



## PSYCHO-EMOTIONAL DISORDERS IN PATIENTS WITH EROSIVE AND ULCERENT FORM OF LICHEN PLANUS OF THE ORAL CAVITY

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### ABSTRACT

*A differentiated effect on the key links in the pathogenesis of the development of lichen planus of the oral mucosa with corrections of the neuroemotional status with the antioxidant Adaptol® led to the normalization of indicators of reactive and personal anxiety and relief of the local process in the oral mucosa. Thus, after pharmacological correction by Adaptol®, normalization of the identified psycho-emotional disorders was noted in 97% of patients with lichen planus of the oral mucosa, a significant improvement in their quality of life, as well as a faster regression of dental status indicators in comparison with similar results after traditional treatment.*

**INTRODUCTION.** Lichen planus (LP) is a psychosomatic disease during exacerbation of which the immune-inflammatory response includes stress-induced production of regulatory neurotrophins and neuropeptides, which leads to disruption of cytokine production and imbalance in the cellular immunity system [10,11,15].

Due to chronic psychoemotional stress, a multilevel systemic reaction occurs, affecting all organs and systems of the body, which depends on the intensity of exposure to stimuli and the individual characteristics of each person [7,8,9,12,13,14,17].

According to modern research, most dental diseases, traditionally classified as psychosomatic, in their development have primarily a genetic and immunological basis. Psychogenic influences act as a link in a series of successive immunological events and lead to exacerbation only in close connection with the main factors of pathogenesis [2,5,6,8,11,18].

Treatment of psychogenic and comorbid LP affective disorders requires a differentiated approach with the appointment of first-line psychotropic drugs for the general medical network [1,2,4,6,8,17,18]. In this connection, our attention was drawn to the anxiolytic drug Adaptol® (Olainfarm, Latvia). Adaptol (mobicar) has a moderate tranquilizing effect, reduces or eliminates the feeling of anxiety, fear, anxiety, irritability, emotional stress. It is a



membrane stabilizer, cerebroprotector and adaptogen due to its antioxidant effect. Has the properties of an antagonist-agonist of the adrenergic system.

Based on this, we set a goal - to evaluate the effectiveness of the correction of psycho-emotional disorders in LP OOM with the anxiolytic drug Adaptol.

**MATERIALS AND METHODS.** The material for the analysis and conclusions was the results of a survey of 42 patients with erosive and ulcerative form of LP OOM, who were on outpatient treatment in the clinic of therapeutic dentistry TMA and TSSI for the period from 2010 to 2016.

The diagnosis of LP OM was made on the basis of the classification of E.V.Borovsky, A.L.Mashkilleyson 2009. Patients aged 20-29 years were examined; 30-39 years old; 40-49 years old; 50-59 and 60-69 years old, including 24 men and 14 women, 21 patients made up the main group and 21 - the control group, the comparison groups were homogeneous in terms of sex and age composition, the presence of provoking factors, and the frequency of background somatic pathology. Prior to treatment, all patients signed a voluntary informed consent to conduct research. The treatment was preceded by professional oral hygiene and elimination of local traumatic factors. Patients in the control group received complex antimicrobial, immunomodulatory and physiotherapy treatment. In the complex therapy of patients of the main group, "Adaptol" was additionally introduced in a dose of 1 table. 3 times a day, up to 2 - 3 months.

The psychological status of patients with LP ORM was assessed according to the self-assessment scale of I.D. Spielberg and Yu.L. Khanin. We studied the state of reactive anxiety - RA (as a state of situational anxiety) and personal anxiety - PA (as a stable characteristic of a person) (Karelin A. 2007) [3,4,17,18,19].

When interpreting the results, the following ratings were adhered to: up to 30 - low anxiety; 31-45 - moderate anxiety; 46 and more - high anxiety.

Mathematical processing of the data obtained as a result of the research was carried out using the methods of variation statistics.

**RESULTS OF THE RESEARCH.** When studying anxiety, it turned out that in the control group, the indicators of RT and LT could be characterized as moderate and average.

Patients with LP OM showed a statistically significant ( $P < 0.05$ ) higher level of reactive (RA) and personal anxiety (PA). At the same time, the study of LT turned out to be more informative. Based on the analysis of the state of RA and PA in patients with LP before treatment, it can be assumed that they have a predisposition to perceive a wide range of life situations as threatening and respond to them with a prolonged state of tension, such as emotions, anxiety, concern, internal excitement. Other symptoms of psycho-emotional disorders were also found in patients with LP OMS: sleep disturbance, mood depression, thinking disorders, mobility and hyperactivity, obsessions, fears.

Thus, in patients with LP OCM, there is a constant increased readiness for the development of stressful situations. It is also important that the disease itself is not only a source of stress for the patient, but also an important psychological problem.

In patients with PA after treatment, positive dynamics of the studied indicators of psycho-emotional status was registered.

All studied indicators of RA and PA improved or reached the values of the control group. At the same time, the highest effect of psychoemotional status normalization was obtained in the main group.

The most pronounced dynamics was established for PA indicators, reflecting the presence of a neurotic breakdown and psychogenic-caused diseases. The predisposition to perceive life situations as threatening and to respond to them with anxiety, concern, internal



excitement significantly decreased, fears, obsessions disappeared, behavior became more adequate.

After treatment, the mean group PA in the main group, equal to  $39.11 \pm 1.81$ , was as close as possible to the values of the control group  $36.02 \pm 2.24$  ( $P > 0.05$ ) and was statistically significantly lower than the corresponding values before treatment -  $51.22 \pm 1.62$  ( $P \leq 0.05$ ). It should be noted that in the course of treatment there was a significant decrease in the proportion of patients with high and moderate levels of PA, this dynamics is more significant in the main group. Thus, in the main group after treatment there were no patients with a high level of PA, the proportion of such patients in the comparison group was  $14.28 \pm 7.63\%$  during this period; the corresponding ratios of moderate PA were  $38.09 \pm 11.60\%$  versus  $66.67 \pm 10.60\%$ ; and an increase in the proportion of low PA -  $61.91 \pm 11.60\%$  versus  $19.05 \pm 5.91\%$  ( $P < 0.05$ ).

Significantly decreased and indicators of RA, due to situational stress, anxiety, anxiety. The mean group RA after treatment was  $39.41 \pm 1.55$  versus  $51.22 \pm 1.62$  ( $P < 0.05$ ) before treatment and  $44.31 \pm 2.4$  ( $P < 0.05$ ) in the control group.

The proportion of patients with high and moderate levels of RA after treatment was lower in the main group. Thus, the proportion of patients with a high level of RA decreased in the main group from  $19.05 \pm 1.62\%$  to  $4.78 \pm 4.64\%$  against the same value in the comparison group -  $9.52 \pm 4.60\%$ ; the corresponding dynamics of moderate RA was  $38.09 \pm 10.60\%$  versus  $61.90 \pm 10.60\%$  ( $P \leq 0.05$ ); and the proportion of patients with a low level of RA, on the contrary, increased and amounted to more than half in the main group -  $57.14 \pm 10.80\%$  versus  $28.57 \pm 9.86\%$  ( $P \leq 0.05$ ) in the comparison group.

Recovery and normalization of the psychological status coincided synchronously with the relief of the clinical picture of LP OM.

It is known that mental and somatic disorders are manifestations of a general pathological process involving all body systems. At the same time, manifestations on the OM can act as a reflection of the emotional state of a person.

Obviously, in the pathogenesis of LP OM, negative emotional impulses destabilize the functional state of many body systems through subcortical structures. On a negative psycho-emotional background, there is an aggravation of dysregulation of the central nervous, autonomic nervous, hormonal, immune systems, disorders of lipid peroxidation processes, an increase in endogenous intoxication, leading to disruption of the functioning of various homeostatic systems of the body.

**DISCUSSION AND CONCLUSIONS.** In the development of pathological disorders in patients with LP OM, these mechanisms look like a "vicious circle": through subcortical structures, negative emotional impulses associated with psycho-emotional disorders trigger the mechanisms of destabilization of the functional state of many homeostatic systems, which leads to an aggravation of the course of LP OR. As can be seen from the results of studies, when choosing therapy for a particular patient, it is important to diagnose the entire complex of disorders and their impact on the course of pathology.

A differentiated effect on the key links in the pathogenesis of the development of LP OM with corrections of the neuroemotional status with the antioxidant Adaptol® led to the normalization of indicators of reactive and personal anxiety and relief of the local process in the OM. Thus, after pharmacological correction with Adaptol®, the identified psycho-emotional disorders were normalized in 97% of patients with LP OM, a significant improvement in their quality of life, as well as a faster regression of dental status indicators in comparison with similar results after traditional treatment. The results obtained are the basis for the widespread use of the antidepressant Adaptol in the complex treatment of LP OOM.



## References:

1. Dorozhenok I.Yu., Snarskaya E.S., Shenberg V.G. Comorbid mental disorders in patients with lichen planus // Russian Journal of Skin and Venereal Diseases. 2015; 18(5): 38-42.
2. Dorozhenok I.Yu., Snarskaya E.S., Shenberg V.G. Psychosomatic aspects of lichen planus // Russian Journal of Skin and Venereal Diseases. - 2014. - No. 6. - T.17. - S. 43 - 50.
3. Kamilov, Kh.P., Khodzhiakbarova, S.T., Azizov, U.M., Kamilova, S.R.K., and Shukurova, Yu.A. (2019). STUDYING THE ANTIBACTERIAL PROPERTIES OF A NEW DEVELOPMENT OF THE DENTAL PREPARATION "DENTA ALOE". Journal of Critical Reviews, 7(4), 2020.
4. Karelin A.A. Big Encyclopedia of Psychological Tests M.: Eksmo, 2007, ISBN 978-5-699-13698-8.
5. Lukinykh, L.M. Correction of the psycho-emotional sphere of patients with lichen planus of the oral mucosa / L.M. Lukinykh, N.V. Tiunova // Education, science and practice in the dental service of the north: materials of the interregional scientific and practical conference. - Yakutsk, 2009.-p. 201-203.
6. Orestova E.V. Personal factor in the occurrence and development of dental diseases. [Electronic resource] // Medical psychology in Russia: electron. scientific magazine 2011. N 6. URL: <http://medpsy.ru> (date of access: hh.mm.yyyy).
7. Tiunova, N.V. The effectiveness of tenoten in the complex treatment of lichen planus of the oral mucosa / N.V. Tiunova, L.M. Lukinykh // Clinical Dentistry. - 2009. - No. 2. - S. 38-39.
8. Abdurasulovna, S. U., Sevara, K., Kamola, A., & Madina, K. (2020, July). ETIOPATHOGENIC ASPECTS OF THE SUTTON'S APHTAE IN THE ORAL MUCOSA. In *The 1 st International scientific and practical conference "Actual trends of modern scientific research"(July 19-21, 2020) MDPC Publishing, Munich, Germany* (Vol. 379, p. 58).
9. Adamo D., Ruoppo E., Leuci S., Aria M., Amato M., Mignogna M.D. Sleep disturbances, anxiety and depression in patients with oral lichen planus: a case-control study. J. Eur. Acad. Dermatol. Venereol. 2014. doi: 10.1111/jdv. 12525.
10. Alves M.G., Carvalho B.F., Balducci I., Cabral L.A., Nicodemo D., Almeida J.D. Emotional assessment of patients with oral lichen planus. Int. J. Dermatol. 2014. doi: 10.1111/ijd.12052.
11. Gavic L., Cigic L., Biocina Lukenda D., Gruden V., Gruden Pokupec J.S. The role of anxiety, depression, and psychological stress on the clinical status of recurrent aphthous stomatitis and oral lichen planus. J. Oral. Pathol. Med. 2014; 43(6): 410-7. doi: 10.1111/jop.12148.
12. Girardi C., Luz C., Cherubini K., de Figueiredo M.A., Nunes M.L., Salum F.G. Salivary cortisol and dehydroepiandrosterone (DHEA) levels, psychological factors in patients with oral lichen planus. Arch Oral. Biol. 2011; 56(9): 864-8. doi: 10.1016/j. archoralbio.2011.02.003.
13. Gorouhi F., Davari P., Fazel N. Cutaneous and mucosal lichen planus: a comprehensive review of clinical subtypes, risk factors, diagnosis, and prognosis. Sci. Wld. J. 2014; 2014: 742826. doi: 10.1155/2014/742826.
14. Lehman J.S., Tollefson M.M., Gibson L.E. Lichen planus. Int. J. Dermatol. 2009; 48(7): 682-94.
15. Manolache L., Seceleanu-Petrescu D., Benea V. Lichen planus patients and stressful events. J. Eur. Acad. Dermatol. Venereol. 2008; 22(4): 437-41. doi: 10.1111/j.1468-3083.2007.02458.x.



16. Payeras M.R., Cherubim K., Figueiredo M.A., Salum F.G. Oral lichen planus: focus on etiopathogenesis. Arch. Oral Biol. 2013; 58(9): 1057-69. doi: 10.1016/j.archoralbio.2013.04.004.
17. Shukurova, U. A., & Bekjanova, O. E. (2015). The state of cytokine profile in patients with lichen planus of oral mucosa. In *Proceedings of 8th European Conference on Biology and Medical Sciences* (pp. 52-57).
18. Shukurova, U. A., & Sadikova, I. E. (2023). COURSE OF CHRONIC RECURRENT APHTHOSIS STOMATITIS IN PREGNANT WOMEN.
19. Valter K., Boras V. V., Buljan D., Juras D.V., Susie M., Pandurie D.G., Verzak Z. The influence of psychological state on oral lichen planus. Acta Clin. Croat. 2013; 52(2): 145-149.