

# Comparative Evaluation of the Therapeutic Effect of Individual and Complex Dental Examination in Children with Common Heart Disease

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**Annotation:** A general assessment of the regression of clinical signs and changes in the results of special research methods in children with common heart defects allowed us to determine that the highest therapeutic effect is observed in the complex application of drugs for heart defects and dental diseases. We studied that they cause herpetic stomatitis in the mucous membrane of the oral cavity.

A special flavonoid-based drug substance quercetin powder for herpetic stomatitis was tested in practice. Quercetin exhibits anti-ulcer activity associated with the use of anti-inflammatory drugs and also has radioprotective activity.

**Keywords:** general heart disease, quercetin, traditional treatment, salivation, cytological examination, periodontal disease.

Cardioprotective properties of quercetin are associated with an increase in the energy supply of cardiomyocytes due to its antioxidant effect and improved blood circulation. The regenerative properties of quercetin are shown in accelerated wound healing. Quercetin powders are highly active in the treatment of periodontal diseases, treatment of erosive and ulcerative diseases of the mucous membrane of the oral cavity, and purulent-inflammatory diseases of soft tissues.

During our study of patients with herpetic stomatitis in children with common heart disease, we divided the children into 2 groups (Table 1).

**Table 1. Indications for treatment of herpetic stomatitis in children with common heart disease**

Forms	Children's group			
	1st age group, 4-5 years old (n=25)		2nd age group, 8-9 years old (n=28)	
	Traditional treatment and Quercetin	Traditional treatment	Traditional treatment and Quercetin	Traditional treatment
The relationship between the number of children treated				
Blue form n=34	10	7	10	7
White form n=19	5	3	6	5

Indications of treatment of herpetic stomatitis with quercetin powder in children with common heart disease were confirmed not only by quantitative indicators (90%), but also by the quality of the obtained results, evaluated as "effectiveness in a significant indicator" - 40% of treatment results testify to this. It should be mentioned that the use of quercetin powder had a sufficiently high therapeutic effect (90%), in comparison with the results "effectiveness in excellent indication" - 36%, "effectiveness in significant indication" - 40%, it gave results evaluated as a significant improvement. The high efficiency of the use of Quercetin in patients with herpetic stomatitis was confirmed by the results of observation after a long period (for 1 year). Perhaps this is due to the fact that when the observed patients were examined after 6 months, special research methods were maintained at the post-treatment level, which confirms that the cessation of the inflammatory-destructive process is expressed and stable in this group of patients.

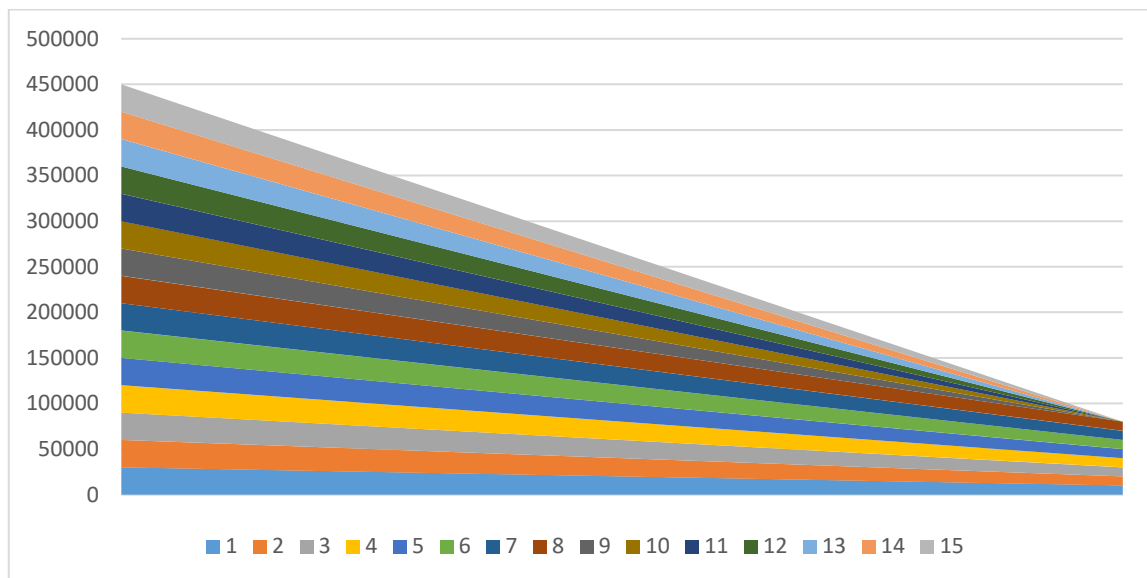
Herpetic stomatitis in children with a common heart defect, according to the data, when using the traditional method of treatment, the obtained clinical results were maintained after 6 months in 80% of patients, and for 3 months in 20% of patients, but the results of special research methods differed reliably, but did not reach the initial level. . The result of treatment with quercetin drug was maintained in 100% of patients after 1 year.

Thus, herpetic stomatitis in children with common heart disease is considered to be highly effective in the use of quercetin drug, and it is pathogenetically based and highly effective in the treatment and prevention of the disease, so it can be recommended for widespread use in clinical practice.

### **Treatment of herpetic stomatitis with quercetin powder in children with congenital heart disease economic efficiency**

The cost-effectiveness of selected drugs based on 7-day treatment of herpetic stomatitis in children with a common heart defect confirmed the following:

The economic effectiveness of this treatment principle recommended for children with common heart defects was calculated based on the incidence of heart disease among young children and the development of the mechanism of providing dental services.



### **Treatment of herpetic stomatitis with quercetin powder in children with congenital heart disease**

**Economic efficiency** In Bukhara Multidisciplinary Children's Medical Center, among patients with dental diseases in children with common heart defects, the rate of encountering patients with herpetic stomatitis, their specific clinic, and the development of treatment measures using the new modern quercetin drug were used for each patient during the dental examination. showed the savings of up to 385,000 soums. This saved money, reduced the number of trips and ensured the health of young children. We reduced the time to 7 days.

Based on the data obtained as a result of the research, we can come to the following conclusion. Treatment with the use of quercetin is an effective anti-inflammatory therapy for the treatment of inflammatory diseases of the oral mucosa, which has a complex effect on the pathogenetic relations of inflammation. It is convenient to use. At the same time, the lack of significant differences in these treatment conditions, as well as the cost-effectiveness of using quercetin, make it the treatment of choice in the treatment of this pathology.

Inflammatory diseases of the mucous membrane of the oral cavity are one of the most common pathological processes in children with a common heart defect, and they are the first protective reaction of the body against the influence of a harmful agent. The progression of inflammatory diseases of the oral mucosa is subject to generally recognized laws, but it is also distinguished by a number of features that depend on the anatomical and physiological characteristics of the structure of

these tissues. The most common inflammatory diseases of the mucous membrane of the oral cavity are stomatitis of various etiologies, gingivitis, periodontitis, etc. It is worth noting that about 90% of patients with this pathology seek medical help at the stage of the chronic process, such situations complicate the treatment process and the choice of drugs.

It is known that the course and outcome of the inflammatory process depends on the body's reactivity and the duration of exposure to the pathogenic stimulus. The results of the studies show that the frequent increase of this pathology, as well as the frequent early chronicity of the inflammatory process, are associated not only with well-known local factors, but also with the disruption of the functioning of various systems of the body. This fact confirms that the problem of inflammation of the mucous membrane of the oral cavity is relevant not only for dentists, but also for immunologists, gastroenterologists, endocrinologists and other specialists.

Different etiological factors of inflammation of the mucous membrane of the oral cavity in children with common heart disease determine the formation of a specific inflammatory pathology. Thus, with the development of the disease, infectious-allergic, viral, autoimmune and other theories are considered. The connection between the development of mono- and polyvalent bacterial allergy to *Proteus*, L-forms of staphylococci, streptococci and *Escherichia coli* in inflammation of the mucous membrane of the oral cavity in children with a common heart defect has been experimentally proven. Many patients with a history of this pathology are diagnosed with autoimmune diseases (ulcerative colitis, Crohn's disease, Behcet's disease, etc.), functional disorders of the digestive system (gastritis, dysbacteriosis, constipation, diarrhea, biliary dyskinesia, etc.), endocrine diseases, systemic including breakdowns.

Another common inflammatory disease of the oral mucosa is acute and chronic gingivitis, which is usually caused by the accumulation of bacterial plaque on the teeth. Its development can be caused not only by improper orthodontic treatment, congenital malocclusion, but also by violation of prosthetics rules. These reasons, together with improper care of teeth or prostheses, lead to a violation of the biocenosis of the oral cavity. Here, the direct triggers are *St. Oralis*, *B. Gingivalis* and others. Provocative factors for the development of gingivitis are bad habits, immunosuppressive conditions, malnutrition, diabetes, vitamin C deficiency, and somatic diseases. Nevertheless, local factors are the main trigger for the development of various forms of gingivitis: the accumulation of plaque and the formation of supra- and subgingival deposits.

In the existing literature, we did not find statistical data reflecting the frequency and number of inflammatory diseases of the oral mucosa, which occur as an independent disease or as a manifestation of a certain somatic pathology. For a long time, experts believe that the basis of many diseases of the oral mucosa is the effect of many exogenous and endogenous factors.

Despite the above, at present, local therapy remains the mainstay in the treatment of inflammatory pathologies of the oral mucosa, which includes the creation of adequate hygienic conditions, the elimination of possible exogenous agents, antiseptic and anti-inflammatory measures, and restoration. We must ensure normal microcirculation at the site of inflammation. A good result of treatment is a long rehabilitation period between the complete elimination of acute inflammation and or the exacerbation of the chronic form of the disease. *Cholisal*, *Solcoseryl* and *Metragil-Dent* are the most widely used and well-proven drugs for the treatment of inflammation of the oral mucosa in children with a common heart defect. The complex use of quercetin gives a very high efficiency.

Based not only on some literature data, but also on the results of existing clinical observations on the specific anti-inflammatory effect of the drug Quercetin, the purpose of our work was to study the course aimed at the treatment of inflammation of the oral mucosa in children with common heart disease.

To achieve the goals and objectives, we observed all patients with congenital and acquired forms of heart defects. We divided children with common heart defects into 3 groups: congenital, acquired and

control groups. Before starting the treatment, we studied the hygiene and condition of the oral cavity organs as one of the main factors in the development of inflammatory diseases.

Due to the presence of painful sensations, hygiene was difficult for many patients and they were prescribed general hygiene measures. The obtained data confirm that, although hygiene compliance improved after all interventions, it remained at a "satisfactory" level in the majority of patients in both groups. This shows that the use of toothbrushes, appropriate pastes and antiseptics is not enough to achieve the desired result in this group of patients. For this, after the inflammatory process subsides and the symptoms of pain subside, professional hygiene is required.

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