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DEVELOPMENT OF CONSERVATIVE TREATMENT IN CHRONIC TONZILLITIS

Abstract: The palatine tonsils perform a protective function and participate in the formation of general and local immunity. To substantiate and evaluate the effectiveness of the use of intravenous laser blood irradiation (ILBI) and local laser therapy in the optimization of conservative treatment of chronic tonsillitis.

Key words: Laser therapy chronic tonsillitis, antioxidant system, immunoglobulin, catalase, superoxide dismutase.

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Introduction

The relationship of chronic tonsillitis with damage to other organs and systems is very diverse. In different periods of the study of this pathology, from ten to several hundred diseases were attributed to the number of tonsillogenic diseases. Despite the lack of a unified point of view among researchers on this issue at the present time, the dependence of heart, joint and kidney lesions on the focus of infection in the tonsils can be considered reliably established. Underestimation of this circumstance often leads to untimely and ineffective treatment measures.

As a result, the number of complications of chronic tonsillitis is increasing. This situation is largely due to the widespread in our country a sparing attitude towards the tonsils as an important immunocompetent organ. On the other hand, such an approach to the palatine tonsils forms the basis of recommendations for limiting radical surgical treatment of tonsillitis and leads to the displacement of surgical removal of tonsils by conservative methods

of treatment, even with the possibility of developing tonsillogenic complications.

According to a number of scientists, the arguments in favor of a sparing attitude towards the pathologically altered palatine tonsils are unfounded, since their removal is not aimed at freeing the body from normally functioning cells of the lymphoid series, but at getting rid of the focus of infection, the focus of immunopathology, which produces autoimmune antibodies. Tonsillectomy should be performed without delay in case of tonsillogenic complications (rheumatism, nonspecific polyarthritis, nephritis, etc.). When chronic tonsillitis is combined with a pathology that does not have a direct pathogenetic connection with it (thyroiditis, hypertension, chronic lung diseases, liver, systemic collagenoses, etc.), the treatment tactics should be determined individually after a thorough clinical examination.

The effect of bilateral tonsillectomy on the course of associated (etiopathogenetically associated with tonsillitis) and concomitant (not directly related)

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diseases has been studied by many authors at different times of the postoperative period. The data of objective examination cited by them indicate a significant percentage of recoveries in the group of patients suffering from recurrent tonsillitis, and an improvement in the condition of patients suffering from rheumatism, nephritis, polyarthritis and other diseases after removal of pathologically altered palatine tonsils.

On the other hand, there are reports of the appearance in the postoperative period of a tendency to respiratory diseases, bronchitis, there is an increase in the number of colds. At the same time, there is an opinion that local manifestations of the negative consequences of the removal of the palatine tonsils rarely occur and, with a well-performed operation, can be minimized.

Numerous clinical and immunological studies have revealed that the development of chronic inflammatory and allergic diseases of the pharynx in most cases is pathogenetically associated with primary or secondary, local or systemic immunological insufficiency.

The importance of studying the immunological state in diseases of the upper respiratory tract is determined not only by the high frequency of development of this pathology, but also by their pathogenetic significance in the development of diseases such as bronchial asthma, chronic pneumonia and other diseases of internal organs. Due to a decrease in the effectiveness of local immunity in inflammatory diseases of the upper respiratory tract, conditionally pathogenic microorganisms, especially staphylococcus aureus, are released from the mucous membrane. Some authors explain this by a decrease in the activity of the T and B-systems of the immune system. Studies by a number of authors have established that in chronic inflammatory and allergic diseases of the upper respiratory tract, there is a deficiency of various classes of immunoglobulins to pathogens and their toxoids. With the pathology of the upper respiratory tract, the suppression of T- and B-populations in the peripheral blood, an increase in the number of rosette-forming cells was reliably established. In addition, in patients with chronic diseases of the upper respiratory tract, disorders of cellular immunological reactivity in the reactions of blast transformation and leukocytosis were revealed.

Traditional methods and drugs used as immunomodulators are either insufficiently effective or have various side effects, for example, toxicity.

In recent years, there have been works devoted to immunocorrection in nonspecific inflammatory diseases of the upper respiratory tract using both medications and therapeutic physical factors, of which laser radiation is the most preferable. However, publications on this topic are few in number and do not give a complete picture of the whole variety of

methods used for immunocorrection in the studied pathology.

The introduction of laser radiation into clinical practice is a promising area of non-drug immunocorrective therapy. Laser therapy has an immunostimulating, anti-inflammatory, analgesic and hyposensitizing effect.

Most of the works on assessing the effectiveness of laser therapy in patients with chronic tonsillitis were carried out in the 80s - 90s of the XX century using devices of the first and second generations. They generate laser radiation of significant intensity. At the turn of the XXI century in medicine, a priority was determined in the use of low-intensity laser radiation generated by third-generation devices. The duration of the pulses of such radiation (on the order of 10 - 100 nsec) is comparable to the time of the excited state of the atoms of biomolecules. Such radiation has a more pronounced immunomodulatory and anti-inflammatory effect, reliably established in the study of patients with various somatic diseases.

Thus, the data available in the literature indicate a decrease in the degree of immunological protection and nonspecific resistance of the organism during a prolonged chronic inflammatory process in the palatine tonsils, which can lead to the development and formation of metatonsillar complications. Therefore, today the close attention of researchers is directed to immunocorrection in various pathological conditions of the body, including diseases of the upper respiratory tract. However, in relation to the conditions for the development of the pathology of the palatine tonsils, the possibilities of immunocorrection by physical methods, in particular, by the effect of low-intensity laser radiation, have not been sufficiently studied, which predetermined the conduct of this study.

The paper presents a scientific substantiation of the etiopathogenetic mechanisms of the development of chronic tonsillitis and its complications in young people. A scheme for a detailed individual assessment of the nature and course of the inflammatory process in the palatine tonsils, the possibility of its relief by the most effective methods was developed, the validity of indications for laser therapy in the decompensated form of chronic tonsillitis was assessed.

A comparative analysis of the effectiveness of various methods of laser therapy in patients with CT was carried out. Various parameters of procedures for intravenous laser irradiation of blood, percutaneous laser irradiation of the cubital veins and the area of the palatine tonsils in patients with decompensated XT are substantiated. Pathogenetically substantiated effective schemes have been developed for combining drugs with various methods of laser therapy in the presence of an inflammatory process in the tonsils. High efficiency of laser immunocorrection as an integral

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part of complex therapy of patients with decompensated form of XT was established.

Practical significance. Methods for intravenous laser irradiation of blood and combined transcutaneous laser irradiation of the cubital veins and the tonsils area have been developed and tested. The principles of selection of patients for the appointment of various methods of JIT, the criteria for its effectiveness and the prognosis of the results of treatment of patients with decompensated form of chronic tonsillitis have been clarified. The proposed JIT methods shorten the treatment time and prevent the development of para- and metatonsillar complications.

Effective drug combination regimens, modes of intravenous laser irradiation of blood and transcutaneous laser irradiation of the cubital veins and the tonsils in the decompensated form of chronic tonsillitis have been developed, tested and introduced into clinical practice.

The patients were divided into two groups.

Group 1 (main) - 82 patients with chronic tonsillitis of the toxic-allergic form of the 1st degree

and the toxic-allergic form of the 2nd degree, who underwent complex treatment and intravenous laser blood irradiation.

Group 2 (control) - 44 patients with chronic tonsillitis of the toxic-allergic form of the 1st degree and the toxic-allergic form of the 2nd degree, who underwent traditional treatment and local laser therapy.

The examination revealed that the largest proportion of patients with chronic tonsillitis was children aged 6 to 18 years, with a peak incidence from 5 to 15 years, which does not contradict the literature data.

Confirmation of the diagnosis was carried out according to the classification of B.S. Preobrazhensky and V.T. Palchun.

The survey carried out by us complies with the standards approved by the Ministry of Health of the Republic of Uzbekistan. The research was carried out in a hospital, among specific research methods, the content of immunoglobulins IgA, IgM, IgG in the blood serum was studied, and the activity of catalase and superoxide dismutase in saliva was studied using a biosensor.

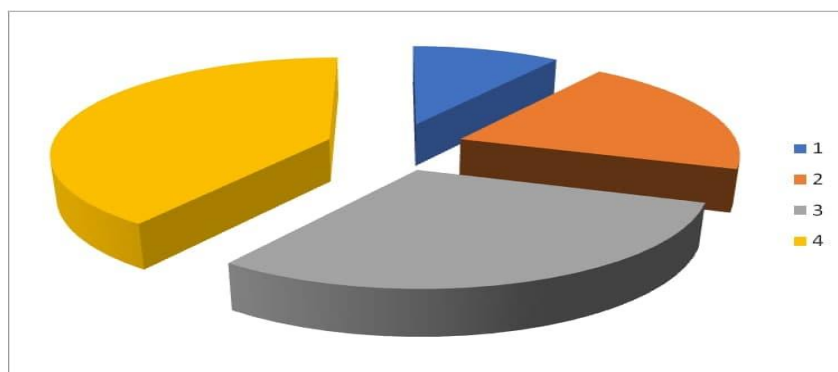


Fig 1. Diagram. Distribution by age.

1. From 3 to 5 years make up - 23.8%
2. From 5 to 10 years old make up - 19.8%
3. From 10 to 15 years old make up - 37.3%
4. From 15 to 18 years old make up -19.0%

Results: The study of antioxidant and immunological parameters in chronic tonsillitis toxic-allergic 1 and 2 degrees, the immune system was significantly suppressed. After intravenous laser irradiation of blood in patients, it gives high clinical efficacy. After treatment with local laser therapy, antioxidant parameters did not change significantly.

Findings. The high efficiency of the method of intravenous laser blood irradiation in chronic tonsillitis has been proven, which leads to the normalization of antioxidant and immunological parameters, prevents local signs of the disease and helps to reduce hospital stay.

CONCLUSIONS

1. In patients with various forms of chronic tonsillitis, pathological changes in the immunological status of the body are formed in the form of a decrease in the levels of immunoglobulins of different classes, a decrease in the functional activity and functional reserve of the tonsils; the severity of these changes correlates with the clinical form of the disease.

2. The inclusion of laser therapy in the complex scheme of clinical treatment of patients with decompensated form of chronic tonsillitis potentiates the therapeutic effects of drug therapy, reduces the incidence of metatonic complications, potentiates anti-inflammatory and immunostimulating effects,

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shortens the duration of treatment and increases the duration of the period of stable remission.

PRACTICAL RECOMMENDATIONS

1. In the complex treatment of patients with decompensated chronic tonsillitis, it is advisable to use intravenous laser irradiation of blood and transcutaneous laser irradiation of blood and palatine tonsils.

2. The course of laser therapy for patients with chronic tonsillitis with radiation generated by the "AZOR-ILBI" apparatus consists of 5 daily procedures of intravenous laser blood irradiation through a single-use light guide inserted into the patient's ulnar vein. The radiation power of the device "AZOR-ILBI" is 2.5 mW, the duration of the procedure is 10 minutes. If necessary, the course can be repeated after 12 months.

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