

The Effect of Complex Treatment on Clinical and Biochemical Parameters in Patients with Reactive Dystrophic Diseases of the Salivary Glands

*Jumaev L. R, Narzullaev N. U
Bukhara State Medical Institute*

ABSTRACT

Timely and correct diagnosis of diseases of the salivary glands remains an urgent problem of modern medicine. It was found that in more than 70% of cases there is a discrepancy in diagnoses when the patient enters the next stage of treatment (4,8).

KEYWORDS: *Biochemical Parameters, Dystrophic Diseases , Salivary Glands.*

Among dental pathology, diseases of the salivary glands, according to a number of authors, range from 3 to 7%. Of these: salivary stone disease accounts for up to 60%, various forms of chronic sialadenitis and sialadenosis — up to 30%, congenital anomalies – up to 1% and tumors – up to 5%(3.6).

The current situation is explained not only by the increase in the total number of patients, the lack of uniform algorithms, unified criteria and effective diagnostic methods, but also by the fact that various diseases of the salivary glands have similar clinical symptoms, and differential diagnosis requires extensive clinical experience and the use of special equipment (1.5).

The structure of the incidence of various sialadenitis demonstrates the overwhelming majority (85-96%) of lesions of the parotid salivary glands by a reactive-dystrophic process. At the same time, the anatomical and functional identity of the large salivary glands allows us to judge the similarity of pathological changes occurring in them and project the results of research on the group of reactive dystrophic diseases of the large salivary glands as a whole (2,7).

The purpose of the study: to study the effect of complex treatment on clinical and biochemical parameters in patients with reactive dystrophic diseases of the salivary glands.

Materials and methods of research:

All patients of the complex therapy group simultaneously with the treatment of general somatic pathology were treated with generally accepted therapeutic and preventive measures aimed at increasing salivation and reducing the swelling of the salivary glands. Patients were prescribed desensitizing (suprastin, diphenhydramine) and general restorative treatment. Along with general treatment, locally after instillation of the excretory duct of the salivary glands with an antiseptic (deccasan solution), 2 ml of autoplasm was injected intravenously, which was removed from the salivary gland by massage along its excretory ducts. After a 3-4-fold repetition of this procedure, 2 ml of autoplasm was re-injected into the gland and without massaging the gland, applications were applied to its area with a 20%-30% solution of dimethyl sulfoxide (DMSO) in the form of compresses. Dimexide is able to transport medicinal substances through the skin, enhancing their effect, inhibits the proliferation of fibroblasts, has a cytotoxic effect on pathologically altered lymphocytes, improves microcirculation in tissues, has analgesic, anti-inflammatory and bactericidal effects. Then 0.4 ml of kleksan was injected subcutaneously into the gland area. In addition to drug therapy, physical therapy exercises and therapeutic massage were prescribed, which were carried out daily for 10-14 days. For the enzyme therapy of the main group of patients, the drug Wobenzym was

<https://cejsr.academicjournal.io>

used, containing enzymes of plant (papain 60 mg, bromecaine 45 mg) and animal (trypsin 24 mg, chymotrypsin 1 mg, pancreatin 100 mg) origin and 50 mg of rutin. Patients took 3 tablets of the drug 1 time a day 40 minutes before meals for 10 days. The purpose of such a large amount of Wobenzyme is explained by its low absorption in the intestine.

As an antioxidant, Vitamin E (alpha-tocopheryl acetate) 400 mg 2 capsules per day for 10 days was prescribed to patients to participate in the processes of cell proliferation, tissue metabolism, and prevention of erythrocyte hemolysis. Patients who associated the appearance of pathological symptoms with the presence of stress were prescribed three times glycine intake under the tongue during the day. Patients suffering from sialosis, physiotherapy procedures were contraindicated due to the presence of concomitant comorbid pathology.

Results and their discussions:

Almost all patients of the main group showed significant improvement: malaise, weakness, headache disappeared, appetite, chewing function recovered, body temperature normalized. The average time of normalization of the general condition and body temperature was 3.1 ± 0.3 days.

During palpatory examination of patients in the area of reactive-dystrophic lesions of the salivary gland in incoming patients, a painful, dense infiltration was determined, without clear boundaries. In the course of treatment in patients in the comparison group, infiltrate in the salivary gland area with a reactive-dystrophic process disappeared after 8.0 ± 0.5 days.

After complex therapy in patients with sialoses, a decrease and restriction of the hyperemia zone of the skin in the salivary gland affected by reactive dystrophic disease was observed the next day, while the hyperemia completely disappeared by 5.10 days of treatment. In patients receiving traditional treatment, mucosal hyperemia passed by 5.50 days of treatment.

A decrease in the secretory function of the salivary gland contributes to the progression of the dystrophic process in the gland itself and the occurrence of complications. The analysis of sialometric indicators showed that after treatment there was an increase in salivation. The secretory function of the glands involved in the dystrophic process was restored after treatment and did not significantly differ from the function of the unaffected glands by 5.90 ± 0.14 days with traditional therapy and by 5.14 ± 0.11 days with complex treatment.

Also, upon admission, the observed patients had a violation of the function of the affected salivary gland in the form of a lack of saliva secretion or turbid saliva with an admixture of pus. After traditional treatment in patients in the comparison group ($n=77$), the function of the damaged salivary gland was normalized and saliva without impurities and pus was released on 7.09 ± 0.17 days, whereas after complex therapy in the main group of patients ($n=85$), saliva without impurities and pus was achieved on 3.52 ± 0.10 days, that is, twice as fast. At the same time, saliva viscosity was restored to normal values by 8.27 ± 0.21 and 8.09 ± 0.11 days, respectively.

Table 1 Restoration of the excretory function of the salivary gland in patients receiving traditional and complex treatment (M±m)

Research groups	Excretory functions of the salivary gland		
	Recovery time of salivation rate (day)	Terms of saliva viscosity recovery (day)	Terms of absence of impurities from saliva (day)
Traditional treatment, n=77	5,90±0,14	8,27±0,21	7,09±0,17
Complex treatment, n=85	5,14±0,11*	8,09±0,11	3,52±0,10*

Note: * - the significance of differences in relation to traditional treatment was noted (* - $P < 0.001$; ** - $P < 0.01$; *** - $P < 0.05$).

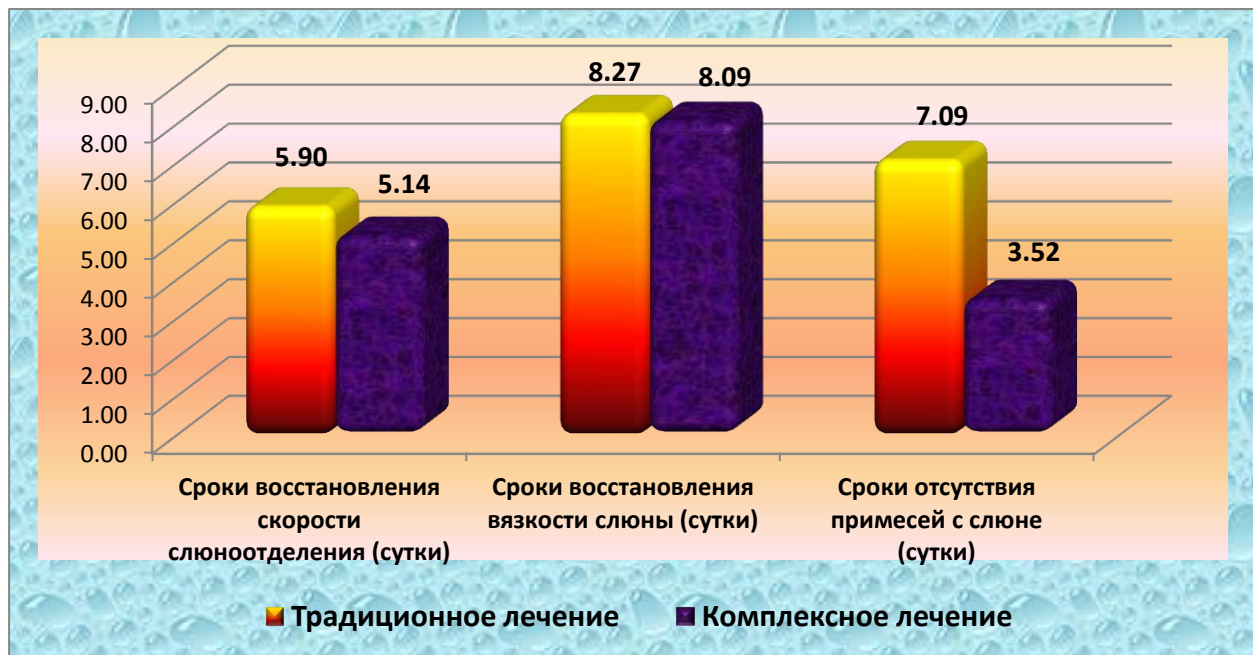


Fig. 1. Restoration of the excretory function of the salivary gland in patients receiving traditional and complex treatment.

In all patients in the study groups, upon admission and daily during the treatment, we measured the rate of salivation by spitting into a test tube. Before treatment, the rate of salivation in patients was 0.09 ± 0.01 ml/min. On the third day of the complex and traditional treatment, this indicator was 0.20 ± 0.01 ml/min and 0.17 ± 0.01 ml/min, respectively. As can be seen, in the process of traditional treatment, the increase in the rate of salivation occurs slightly and the rate of salivation was less than normal by 0.24 ± 0.01 ml/min.

One of the available signs of dystrophic diseases and reactivity of the body are changes in various blood parameters. When studying these indicators in the observed patients at admission and after the course of traditional antibacterial therapy, the following was revealed. Upon admission, hemogram changes characteristic of reactive-dystrophic processes were revealed. ESR decreased from 34.2 ± 2.1 mm/hour to 21.4 ± 1.2 mm/hour in patients with RDZ. 10 days after the traditional treatment, the ESR in patients was 17.4 ± 1.5 mm/hour.

As is known, neutrophils appear first in the focus of reactive-dystrophic processes, and the body reacts to pathology by increasing their content in the blood, reducing the number of lymphocytes responsible for immunological protection. Therefore, by the ratio of the number of lymphocytes and neutrophils in the blood leukoformula in dynamics, it is possible to judge the effectiveness of the treatment.

After appropriate treatment and relief of the reactive-dystrophic process, patients were discharged from the hospital. At the same time, patients with RDZ SJ were treated for an average of 11 ± 1.0 days.

In the discharge epicrisis, patients suffering from reactive dystrophic diseases of the salivary glands were recommended periodic sanitation of the oral cavity, rinsing the oral cavity with antiseptic solutions and herbal decoctions, performing dental prosthetics, taking multivitamins and observation by a dental surgeon at the place of residence.

The analysis of the clinical symptoms of sialoses allowed us to develop a method for assessing the severity of the clinic of RDZ SJ, as well as a methodology for evaluating the effectiveness of therapeutic and preventive measures.

<https://cejsr.academicjournal.io>

During and after the course of treatment, patients with reactive dystrophic pathology of the salivary glands noted an improvement in general well-being, normalization of high blood pressure, improved sleep, general calming effect, increased mood. On the part of CHLO, a decrease in soft tissue edema around the LV, the disappearance of discomfort, increased salivation was revealed.

Frequency of occurrence of the most characteristic complaints in patients with reactive dystrophic The pathology and development of salivary glands in the dynamics of treatment is presented.

As can be seen from Table 2, swelling in the LV area: was constant before treatment in 49 (63.64±5.48%), after traditional treatment was observed in 20 (25.64±4.94%) patients, and with complex therapy before treatment was in 56 (65.88 ± 5.14%), after complex treatment in 6 (7.14±2.81%) of patients. Periodic: with traditional treatment - before treatment in 28 (36.36±5.48%), after treatment in 9 (11.54±3.62%), (Wilcoxon sign rank criterion, $Z = -6.385$; $p = 0.000$), and with complex treatment - before treatment in 29 (34.12±5.14%), after treatment only in 2 (2.38±1.66%) patients, (Wilcoxon sign rank criterion, $Z = -7.779$; $p = 0,000$)).

Pain in the LV area: it was pronounced before traditional treatment in 44 (57.14±5.64%), after treatment it was observed in 12 (15.38±4.09%) patients, and with complex therapy before treatment it was in 61 (71.76±4.88%), after complex treatment in 5 (5.95±2.58%) patients. Unexpressed: with traditional treatment - before it in 33 (42.86±5.64%), after treatment in 3 (3.85±2.18%) patients, (Wilcoxon sign rank criterion, $Z = -7.195$; $p = 0.000$), and with complex (before treatment in 24 (28.24±4.88%), after treatment only in 1 (1.19±1.18%), (Wilcoxon sign rank criterion, $Z = -7.925$; $p = 0.000$)).

Dry mouth: it was constant before treatment in 32 (41.56±5.62%), after traditional treatment it was observed in 23 (29.49±5.16%) patients, and during complex therapy before treatment it was also in 32 (37.65±5.26%), after complex treatment in 26 (30.95±5.04%) patients. Periodic: with traditional treatment - before treatment in 45 (58.44±5.62%), after treatment in 10 (12.82±3.79%), (Wilcoxon sign rank criterion, $Z = -6.171$; $p = 0.000$), and with complex (before treatment in 53 (62.35±5.26%), after treatment only in 1 (1.19±1.18%) patient, (Wilcoxon sign rank criterion, $Z = -7.280$; $p = 0.000$)).

The analysis of the severity of local manifestations of reactive dystrophic pathology of the salivary glands, in the dynamics of the treatment, showed that positive dynamics was observed in all groups of patients. So, in patients receiving complex treatment, the swelling practically disappeared.

During palpation and massage of the affected gland, a secret was released from the mouth of the duct in patients, which was evaluated qualitatively. If before the therapy, qualitatively unchanged saliva was found in 15.3% of patients, then in the remaining patients with reactive dystrophic pathology of the salivary glands, it was a thick, cloudy liquid with an admixture of mucous lumps and floccular inclusions.

After traditional treatment with LV palpation, it was painless and mild in 37 (57%) patients, and at the same time, after the use of enzyme therapy in combination with traditional treatment in 90% of patients with LV, it had a soft consistency and became painless.

Thus, when using autogenic platelet autoplasm, Wobenzyme, vitamin therapy, exercise therapy and therapeutic massage in the arsenal of therapy of sialoses, there was a decrease in the frequency of manifestations of local and general symptoms of the disease, restoration of the secretory function of the pancreas, improvement of the hygienic condition of the oral cavity, which indicates the expediency of the complex therapy used.

<https://cejsr.academicjournal.io>

REFERENCES:

1. Жумаев Л.Р., Иноятв А.Ш. *Комплексное лечение реактивно - дистрофических заболеваний слюнных желез*. Методические рекомендации. Бухара. Издательство Дурдона. 2022.-С.23.
2. Золотухин С.Ю., Епифанов С.А. Комплексное лечение больных сиалолитиазом. Вестник Национального медико-хирургического Центра им. Н.И. Пирогова. 2020, т. 15, № 3, часть 2. -Стр. 136-142.
3. Косюга С.Ю., Ботова Д.И. Оценка уровня стоматологического просвещения и гигиены полости рта пациентов, находящихся на ортодонтическом лечении. Российский стоматологический журнал. 2017; 21(2). -Стр. 82 - 84.
4. Людчик Т.Б., Гурбанов Т.В. Актуальные вопросы лечения хронических воспалительных и реактивно-дистрофических заболеваний околоушных слюнных желез. Современная стоматология. N2. 2018.- Стр. 42 – 43.
5. Abarna Jawahar, G. Maragathavalli, Manjari Chaudhary. Prevalence of salivary gland disease in patients visiting a private dental college. European Journal of Molecular & Clinical Medicine ISSN 2515-8260 Volume 07, Issue 01, 2020. -P.33-56.
6. Agarwal S. Relationship between aging and susceptibility to; protein oxidative damage/ S. Agarwal, R.S. Sohal// Biochem. Biophys. Res. Commun. 1993.- Vol. 194. - P. 1203-1206.
7. Ames B.N. Oxidants, antioxidants and the degenerative diseases of aging/ B.N. Ames, M.K. Sigenaga, T.M. Hagen// Proc. Natl. Acad. Sci. USA- 1993.-Vol. 90.-P. 7915-7922.