

**ACNE TREATMENT WITH THE INCLUSION OF IMMUNO-ORIENTED THERAPY
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Against the background of complex therapy, which includes immunotropic drugs in addition to standard methods, higher efficacy of the therapy and rapid positive clinical dynamics were noted. The inclusion of immunotropic drugs in the complex therapy of acne increases its effectiveness

Keywords: *acne, immunotherapy, glucosaminylmuramyl dipeptide, ozone therapy.*

Introduction. These phenomena are aggravated by the fact that with severe abscessing forms of the disease, there is almost always a persistent resistance of patients to the means used in the complex of standard therapy. Moreover, in practice, complicated forms of acne are increasingly being registered. Taking into account this information, UB seems to be an important medical and social problem.

Violation of homeostasis, in particular hormonal imbalance, contributes both to the formation of the disease and provokes long-term maintenance of the disease and causes the development of resistance of this pathology to standard therapy. The unity of the three homeostasis systems, as well as the presence of changes in both the nervous and endocrine spheres, leads to the formation of defects in the functioning and immune system in people suffering from vulgar acne. The presence of conditionally pathogenic microflora persisting on the skin surface for a long time (*Propionibacterium* acne), the addition of secondary infectious agents (parasitic and yeast-like fungi, mites of the genus *Demodex*) cannot but affect the change in the immune status of patients. In general, it has long been known that this disease is not limited to chronic skin lesions involving sebaceous glands and hair follicles in the pathological process, forming a clinical syndrome complex of UB, but is characterized by a multicomponent pathogenesis.

Thus, there are only isolated reports of changes in one or another link of the immune system, cytokine balance with a violation of the dynamics of pro- and anti-inflammatory cytokines. N.I. Skorogudaeva (2009) notes that the development and maintenance of the chronic course of the inflammatory process is facilitated by immunological shifts observed in patients with various forms and degrees of severity of acne. Violations of the cytokine status are also assigned no less importance in the formation of UB in almost all acne patients. No less debated is the question of the participation and significance of immuno-oriented therapy in the complex treatment of acne.

The purpose of the study: to study the results and effectiveness of complex treatment of vulgar acne with the inclusion of immuno-oriented therapy based on clinical and immunological research.

Materials and methods.



48 patients aged 15 to 35 years suffering from acne vulgaris of moderate and severe degree were under observation. The severity of the inflammatory process was assessed using the Cook scale.

It is known that GMDP belongs to the class of muramyldipeptides (MDP) and is the minimal recognizable structural component of the bacterial wall peptidoglycan (Shikama Y. et al., 2011). Thus, in addition to traditional therapy, patients received an immunomodulatory drug - Lycopid. It was used per os at a dose of 10 mg 1 time per day for the first 10 days. Patients of both subgroups were comparable in terms of the main clinical and anamnestic parameters - average age, general somatic status.

When assessing the intensity of rashes on the scale described above, the average score in patients of both groups was 6. The duration of the disease ranged from five to fifteen years. In 100% of patients, the course of acne was complicated by the formation of post-acne scars. The assessment of the severity of scars was carried out using the Vancouver scale, which includes the calculation of the total score criterion for the manifestation of the scar element. Suppression of developing inflammation is carried out through a cascade of inhibitory effects on proinflammatory cytokines: interleukin-1 (IL-1), IL -6, IL - 8, tumor necrosis factor (TNF).

In the study of the immune status, the content of CD3+, CD8+, CD16+, CD20+, CD25+, CD95+ lymphocytes was determined using appropriate monoclonal antibodies (JSC "Sorbert") on a flow cytofluorimeter; the level of serum immunoglobulins of classes A, M, G was determined by radial immunodiffusion in gel; the intensity of oxidativerecovery processes of neutrophils in the NST test according to existing methodological recommendations; the level of circulating immune complexes was determined by the method of deposition with polyethylene glycol mol. with a mass of 6000 Yes.

Statistical data processing was carried out using the Statistica 6 program. The reliability of differences in groups was assessed using the nonparametric Mann-Whitney-Wilcoxon criterion. The generally accepted level of reliability of differences was applied at $p < 0.05$.

When assessing the parameters of the dynamics of the clinical picture in both groups of patients before the start of therapy and after the end of the course, the Cook scale was also used, the Vancouver Index was used to control changes in scar elements.

Results and discussion. Upon completion of the course of therapy in the control and main groups, repeated monitoring of the dynamics of clinical signs and parameters of the immune status of patients of both groups was carried out. When examining patients of the control group, it was noted that a noticeable positive clinical dynamics in the form of a decrease in the number of pustular elements developed on the 15th-20th day. from the beginning of therapy.

Positive changes were expressed in the absence of new inflammatory elements, the rapid resolution of pustular acne, including conglobate, indurative and abscessing, as well as in a noticeable smoothing of existing post-acne scars. The Cook scale score was 2 points. It should be noted that scarring was not observed in patients of the main group against the background of resolution of long-lasting persistent deep inflammatory elements. The positive dynamics was confirmed by a decrease in the number of points on the Vancouver scale from 11 to 6. When studying the immune status indicators of these patients, a significantly significant increase in the number of lymphocytes with helper-inductive properties was noted, entailing an improvement in the immunoregulatory index, an



increase in the processes of early and late activation of immunocompetent cells, a decrease in the level of circulating immune complexes, proving an improvement in elimination function, as well as an increase in IgG content.

Conclusions.

1. The results of this study allow us to conclude about the positive effect of ozone therapy and glucosaminylmuramyl dipeptide, which has an immunomodulatory effect on phagocytic cells, both on clinical manifestations of acne and post-acne conditions, and on changes in the immune status of patients.

2. This allows us to recommend the developed method of complex treatment for the treatment of patients suffering from moderate and severe forms of acne, as well as for patients with a tendency to prolonged persistence of inflammatory elements of acne or a tendency to scar tissue formation.

LITERATURE

1. Акне и розацеа / Под ред. Н.Н. Потекаева. М.: «Изд. БИНОМ», 2007. 216 с.
2. Аравийская Е.Р., Соколовский Е.В. Системная антибиотикотерапия акне: некоторые дискуссионные вопросы. *Вестник дерматологии и венерологии*. 2013;(6):117-121
3. Голоусенко И.Ю. Акне у женщин: этиологические и патогенетические механизмы, диагностика и лечение: Автореф. дисс. ... д. м. н. М., 2014. 47 с
4. Кунгуров Н.В., Зильберберг Н.В., Толстая А.И., Кохан М.М. Патогенетические и клинические основы результативности комбинированной терапии больных акне и постакне. *Лечащий врач*. 2013;(10):24-28.
5. Осипова Н.К. Комплексный подход к терапии и реабилитации кожи у больных различными формами акне и постакне: Автореф. дисс. ... к. м. н. - М., 2011. 27 с.
6. Перламутров Ю.Н., Чижова С.К., Корчевая Т.А., Ольховская К.Б. Сравнительная эффективность и переносимость различных методов терапии акне у женщин. *Клиническая дерматология и венерология*. 2012;(3):72-77.
7. Самцов А.В. Топические антибиотики в лечении акне // *Вестн. дерматол. и венерол.* 2011. № 1. С. 84-85
8. Скороздаева И.Н. Патогенетическое обоснование комплексной терапии вульгарных угрей: Автореф. дисс. ... к. м. н. М., 2009. 26 с.
9. Oudenhoven M.D., Kinney M.A., McShane D.B. et al. Adverse Effects of Acne Medications: Recognition and Management // *Am. J. Clin. Dermatol.* 2015. Apr 21. [Epub ahead of print].
10. Leyden J., Strauss J., Krowchuk D. et al. Guidelines of care for acne vulgaris management. *J. Am. Acad. Dermatol.* 2007, v 56, p. 651-653..
11. Shikama Y. et al., Muramyl dipeptide augments the actions of lipopolysaccharide in mice by stimulating macrophages to produce pro-IL-1 β and by down-regulation of the suppressor of cytokine signaling 1 (SOCS1) *Biology, Medicine* 2011. v. 115, p. 122-126.