

OPTIMIZATION OF CONSERVATIVE TREATMENT OF CHRONIC TONZILLITIS

¹Khushvakova Nilufar Jurakulovna, ²Nishanbaeva Furuza Murodovna

D. MD, Professor of the Department of Otorhinolaryngology Samarkand State Medical Institute¹, basic doctoral student of the Department of Otorhinolaryngology Republic of Uzbekistan, Samarkand. Samarkand State Medical Institute²
sevar0887@mail.ru

ANNOTATION

The palatine tonsils perform a protective function and participate in the formation of general and local immunity. Due to the anatomical structure (tortuosity of the crypts and also come into contact with antigens that have entered the body, which leads to the production of specific and non-specific biologically active substances, such immunoglobulins A, M, G are not secreted in the pharynx and are carried by the lymphogenous and hematogenous route. methods of treating chronic tonsillitis

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

Аннотация Небные миндалины выполняют защитную функцию, участвуют в формировании общего и местного иммунитета. В связи с анатомическим строением (извилистость крипт, а также соприкасаются с попавшими в организм антигенами, что приводит к выработке специфических и не специфических биологически активных веществ такими, являются иммуноглобулины А, М, G не секретирруется в глотке и разносятся лимфогенным и гематогенным путем.

Ключевые слова: хронический тонзиллит, антиоксидантная система, иммуноглобулин, каталаза, супероксиддисмутаза.

PURPOSE OF THE STUDY

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

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.

The processing of the obtained results according to the Student's criterion showed that at ILBI for catalase trss = 1429,70, For superoxide dismutase trss = 1083,74.

Hence, the strong action of ILBI.

Which is a low figure. Indicators for ILBI for IgA tras =1587,48 For IgM tras = 1202,07, for IgG tras =2118,91.

Which shows the strong effectiveness of ILBI.

With local laser therapy, these indicators for IgA tras =305,16, For IgM tras = 333,52, for IgG tras = 3599,65,

What shows low efficiency

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.

INTRODUCTION

The problem of chronic tonsillitis to this day remains very relevant in medicine and goes far beyond the limits of otorhinolaryngology. According to the latest data, chronic tonsillitis occurs in children in 12-15% of cases, and in adults under 40 in 4-10% [1].

In each age period, chronic tonsillitis has features of the course. Most often, starting in childhood, it also occurs in adulthood. In chronic tonsillitis, there is a violation of defense mechanisms, bacterial invasion, promotes the spread and maintenance of inflammation, which leads to intoxication of the body [2].

Chronic tonsillitis develops and proceeds against the background of suppression of the body's natural resistance, violation of humoral and cellular immunity, and the formation of an autoimmune process. Therefore, treatment should be comprehensive, both aimed at eliminating microbial invasion and increasing the body's resistance [3].

To increase the effectiveness of conservative treatment, we used intravenous laser blood irradiation. The criteria for the effectiveness of conservative treatment are the disappearance of caseous plugs in crypts, a decrease in the frequency of relapses and an improvement in the indicators of immunological parameters.

The antigen-antibody complex has chemotactic activity, which increases the proteolytic ability of macrophage enzymes, which in turn leads to lysis of the tonsil tissue, denaturation of its own proteins, which becomes antigenic. Once in the blood, they cause the production of autoantibodies that are on the cell and damage them. The palatine tonsils are in the zone of constant and increased sensitization. In chronic tonsillitis, delayed sensitization occurs.

In the pathogenesis of chronic tonsillitis, an important role is played by the processes of free radical oxidation, the severity of which depends on antioxidant defense factors. To differentiate the forms of chronic tonsillitis, indicators of catalase and SOD activity in saliva, as well as an addition to the examination method, are informative [3].

To date, the choice of a method for treating chronic tonsillitis remains an unsolved problem. Due to the fact that the tonsils play an important role in the body, it is necessary to limit surgical interventions. Non-rational methods of conservative treatment do not provide proper sanitation of the palatine tonsils, which leads to the development of complications, and also increases the cost of treatment and takes more time for the doctor and the patient.

In our work, we used a low-intensity semiconductor laser in the red and blue radiation ranges (650 ± 10 nm, 405 nm).

Laser radiation is characterized by completely special physical properties that have no analogues in nature: monochromaticity, coherence, directivity and polarization [5].

Purpose of the study: to evaluate and substantiate the effectiveness of the use of intravenous laser blood irradiation and local laser therapy in optimizing the conservative treatment of chronic tonsillitis.

Materials and methods of research: The basis of our study was 126 patients aged 3 to 18 years suffering from chronic tonsillitis of toxic-allergic form of 1 degree and toxic-allergic form of 2 degrees, who were hospitalized in the pediatric department of rheumatology and otorhinolaryngology of the Regional Multidisciplinary Pediatric Clinical Medical center of the Samarkand region.

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.

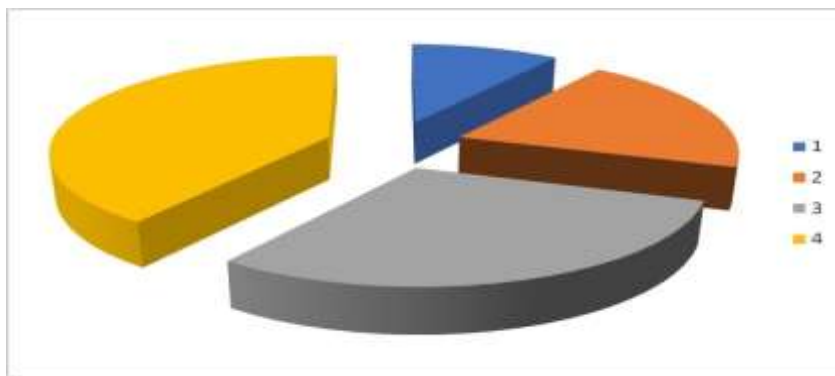


Fig 1. Diagram. Distribution by age.

1. From 3 to 5 years is m is 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%

The statistical processing data before and after treatment with intravenous laser blood irradiation (ILBI) are shown in the following table.

Table No. 1

Indicators	Before treatment	After ILBI	T criterion
IgA	0, 33 ± 0,20	2.67 ± 0.61	1587.48
IgM	0.39 ± 0.33	1.71 ± 0.49	1202.07
IgG	2.64 ± 1.42	13.32 ± 2.13	2118.91

In the main group studying the classes of immunoglobulins, there was a decrease in all indicators of immunoglobulins before the treatment. After the treatment, after 12 months, an increase in the indices of immunoglobulins IgA, IgM, IgG was observed, which indicates that intravenous laser blood irradiation (ILBI) gives high clinical efficacy.

The statistical processing data before and after the local laser therapy treatment of the obtained measurements are shown in the following table.

Table No. 2

P Indicators of	Before treatment	After local laser therapy	T criterion.
IgA	$0,81 \pm 0,72$	0.86 ± 0.74	305.16
IgM	0.82 ± 0.66	0.80 ± 0.62	333.52
IgG	5.95 ± 1.92	5.66 ± 1.99	3599.65

In the control group, a decrease in all immunoglobulin parameters was observed before the treatment, as well as after the use of local laser therapy, it showed that the immunoglobulin values IgA, IgM, IgG did not change significantly, which indicates the low clinical effectiveness of local laser therapy in the treatment of chronic tonsillitis in children.

The statistical processing data before and after ILBI treatment of the obtained measurements are shown in the following table.

Table No. 3

P Indicators of	Before treatment	After treatment	T criterion.
superoxide dismutase	0.81 ± 0.61	2.76 ± 0.28	1429.70
catalase	0.03 14	2.02 ± 0.28	1083.74

In the main group, we observed a decrease in catalase and superoxide dismutase indices before treatment, which is seen in the first table.

After the treatment, 6 months later, an increase in catalase and superoxide dismutase indices was observed, which indicates that ILBI provides high clinical efficacy.

Based on our research, the following conclusions were drawn:

The clinical efficacy of intravenous laser blood irradiation in chronic tonsillitis in children with toxic-allergic forms of 1 and 2 degrees, in contrast to the control group, was revealed.

It is noted that in chronic tonsillitis, the immune status decreases, that is, immunoglobulins IgA, IgM, IgG, as well as a decrease in the antioxidant system, a decrease in the activity of catalase and superoxide dismutase is observed.

The high clinical efficacy of intravenous laser blood irradiation in chronic tonsillitis leads to an improvement in the parameters of the immune system and antioxidant system, eliminating local signs of the disease and contributes to a reduction in bed days.

LITERATURE REVIEW

1. Xushvakova N. ZH, Davronova G.B. Russian otorhinolaryngology No. 1, (62) 2013.
2. Karpishchenko S.A., Lavrenova G.V., Baranskaya S.V. Omsk Bulletin No. 2 (134) 2014.

3. Stanishevsky R.O. Network scientific publication. No. 3 2012.
4. Ovchinnikov A.Yu., Gabedova V.A., Svet A.V., Doletsky A.A. (Effective Pharmacotherapy: Pulmology and Otorhinolaryngology No. 1 2010.
5. Geynits A.V., Moskvin S.V., Achilov A.A. Intravenous Laser Blood Irradiation " Triada Publishing House " 2008.
6. S.S Nabiyeva , A.A Rustamov, M.R Malikov , N.I Ne'matov // Concept Of Medical Information // European Journal of Molecular & Clinical Medicine, 7 (7), 602-609 p, 2020
7. HA Primova, TR Sakiyev and SS Nabiyeva Development of medical information systems // Journal of Physics: Conference Series. 1441 (2020) 012160 IOP Publishing doi: 10.1088 / 1742-6596 / 1441/1/012160 (Scopus) <https://iopscience.iop.org/article/10.1088/1742-6596/1441/1/012160>
8. Primova Holida, Sakiev Temur, Nabieva Sevara Development of medical information systems // *Internentional conference on information Science and communications technologies ICISCT 2019, Applications, Trends, Opportunities. 2019, 4-6 november.*
9. S.S Nabiyeva, A.A Rustamov, M.R Malikov, N.I Ne'matov // Concept Of Medical Information // European Journal of Molecular & Clinical Medicine, 7 (7), 602-609 p, 2020
10. 8. Karshiev A., Nabieva S., Nabiyeva I. Medical information systems. International Scientific Journal Theoretical & Applied Science. SECTION 4. Computer science, computer injineering and automation. Issue: 04 Volume: 72. Published: 30/04/2019. 505-508 p.
11. T. F.Bekmuratov , HAPrimova , BTSoliyeva . The adaptive algorithm of fuzzy synthesis // International scientific and technical journal "Chemical technology. Control and management., No. 5 "and" Journal of Korea multimedia society "South Korea, Seoul - Uzbekistan, -Tashkent. – 2016-pp. 110-114

E-ISSN NO:2349-0721