

# The Use and Effectiveness of Therapeutic Red Echinacea In the Complex Treatment of Chronic Recurrent Aphthous Stomatitis in Patients with Chronic Gastroduodenitis

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**Abstract:** Objective: to increase the effectiveness of treatment of chronic recurrent aphthous stomatitis of the oral mucosa against the background of chronic gastroduodenitis by correcting dysbiotic disorders and enhancing antioxidant protection through pathogenetic therapy.

Methods: General clinical, laboratory, biochemical, functional, instrumental and statistical methods were used in the course of the study.

Results: Clinical studies in patients with chronic recurrent aphthous stomatitis of the oral mucosa against the background of chronic gastroduodenitis have shown: a decrease in the following indicators by 1.24 times, a deterioration in hygiene by 1.92 times, an increase in the Schiller-Pisarev test by 2.06 times, an increase in stimulated salivation by 1.84 times and the absence of stimulated salivation by 2.09 times, a shift in The pH is in the acidic side.

Conclusions: The results of clinical and laboratory studies during operative and long-term follow-up showed that the therapeutic and prophylactic complex developed by us for the treatment of oral mucosal diseases in chronic gastroduodenitis has a long-term bactericidal effect against pathological microbes. The local immune status of the oral cavity was observed to approach the norm.

**Keywords:** Chronic recurrent aphthous stomatitis, dental caries, periodontal diseases, epidemiological study, chronic aphthous stomatitis, oral mucosa.

**Introduction:** it has been proven that in patients with gastroduodenitis, the activity of the intestinal microflora decreases and the activity of intestinal enzymes decreases. As a result of a violation of normomicrobiosis in the body, intestinal dysbiosis occurs, in which the intestinal microflora degrades, which leads to disruption of the normal functioning of the intestinal biocenosis. This substance has anti-inflammatory and antioxidant effects, and also has anti-inflammatory and anti-inflammatory effects on the body, which contributes to the development of cancer. Activation of coagulase, a precursor to dysbiotic bacteria such as staphylococci, hemolytic

streptococci, lactobacilli, corynobacteria, aerobic gram-positive bacteria (pathogenic fungi) and nematode fungi.adventurous and forced to be a normal Florentine shepherd. The presence of pathogenic microflora in the oral cavity leads to aphthous stomatitis (sepsis).

The examination revealed that 30% of patients with chronic dental disease had caries, and 60% of patients with chronic dental disease had recurrent stomatitis. Due to increased sensitivity to the effects of microflora, antibacterial therapy and the irrational use of antifungal and antifungal agents in conditions of increased risk of recurrence of inflammatory lung

diseases, it is possible that this will lead to a deterioration in the well-being of patients.

The methods of diagnosis of stomatitis developed by him, based on the study of cervical pathologies, as well as the pathogenetic mechanisms of the development of such complications, have significantly expanded the horizons of patients. We believe.

A special role in the development of malignant neoplasms is played by exo- and endogenous malignant neoplasms -biological enzymes of substrates, Haus, naphthalene enzymes and their specific reactions of inhibition of ultraviolet rays. "distress"), that is, as a stress agent.

Due to the fact that people with hearing impairments do not have teeth and gums, they may be at risk of developing diseases characterized by increased sensitivity to UV rays. This suggests that the tooth pathology is flagellated, may be chronic, or may be related to the sensory response of the entire organism.

One of the main areas of research in dentistry is the study of pathologies and concomitant diseases of the gums and gums, the study of the regulation of gum homeostasis and the regulation of the regulation of homeostasis in the body. In this regard, periodontal diseases may develop an inferiority complex.

In modern dentistry, there is no single approach to the diagnosis and treatment of aphthous stomatitis, unlike most other diseases, including dental diseases, which are not independent and are not associated with certain physical and social needs.

The etiology of gastroduodenitis in children and adolescents with disabilities includes the following areas of therapy: drug therapy; drug therapy for gastroduodenitis; drug therapy for acute gastroduodenitis; drug therapy for acute gastroduodenitis; drug therapy for acute gastroduodenitis; drug therapy for acute gastroduodenitis; drug therapy for acute gastroduodenitis; therapy for acute gastroduodenitis. and pathogenetics

The aim of the study was to identify increased levels of dysbiotic cholinergic receptors and pathogenetic therapy using antioxidants in patients with gastroesophageal gastroduodenitis.

## METHODS

Materials and methods of taditdacha: we used taditdacha methods to complete the tasks. Clinical features of the development of gastroduodenitis in patients with chronic gastroduodenitis not stimulated by oral fluids, biochemical studies, microbiological studies. To achieve this goal, 118 patients aged 24 to 56 years were examined: 70 of them were men and 48

were women. 118 people worked in the clinic (Table 1). Of these, 34 Nafarians are patients with somatic pathology, 84 Nafarians are patients with gastroduodenitis. The diagnosis of "gastritis and duodenitis", K29.9 with the HCT-10 code was made by gastroenterologists based on a history of gastroduodenitis.

The first (antisocial) survey conducted by People magazine consisted of 46 people (25 men and 21 women) suffering from aphthous stomatitis and rare gastroduodenitis. For the treatment of aphthous stomatitis, anti-aging products are used, that is, products containing antibiotics, antiseptics, antiviral, bactericidal and antiviral drugs, keratoplasty. Journalists have found out that in patients suffering from gastroduodenitis, special pressure algorithms can be used in the treatment of aphthous stomatitis in the anamnesis (see Fig.1). One of the most well-known and scientifically proven theories is the immunological concept of the pathogenesis of this pathology. Depending on the severity of the disease, immunomodulatory therapy is prescribed. One of the methods of immunomodulation is to enhance the immune response in case of bacterial infection with lipopolysaccharides. Bacterial lysosomes include the immune system.

The second (comparative group) - 38 patients (24 men and 14 women) with chronic recurrent aphthous stomatitis of the oral cavity and chronic gastroduodenitis were treated according to generally accepted (traditional therapy) norms. Patients in the main group and comparison group had to repeat the course of treatment after 6 months. The third (control group) - 34 people (21 men and 13 women) - includes individuals without somatic pathology. The examination data and the course of treatment were entered into the personal notebook of the developed patient. The effectiveness of the treatment was assessed by clinical results, biochemical and microbiological indicators after 14 days and 30 days. Long-term results-after 12 months of observation.

Ozone has a number of advantages over other substances as a disinfectant:

\* Ozone is an extremely powerful disinfectant, able to resist 99.9% of pathogenic microorganisms

- Rapid reaction to other antiseptic substances enters
- Ozone molecules have the property of acting up to nano - structures due to their size being 150% smaller than the molecules contained in other liquid antiseptics

The topical application of a generating ozonochlorode solution in the Prozone apparatus with high clinical efficacy significantly reduced the demand for the use of

a number of drugs with side effects, making it possible to completely end subsequent relapses.

Clinical experience accumulated in recent years shows that pathology of the organs and tissues of the oral cavity can only be stopped with the help of treatment measures, but cannot be completely cured. In this regard, it is necessary to develop and widely introduce measures for the Prevention of major dental diseases into practice, to understand the laws of functioning of a healthy organism.

Diseases of the oral mucosa, which often persist with chronic and periodic remissions and relapses, occur against the background of an increased secondary immunodeficiency state of the body. One of the modern and scientifically proven theories is the immunological concept of pathogenesis of this pathology.

For this reason, the priority of SQAS treatment is immunomodulation therapy. One method of immunomodulation is to strengthen the immune system with lipopolysaccharides of bacterial origin. Drugs that store bacterial lysates include Imunal. Imunal is an immunocorrector of biological origin (made from a dwarf exinacea plant), whose immunocorrective effect is manifested in increasing

phagocytic activity, increasing and increasing the amount of secretory immunoglobulins belonging to Class A, increasing and increasing the number of immunocompetent cells responsible for the production of antibodies, slowing the oxidative metabolism of polymorphonuclear leukocytes (Figure 2). The composition of the drug includes 13 strains of the following bacteria: *Str. pyogenes* groupe A, *Str. sanguis*, *St. Louis aureus*, *K. pneumoniae*, *S. pseudodiphtheriticum*, *F. nucleatum* subs, *nucleatum*, *C. albicans*, *Lactobacillus acidophilus*, *L. helveticus*, *L. lactis*, *L. includes* a mixture of *fermentatum* lysates. The composition - due to the multivalent antigen complex - the drug is practically a locally used dry vaccine that allows you to carry out infectious and anti-inflammatory Immunotherapy of diseases of the oral cavity. Imunal is used as a prophylactic agent in complex therapy both in the acute period and in the stage of chronic periodontitis, red flat lishay, herpes lesions, remission of oral dysbacteriosis. The results of the clinical effect obtained from the use of the drug revealed a decrease in pain, swelling, bleeding of pathological areas, significant shrinkage of the peptic ulcer areas and an acceleration of epithelization processes.



**Figure 2. Imunal preparation made from the Scarlet exinacea plant**

Imunal is an immune-stimulating drug made from medicinal plant raw materials. The causative agent of Imunal drops is the flowering Crimson exinacea (*Echinacea purpurea* (L.) Moench) is the juice of a freshly harvested herb of the plant.

The active substances of scarlet exinacea strengthen the body's natural protective forces and act as a nonspecific stimulant of immunity. By increasing the number of leukocytes (granulocytes and macrophages) and activating phagocytosis, they contribute to the destruction of disease-causing microorganisms in the human body.

Research results: the results of the clinical examination are confirmed by biochemical studies. Analysis of the change in indicators 14 days after the use of the

treatment-prophylactic complex in the main group indicates a decrease in elastase activity by 1.81 times ( $p < 0.05$ ) and MDA concentration by 1.56 times. Ozonized water with anti-inflammatory action and "imunal" prevent the accumulation of lipid peroxidation products in the oral cavity.

A significant increase in MDA concentration as an indicator of Lipid peroxidation processes was completely lost in the main group 30 days after the complex of treatment measures. There was a significant decrease in the level of signs of inflammation: the content of the proteolytic enzyme elastase decreased by 2.53 times ( $p < 0.02$ ) and MDA decreased by 2.15 times ( $p < 0.05$ ), respectively, almost reached the norm.

Long-term results after 1 year of observation in the main group show that elastase activity decreased 2.0 times ( $p < 0.02$ ), MDA level decreased 1.87 times ( $p < 0.05$ ), which corresponds to normal values.

After 14 days, a decrease in elastase activity and MDA concentration in the comparison group was recorded 1.17 times, which remained at a very high level. A significant decrease in the level of signs of inflammation was observed after 30 days - elastase 1.94 times and MDA 2.0 times ( $p < 0.05$ ).

In the comparison group, the results of studies after 1 year showed the short-term effect of treatment using the standard method. The Paul indicator did not reach the norm: the MDA level practically did not change - a decrease of 1.12 times and remained significantly higher than the indicators of the main group, the activity of elastase decreased slightly - 1.21 times.

The state of the body's peroxidation processes and antioxidant systems has been more accurately observed with API dynamics before and after treatment. In the main group of observations, 30 days after treatment, the activity of the antioxidant catalase enzyme increased significantly by 3.0 times ( $p < 0.01$ ) and approached normal values as close as possible. Treatment of patients in the comparison group did not have a significant effect on this enzyme, which increased by 1.67 times ( $p < 0.02$ ). The API index, calculated based on MDA and catalase detection, showed a significant growth trend in core group patients - 6.96 times ( $p < 0.001$ ), with slightly increased API index in comparison group patients - by 2.18 times ( $p < 0.001$ ).

1 year after treatment, positive trends were noted in the biochemical study of UN-stimulated oral fluid in patients in the main group. The use of "ozonized water" (rinsing and oral administration) has enabled catalase activity to increase to 2.75 times ( $p < 0.01$ ) and API index to 6.21 times ( $p < 0.001$ ), corresponding to the values of healthy individuals.

The pronounced antioxidant properties of food concentrate help normalize the antioxidant-prooxidizing system and indicate its long-term effect.

The long-term results obtained prove the ability of "ozonized water" to prevent pathological processes caused by excessive lipid peroxide levels in the oral cavity for a long time. After 1 year of follow-up, the rate of dysbiosis in the main group of patients decreased by 3.06 times ( $p < 0.01$ ), indicating the beneficial effects of therapeutic and prophylactic agents on oral microbiocenosis. In patients in the comparison group, dd decreased by 1.28 times compared to the initial condition, as evidenced by a decrease in the protective function of the oral cavity, a state of local immunity of

the oral cavity and a deterioration in the level of protective forces. contributes to the development of antimicrobial enzyme systems, increased UPM growth in the oral cavity and increased microbial growth, and complicates the clinical condition of chronic stomatitis. Recommended "ozonized water" for rinsing and impedes the process of imunal microbial colonization. It can be used to prevent colonization of the oral cavity with candidiasis, as well as to treat the oral cavity to prevent the appearance of bacterial-fungal complications in the oral cavity.

The results of studies have shown that the use of our recommended complex for the treatment and Prevention of candidiasis lesions of the oral cavity suppresses the growth of fungi. Candida prevents recurrence of chronic forms of candidiasis and exacerbation of this disease.

## CONCLUSION

In patients with chronic recurrent aphthous stomatitis of the oral mucosa against the background of chronic gastroduodenitis, clinical studies have shown: the following decrease in indicators was 1.24 times, deterioration of hygienic condition was 1.92 times, Schiller-Pisarev fracture increased by 2.06 times, stimulated salivation by 1.84 times and non - stimulated salivary detachment-by 2.09 times, acid shift of pH. During biochemical testing of stimulated oral fluid in patients with chronic gastroduodenitis, a significant increase in the activity of inflammatory signs was observed: elastase 3.45 times and MDA 1.87 times; reduction of the antioxidant catalase enzyme by 3.5 times; decrease in API index reflects significant changes in antioxidant-prooxidant balance by 6.25 times. The use of the set of therapeutic measures proposed by US normalizes the activity of MDA, elastase and catalase, restores antioxidant protection, contributes to a significant decrease in urease levels and a significant increase in lysozyme secretion, normalizes oral microbiocenosis.

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