

## **PROSPECTS FOR THE USE OF BACTERIOPHAGES IN COSMETOLOGY FOR THE PREVENTION OF SKIN DISEASES**

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Nowadays the most common diseases are the diseases of bacterial etiology; for instance acne, plegmons, dermatitis etc. The main reasons which cause bacterial skin infection developings are violation of the integrity of the skin barrier function, skin biocenoses peculiarities which are formed on the back ground of different dermatosis decrease in the activity of immune reactions, diabetes mellitus, severe somatic diseases,irregularities in the hormone system, psychological and mental stresses,violation of the diet, taking some certain medications, using inappropriate cosmetic. Every cosmetic procedure associated with the use of invasive techniques, such as pilling, injections and different kinds of polishing, has a risk of infectious complications. Skin is one of the most important organ of the human body. That,s why it's diseases like acne bring not only esthetic defects but also psychological discomfort. Diseases also prevent skin to perform its functions. Use of antibiotics in the treatment of those diseases is to no purpose (impractical) due resistance of microorganisms to antibiotics. So the new methods of treatment are needed to cope with illnesses successfully here in after. As claimed by immunologists the use of bacteriophage will become the panacea for diseases. The pathogens are Pseudomonas, Proteus, Klebsiella, Enterobacte–riaceae, Staphylococcus, Streptococcus. The bacteriophages are natural alternative to antibiotics. In serious diseases phage can be combined with various medications, antibiotics including, they are not toxic and don't have any contraindications. Their advantage lies in the fact that they have the immunostimulation effect and can be used as the prevention of infections. The drugs with bacteriophages cause the death of a certain kind of bacteria here with they don't affect the normal flora. The efficiency of these instruments to causative agents of septic diseases is about 75-90%, what is a fairly high rate. Today there is a limited list of drugs with bacteriophages which are especially used in cosmetology. In the Ukrainian market the are drugs with bacteriophages in soft dosage forms used for treatment and prevention of dermatological diseases: "Phagoderm" - a powerful anti-inflammatory and disinfectant for skin (Ltd. SPC 'MicroMir', Russia) which include phages to Staphylococcus aureus, Staphylococcus epidermis, Pseudomonas aeruginosa, Acinetobacter baumannii, Esherichia coli, Streptococcus pyogenes; "Bactériophage Staphylococcous" - the ointment for treatment and prevention of inflammatory diseases (FSUA 'Imbio', Russia) which include phages to Staphylococcus aureus, Staphylococcus epidermis; "Gel-balm With Bacteriophages" - eliminates harmful bacteria, provides rapid healing of injuries, restores the normal flora of the skin ("MIRRA", Russia) which include a concentrate of bacteriophage. The medicine with bacteriophages is only one in Ukraine it is produced by "Biopharma"(Kyiv). Now at the Department of Biotechnology development of compound and the technology of soft drugs containing bacteriophage afor use in cosmetology are conducted.