



DISCUSSIONS ON THE INFLUENCE OF THE DENTAL TREATMENT-PROPHYLAXIS COMPLEX ON THE CONDITION OF THE ORAL CAVITY IN CHILDREN WITH TRAUMATIC STOMATITIS

Sharipova Gulnikhol Idievna

Bukhara State Medical Institute

<https://doi.org/10.5281/zenodo.7952179>

Summary: Maintaining human health, physical and professional activity is an important task of regenerative medicine (Razumov A.N., 2000-2005; Bobrovnishshy I.P., 2001,2005; Ponomarenko V.A., 1999; Prokhorchukov A.A., 2005 , 2006 et al.). For this reason, in its development, in socially significant diseases, especially in inflammatory and dystrophic genesis, in particular, with inflammatory-destructive damage events in the mucous membrane of the oral cavity, which are characterized by recurrence, in dental diseases such as traumatic stomatitis, primary prevention and activation of the body's reserve and adaptation capabilities to prevent recurrences development of drug-free technologies is a promising direction (Khamidulina S.A., 1995; Leus G.A., Goreklyad A.A., Chudokov I.O., 1998; Banchenko G.V., 2000; Borovsky E.V. , 2001). Despite the emergence of modern anesthetic, anti-inflammatory, antimicrobial and keratoplasty drugs for the treatment of this disease, its increase is noted, and today it reaches 28-65% among dental pathologies (Petrova L.V.. 2002; Antoon I.W., Miller R.L., 1996, Carbone M. et al., 1999; Urbaniak W., Lewkowicz P., 2000).

Keywords: MIL-therapy, child, oral cavity, traumatic stomatitis.

The development of effective methods of treatment and prevention of this disease represents an important medical and social problem, because the presence of expressive pain syndrome and erosive-ulcer elements (trauma) in the oral cavity disrupts full nutrition and often reduces the quality of life of patients, their professional and social activities (Banchsnko G.V., 2000; Borovsky E.V.. 2001).

The relevance of the above problem is that the central place in the modern treatment tactics of traumatic stomatitis is the long-term use of antibacterial drugs, which is often confirmed by the development of dysbacteriosis in the oral cavity, as well as a significant decrease in unspecialized resistance and the development of immune instability, which explains the insufficient therapeutic effect in this category of patients. (Leonova E.V., 1995; Maksyutova E.P., 1996; Tsarev V.N., Romanov A.E., Lopyrev V.A. et al., 1996; Spitsina v.i., 1999; Boulingues S. , 2000, Wray D., Rees S.R., Gibson J., 2000.).

In the treatment of dental diseases, physiotherapy methods with anti-inflammatory, regenerating and immune-modulating effects, in particular laser therapy, are a self-explanatory method (Kalinina L.A.L994; Khomchenko S.F.. Sokolovskaya EL,1994; Ushakov A.A., 1996; Bezverkhov Yu.N., 2002; Illarionov V.E., 2003, 2005, etc.).

In modern physiotherapy, the development of methods combined (simultaneous use) or close to combined (almost no time interval) with various physical factors, as well as drugs is a promising direction (Prikuls V.F., Gerasimenko M.10..2000).

In this methodological approach, the increase in efficiency is related to the generalization or potentiation of the physiological effects of the physical factors used (Komarova L.A., Egorova G.I., 1994).

In such an approach, the method of magnetic-infrared-laser exposure, which has proven itself well in clinical practice, is of interest (Prokhorchukov A.A., Jizhtina N.A., Alyabev Yu.S., Dedelyan S.A. et al. 2006).

Taking into account the above, it became interesting to study the effects of magnetic laser therapy in order to increase the therapeutic efficiency and prevent the development of disease recurrences.

All this showed the appropriateness of conducting this research and clarified its tasks.

The purpose of the study was to determine the scientific justification and feasibility of sequential use of MIL therapy for the prevention and treatment of traumatic stomatitis.

The following tasks were solved in the research work: the specifics of the effect of MIL therapy on local inflammations, the regression data of clinical symptoms in patients with traumatic stomatitis and the results of cytological research were determined; the influence of MIL therapy on the composition of microelements and recovery of metabolic instability in patients with traumatic stomatitis was studied comparatively; The effect of the use of MIL therapy on the state of local immune protection in the oral cavity of patients with traumatic stomatitis was evaluated; The effectiveness of the use of MIL therapy in the prevention and treatment of patients with chronic recurrent traumatic stomatitis was comparatively evaluated based on the results obtained in the immediate and long term.

To fulfill the tasks set before us, we conducted research on 141 patients with traumatic stomatitis, their average age was 1 ± 5 years. In accordance with the objectives of the study, all patients were divided into 2 groups according to their clinical and functional aspects: Group I (main) - 76 patients who were treated with MIL therapy on the mucous membrane of the oral cavity; Group II (additional) - 65 patients, in which the area of the oral mucosa was affected by traditional treatment.

In addition to the general clinical dental examination, special research methods were carried out in all patients: cytological study of saliva by counting the amount of leukocytes and epithelial cells, which are considered the main markers of inflammation: cytological study of traces taken from damaged areas of the gum mucosa was carried out to determine the degree of epithelial cells, according to the results of which the cells were the index of differentiation was calculated (HDI); assessment of enzyme balance was carried out photometrically in an alkaline medium by alanine aminotransferases - ALT, aspartate aminotransferases - AST and alkaline phosphatase activity (Bessy et al., 1946). Salivary α -amylase activity was determined according to J. Fischer, J. Tovarek (1975). All biochemical studies used a standard reagent kit from CHSFSR, Laxema; total calcium content T. M. Vishnevitskaya and T. I. According to the methods of Lyashevskaya (1976), inorganic phosphorus was determined by the recovery of phosphorous-tungstic acid (P. A. Rozenberg, N. K. Byalko, 1969); the state of local immunity was assessed by the amount of sIgA in saliva (by the method of Mancini G. S. (1965)).

Various subjective and objective clinical signs of traumatic stomatitis were found in patients examined at baseline.

Among the complaints, pain in the damaged areas of the mucous membrane took the central place, which increased especially when taking spicy and hot food, during speech. In

addition, patients were often bothered by a feeling of bitterness in the mouth (92.5%) and increased salivation (93.3%).

The above-mentioned subjective signs were confirmed by the objective data found in the dental examination. First of all, it was an erosive-ulcerative injury of the mucous membrane of the oral cavity in the form of trauma, which showed yellow-white fibrinous circular or oval-shaped ulcers with a smooth border, in most cases, hyperemia (96.7%), edema in the area of mucosal damage. - 87.5%, the presence of scars - 47.5%, and they often flared up in patients. In addition to local damage to the mucous membrane of the oral cavity, 43.3% of patients had enlarged and painful regional lymph nodes, and 36.6% of cases had an increase in body temperature to subfebrile values (37.4 ± 9.3 oC), a general reaction of the body. All this led to a decrease in the quality of life of patients (70% of cases).

In the application of MIL therapy, the mucosa of the oral cavity (after 5 treatments) called for a decrease in clinical signs.

This was followed by the cessation of subjective clinical signs of local inflammation in an average of 75% of cases, the disappearance of pain syndrome (80%), the burning sensation in the oral cavity in 90% of patients, and the reduction of salivation in 65% of cases. This led to a disordered diet in these patients.

Similar but less pronounced changes were observed when MIL therapy was used, in the form of a reduction in pain syndrome in 65% and 60%, respectively, in OShQ burning sensation in 70% and 65%, and in salivation in 55% and 50% cases, respectively. .

The improvement of the subjective condition in the observed patients was associated with the cessation of the main signs of local inflammation in the mucous membrane, which was objectively determined in the dental examination. The greatest amount of healing of erosions and wounds on the oral mucosa was observed in the main group patients, which was shown by complete epithelization in 55% of patients and partial epithelization in 45% of patients. This was followed by the disappearance of hyperemia and edema phenomena in the mucous membrane of the oral cavity in 50% and 65% of patients, respectively, and their significant reduction in the remaining patients.

In additional groups, the dynamics of erosive-destructive changes in the mucous membrane of the oral cavity was expressed to a lesser extent. Thus, it was observed in 30% and 35% of patients, respectively, and in the remaining patients, various stages of epithelization were noted. Reduction of hyperemia and edema was also noted in an average of 45% of patients in the supplement group. After 5 procedures in the main group, local lymphadenitis and signs of general inflammation in the form of subfebrile symptoms were not detected in any patient. In additional groups, they were preserved in 25% and 40% of cases, respectively.

After the course of treatment, the superiority of the complex effect of the use of MIL therapy on monitoring the main clinical signs became more evident.

This was expressed in the complete disappearance of pain syndrome in 95% of observed patients, which allowed them to return to their usual diet and continue their life activities in full. In addition, after the course of treatment, neither the feeling of bitterness nor the high amount of salivation was observed in these patients.

In the additional group, such changes were noted in 80% and 65% of cases, respectively.

During the dental examination, it was found that all erosive-ulcer lesions on the mucous membrane of the oral cavity were fully epithelized in most patients of the main group, which determined the significant regression of clinical symptoms in the patients of this group.

Also, the general signs of inflammation completely disappeared - the body temperature normalized, and no signs of lymphadenitis were detected in the jaw nodes in any case.

A small number of patients in the additional group (10%) and after the course of treatment, acutely expressed clinical signs of the disease in the form of aphthae in the stage of premature epithelization (without fibrosis) with hyperemia and edema around them remained, although they were less pronounced than in the initial case, was observed with increased sensation and salivation.

Thus, a comparative analysis conducted to determine the effect of different treatment methods on the clinical rate in traumatic stomatitis showed the superiority of MIL therapy, not only in the rapid formation of the regeneration effect (rapid healing of erosive-wound injuries on the mucous membrane of the oral cavity), but also with anti-inflammatory and analgesic effects. appeared.

The results of cytological research in saliva are important for evaluating the inflammatory-destructive process in the mucous membrane of the oral cavity. Saliva is the main component of the oral fluid, which ensures the normal functioning of the mucous membrane of the oral cavity and responds to various pathological processes that develop in the oral cavity and even in other systems of the body (Barer G.M., Kocherzhinsky V.V., Khaligova E.S., 1987) .

For this reason, we comparatively studied the main markers of inflammation (epithelial cells and leukocytes) in the saliva of the examined patients under the influence of the complex use of MIL therapy.

In the initial state, a 3.8-fold increase in the amount of epithelial cells in saliva was noted, which indicates the presence of moderate activity of the inflammatory-destructive process.

After 5 treatments of the treatment complex, which includes the use of MIL therapy, a significant decrease of epithelial cells in saliva was observed (2.9 times), but despite this, their number was still reliably different from the norm.

In the additional group, although there was a reliable reduction of epithelial cells in saliva (2.4 and 3.1 times, respectively), their level was significantly higher (1.9 and 2.4 times, respectively) than in the main group of patients during this period, and moreover, it was 2.4 and 3.1 times higher than the standard values.

After the course of treatment, the positive changes in the cytological rate were more pronounced in the saliva of the examined patients, and the normalization of the epithelial cell content in the saliva of the main group of patients was characterized by the obtained results, which were maintained throughout the observation period (up to 6 months).

In the additional group, positive dynamics also began to be expressed more, but the number of epithelial cells in saliva was still 1.8 times higher than normal values, unstable, and after 6 months it reliably increased compared to the norm, but did not reach the initial level.

It is known that local leukocytosis is also a marker of local inflammatory activity, therefore, we also studied the level of its expression in saliva in cytological studies of the examined patients.

Moderate leukocytosis was detected in the saliva of the examined patients, which was 5.3 times more than the normal values.

A comparative analysis of the effect of various treatment methods on the number of leukocytes in the saliva of patients with traumatic stomatitis showed a rapid and significant cessation of the local inflammatory process as a result of the use of MIL therapy, which was expressed in a 2.5-fold decrease in the number of leukocytes compared to the initial level after 5 treatments, but their number was still below the normal values. 2 times higher.

In the additional group, despite the reliable dynamics of the studied indicators, their value was 1.6 times higher than the indicators in the main group.

After the course of treatment, a positive dynamics was observed in the form of a further decrease in the number of leukocytes in all groups, as in the case of the epithelial cells studied, but only in the main group they reached the normal value and were maintained throughout the observation period (up to 6 months).

In the supplement group and after the course of treatment, their value was 2.1 times higher than the norm, and 2.4 times higher than the values of the main group, while the results were not stable, after 1 month their reliable increase was observed, after 6 months they were 2.8 times higher than the norm value happened, but they did not reach the initial level.

Taking into account changes in the quantity and composition of epithelial cells in the inflammatory-destructive process in the area of damage, we studied the maturation process of epithelial cells in the traces taken from the damaged areas in the mucous membrane of the oral cavity of the examined patients.

At the beginning, in the traces taken from the gingival mucosa in the area of the pathological process, a significant slowing down of epithelial cells was observed, which was expressed by a 75% increase in the amount of immature cells (stages III, IV and V of maturation), due to a decrease in the amount of epithelial cells in stage 6 of maturation occurred, and the cells were identified only in 25% of cases.

References:

- 1.Sharipova G. I. The effect of dental treatment-profilactics on the condition of oral cavity organs in children with traumatic stomatitis // Тиббиётда янги кун. Бухара. – 2022. – № 5 (43). – С. 103-106. (14.00.00; № 22)
- 2.Шарипова Г. И. Эрта ёшдаги болалар травматик стоматитлар билан оғриганда оғиз бўшлиғи микрофлорасининг иммуно-микробиологик жиҳатлари // Биология ва тиббиёт муаммолари. Самарқанд. – 2022. – № 2 (136). – С. 296-298. (14.00.00; № 19)
- 3.Sharipova G. I. Light and laser radiation in medicine // European journal of modern medicine and practice. Belgium. – 2022. – Т. 2. – №. 1. – С. 36-41. (Impact factor: 5.71)
- 4.Sharipova G. I. The use of flavonoid based medications in the treatment of inflammatory diseases in oral mucus //Asian journal of Pharmaceutical and biological research. India. – 2022. – Т. 11. – №. 1. – С. 2231-2218. (Impact factor: 4.465)
- 5.Sharipova G. I.Changes in the content of trace elements in the saliva of patients in the treatment of patients with traumatic stomatitis with flavonoid-based drugs // Journal of research in health science. Iran. – 2022. – Т. 6. – № 1-2. – С. 23-26. (Scopus)

- 6.Sharipova G. I., Nuraliyev N. A. General description and research methods used in children with traumatic stomatitis // European Journal of Research. Austria. – 2022.– T. 7. – № 1. – С. 51-56. (Impact factor: 4.981)
- 7.Sharipova G. I. Paediatric Lazer Dentistry //International Journal of Culture and Modernity. Spain. – 2022. – T. 12. – С. 33-37.
- 8.Sharipova G. I. The effectiveness of the use of magnetic-infrared-laser therapy in traumatic injuries of oral tissues in preschool children //Journal of Academic Leadership. India. – 2022. – T. 21. – №. 1.
- 9.Sharipova G. I. Discussion of results of personal studies in the use of mil therapy in the treatment of trauma to the oral mucosa //European journal of molecular medicine. Germany. – 2022. – T. 2. – №. 2. – С. 17-21.
- 10.Sharipova G. I. Peculiarities of the morphological structure of the oral mucosa in young children // International journal of conference series on education and social sciences. (Online) May. Turkey. – 2022. – С. 36-37.
- 11.Sharipova G. I. Dynamics of cytological changes in the state of periodontal tissue under the influence of dental treatment prophylactic complex in young children with traumatic stomatitis // Multidiscipline Proceedings of digital fashion conference April. Korea. – 2022. – С. 103-105.
- 12.Шарипова Г.И. Травматик стоматит билан оғриган болаларда стоматологик касалликларни комплекс стоматологик даволаш ва уларнинг олдини олишни баҳолаш // Ўзбекистонда миллий тадқиқотлар: даврий анжуманлар: 18-қисм. Тошкент. –2021. – С. 14-15.
- 13.Шарипова Г. И., Казакова Н. Н. Травматик стоматитга эга беморларни флавоноид асосидаги дори воситалари билан даволашда оғиз суюқлиги таркибидаги ўзгаришлар //Integration of science, education and practice. Scientific-methodical journal. Тошкент. – 2022. – Т. 3. – №. 6. – С. 134-142.
- 14.Шарипова Г.И. Мактабгача ёшдаги болаларда оғиз бўшлиғи юмшоқ тўқималарининг шикастланишларини комплекс даволашда магнит-инфрақизил-лазер терапиясини қўллаш самарадорлиги // Услуги тавсиянома. Бухоро. – 2022. – 21 б.