. This situation indicates an increase in the number of people with chronic tonsillitis in the near future and underlines the magnitude of the medical problem and its social significance, which is associated with the occurrence of complications, which, in turn, causes social disorientation of both children and adults. This problem requires the introduction of new methods of treatment of chronic tonsillitis.

In children, BHSA, called pharyngitis, tonsillitis, can cause acute rheumatic fever, accompanied by systemic inflammatory diseases of the cardiovascular system, connective tissue.

At any age, chronic tonsillitis has its own form of rejection. The disease often begins in early childhood and progresses into adulthood. With chronic tonsillitis, there is a violation of the protective mechanisms, bacterial invasion contributes to the spread of inflammation, resulting in intoxication of the body.

Chronic tonsillitis causes a consistent disruption of the immune system of the joints, eventually triggering an autoimmune process. Therefore, treatment should be comprehensive: both aimed at reducing microbial invasion and increasing the body's resistance.

## Pathogenesis of chronic tonsillitis

As a result of intoxication, allergic and neuromystrophic changes develop in the area of the ring of the larynx and palatine tonsils.

The amygdala plays the role of protecting the local immunity of the mucous membrane of the upper respiratory tract. The toxic effect of chronic foci of inflammation in the lymphoepithelial ring zone of the larynx leads to the development of neurophic, allergic and autoimmune reactions. Pathological effects on organs and systems are mediated by hematogenic, lymphogenic, neuro-reflex and immuno-mediated pathways. Just as the amygdala is involved in the formation of local defense mechanisms, the immune system is also involved in the occurrence of the disease. Despite the multiple excitability of chronic tonsillitis, the immunological activity of the amygdala of the palate persists, this condition requires attention to the importance of appropriate treatment of the amygdala of the palate.

Tonsillectomy causes a decrease in the level of T-lymphocytes, NK cells, macrophages.

Palatine tonsils are solid formations of lymphoid tissue located in the mouth. In front, they are limited by the palatine lingual, and behind the palatine-laryngeal arch. Tonsils are considered

part of the human immune system because they are located at the junction of the food and respiratory tract. Normal, physiological and pathological processes occurring in the palatine amygdala are associated with the presence of crypts. Palatine tonsils are well supplied with blood, so bleeding is considered a serious complication of surgical interventions.

The medial surface of the palatine tonsils is covered with a multilayer non-folding epithelium, inside which there are epithelial pathways, which creates conditions for constant contact of immunocompetent cells with antigens. Palatine tonsils are an immune organ in which lymphocytes are produced with subsequent delivery of mature cells to various organs and tissues. The process of contact of lymphocytes with the external environment is called "lymphoepithelial symbiosis".

It is noted that children who have tonsils removed often become infected with infectious diseases. Thus, this problem requires a significant and deeper study using modern laboratory methods of diagnosis and analysis of the results obtained, as well as appropriate treatment of these cases.

An important factor determining the clinical course of chronic tonsillitis is the microbial landscape of the palatine tonsils, as well as the virulence of the infection. There is still no consensus on the composition of the microflora of lacunae. This situation is associated with the local characteristics of the microflora, as well as with the use of various testing methods.

Immune system mediators are involved in the formation of general and local immunity. Immune system mediators are involved in the formation of innate and acquired immunity mechanisms.

Palatine tonsils become a focus of constant sensitization, they are prepared for an allergic reaction. With chronic tonsillitis, a delayed type of sensitization occurs.

The processes of free radical oxidation (ERO) play an important role in the pathogenesis of inflammation in chronic tonsillitis, their severity depends on antioxidant protection factors. Indicators of catalase and superoxide dismutase in saliva are considered important for the differentiation of forms of chronic tonsillitis.

Chronic tonsillitis is characterized by the presence of a continuous inflammatory process in the tonsillar tissue, which is often repeated due to angina and caries.

#### Conclusion

Angina plays an important role in the pathogenesis of chronic tonsillitis. Regression of the acute process does not always occur, and a decrease in the protective forces of the immune system leads to the transition of the process into a chronic form, and not to the recovery of the patient.

One of the causes of the occurrence and development of chronic tonsillitis is the topographical and histological features of the structure of the palatine tonsils. Palatine tonsils differ from other tonsils of the Pirogov-Waldeyer ring in that they have narrow slits in which the detached epithelium and bacteria are located, which can cause a violation of drainage. Rhinitis affects the nasopharynx, which leads to difficulty breathing through the mouth. Cooling of the tonsils causes a morphofunctional change in the mucous membrane.

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