

3<sup>rd</sup> International Conference on

# WOUND CARE, TISSUE REPAIR AND REGENERATIVE MEDICINE

June 13-14, 2022 | Webinar

Received date: 20-02-2022 | Accepted date: 10-03-2022 | Published date: 24-06-2022

## Influence of peptide complex mesotherapy on innate and adaptive immunity

Alexandra I Sergeeva and Lyudmila P Sizyakina

Rostov State Medical University, Russia

**Statement of the problem:** The ability to improve skin condition with bioactive peptides deserves a lot of interest. Still, the topic is not covered in scientific literature. The purpose of this study is to find out the changes in the homeostasis of the body mediated through the immune system and the changes in the quality of life.

**Materials and methods:** In this study, the effect of a preparation containing peptide complexes Hydro Line Extra B. Observation group: 64 patients. Injections: a course of 5 procedures every 14 days. Before and after the course of procedures, the activity of adaptive immunity (CD3+, CD4+, CD8+, CD19+, CD3 + CD25+, CD95+, Foxp3+, CD8+ Gr+, immunoglobulins: IgA, IgG, IgE, and congenital (TLR2, TLR4, TLR9), IgM, CD16+; HCT spontaneous and stimulated tests. Biochemical parameters and thyroid hormones were also studied. Changes in the quality of life: dermatological index "Quality of Life" (Adaskevich V.P., 2004) was used.

**Research results:** The redistribution of the population composition of the lymphoid lineage of immunopoiesis in the peripheral bloodstream is documented. There is an increase in CD4+ and CD8+ subpopulations and changes in the dynamics of activation indicators; a decrease in CD25+; an increase in the proportion of peripheral T-regulatory lymphocytes CD3+ CD25+ FoxP3+. Adaptive immune response: a decrease in B-lymphocytes, an increase in all classes of immunoglobulins, a decrease in natural killer cells. Neutrophilic link: activation of spontaneous oxygen-producing activity. No changes in the thyroid hormones and biochemical studies. All patients mentioned the improvement of quality of life.

**Conclusions:** as a result of the fact that the course administration of peptide complexes leads to a change in the body's homeostasis mediated through the immune system, exerting an obvious effect on innate and adaptive immunity, it is possible to level the clinical efficacy of the course of procedures, which is of interest for further research.

### Recent Publications

1. Sizyakina L P, Sergeeva A I, Andreeva I I. Discoordination of the processes of activation and suppression of immunocompetent cells during mesotherapy with hyaluronic acid. Medical Herald of the South of Russia. 2021; T. 12. No.1. P. 68-73.
2. Sizyakina L P, Sergeeva A I. Immunological aspects of effects of mesotherapy with hyaluronic acid. Immunology. 2021. T. 42. - No 2. - P. 159-165
3. Sizyakina L P, Andreeva I I, Sergeeva A I. Immunotropic effects of mesotherapy in the correction of age-related skin changes. Medical Immunology. 2021. T. 23. - No 3. - P. 585-592.

### Biography

Alexandra Sergeeva is an experienced specialist with an excellent knowledge of cutting-edge technologies in modern dermatology and cosmetology. She is an expert in such areas as various facial procedures, mesotherapy, thread lifting, face contouring, laser, botulinum toxin, IPL therapy and many others. Her desire to master the skills constantly has led to becoming a certified GP with aesthetic privilege in one of the most famous clinics in the UAE. In particular, she is eager to research the influence of injection procedures in cosmetology on functioning of the immune system.

E: [Aleksandra.sergeeva.87@mail.ru](mailto:Aleksandra.sergeeva.87@mail.ru)