DEVELOPMENT PROSPECTS FOR GEL TREATMENT OF ACNE

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Modern medicine pharmacy poses serious challenges in the creation of new domestic preparations for the topical treatment of acne. Range of medicines for the treatment of this disease is quite wide. However, the practice of medicine feels the need for drugs that can effectively implement differentiated topical treatment of acne in the initial stages. The composition of gels for acne treatment includes active substances belonging to different pharmacological groups.

However, the vast majority - synthetic drugs that exhibit certain drawbacks that limit their use. Given the shortcomings of antibiotic acne topical is conducting the search and creation of a new drug on the basis of the substance of natural origin, developing adequate antimicrobial and anti-inflammatory effects with minimal adverse events. In recent years all over the world there has been increased interest in practical medicine to drugs derived from natural raw materials, in particular - from propolis. One of the biologically active substance is propolis, propolis phenolic hydrophobic drug (FGPP).

Given the high antimicrobial, anti-inflammatory, reparative and other pharmacological features FGPP, the creation of a new drug based on it that meets all modern requirements for drugs for topical treatment of acne is important. The aim of this work is to develop science-based composition, technology and methods of analysis of the gel with a phenolic propolis hydrophobic drug for the treatment of acne first stage, has wound-healing, anti-microbial and anti-inflammatory activity. To achieve this goal, the following tasks.

Explore and summarize current literature data on the treatment of acne and the creation of drugs to treat acne.

Theoretically and experimentally justify the composition and gel technology FGPP having reparative, wound healing and antimicrobial activity.

To study the rheological and physico-chemical properties of the gel.

Conduct research to identify key quality indicators and the development of methods for the analysis of the gel justify kind of packing, storage conditions and shelf-life of the drug.

To carry out microbiological and pharmacological studies for the establishment of a gel and the specific activity of the drug harmlessness with developed FGPP in gel form.

To carry out a comprehensive study developed biopharmaceutical gel (in vitro, in vivo).

Based on the results to develop analytical documentation and design of production schedules on a gel. At this stage comprehensively study the properties of hydrophilic gel for the treatment of acne, the drug developed analysis techniques, defined terms and conditions of storage.