

DEVELOPMENT OF EXTEMPORANEOUS OINTMENT WHICH BASED ON MEDICINAL PLANTS

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Introduction. The population of the entire planet began to feel the effect of environmental devastating factors, and especially, of the use of synthetic drugs, biologically active additives, preservatives and other substances to which people are not evolutionarily adapted. It is becoming more and more people with chronic diseases and those who can not tolerate drugs. Relevance, in this case, is the use of drugs based on natural medicinal plants. To date, there is a large amount of drugs (about 400 titles) with plastic-visco-elastic medium, which have a generic name - "Ointments" in the Ukrainian pharmaceutical market. Among them, 76% are representatives of foreign and 24% of domestic production.

Aim of our research was to develop a new compound of the combined extemporaneous based ointment which based on calendula extract and to study of its quality indicators.

Materials and methods. We prepared Calendula extract by aqueous extract of calendula flowers, followed by evaporation to a dense mass. The resulting mass is subjected to analysis for the presence of active substances and basic quality indicators. Then, researches on the choice of basics were made by us. When we choose a basis we take into account the nature of the interaction of all ointment ingredients and the degree of release of main active substances from studied basis.

Results and discussion. According to the results of biopharmaceutical, physical and chemical research as the basis was selected hydrophilic polyethylene oxide basis - alloy of PEO 1500 and PEO-400. This basis provides a high osmotic effect, shows resorptive effect and dries inflamed mucosa. Benefits of the basis are a pharmacologically indifferent, ease to apply on the wound surface, and it is distributed evenly across the wound surface, improving contact with the of the ointment with tissues and the contents of the wound, it is mixed well, and at the same time it is saved its homogeneity. Conducted research on the study of the quality indicators of ointment showed that the ointment is a thermo and colloid stable and has good organoleptic properties and has a pH in the range of 5.27 – 5.79, which has a positive effect on the course of the healing process.

Conclusions. Thus, on the basis of conducted and generalized experimental data, we have proposed the composition of extemporaneous ointment, based on extracts of calendula, which meet the requirements of a given dosage form for its the main indicators.