SELECTION OF EXCIPIENTS IN DEVELOPMENT OF CAPSULES FOR GELMINTOSIS TREATMENT

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Introduction. Over 270 types of helminths and 18 species of protozoa cause diseases of people in all parts of the world. Losses inflicted to the health of the world's population by helminths, rank 4th, yielding only diarrhoea, tuberculosis and coronary heart disease, which indicates the relevance of this problem.

An analysis of anti-helminth drugs available in the pharmaceutical market of Ukraine has shown the prevalence of imported synthetic drugs, indicating the prospectiveness and expediency of development of new drugs based on vegetable raw material (VRM).

Based on the analysis of anti-helminthic VRM drugs, we have offered to develop a capsulated formulation with dry extract of tansy and pumpkin, which exhibit a wide spectrum of antiparasitic activity. The study of physico-chemical and pharmaco-technological properties of active pharmaceutical ingredients showed the need for the introduction of auxiliary substances to the mass for encapsulation.

Therefore, the aim of the work was the choice of auxiliary substances to optimize the composition of hard capsules with dry extracts of tansy and pumpkin.

Materials and methods. In the course of the study used modern auxiliary substances of different groups – fillers: maltose, Tablettose 80, Prosolv SMCC 50; Moisture regulators: Neusilin US2, silica and lubricants: Precirol and calcium stearate. The pharmaco-technological and physico-chemical properties of the samples were studied in accordance with the generally accepted methods of the SPU.

Results and discussion. By microscopic studies of the mixture of dry extracts of tansy and pumpkin with different fillers, maltose has been chosen as filler, since there was a uniform distribution of the particles of extracts in it, in addition, the particles were uniform in linear sizes. The study of moisture absorption at a relative humidity of 45%, 75% and 100%, allowed to choose a rational moisture regulator – aerosil. Investigation of encapsulation mass flowability with different lubricants has revealed the feasibility of calcium stearate addition to its composition.

Conclusions. Based on the conducted physical-chemical and pharmaco-technological studies, a rational composition of auxiliary substances for the production of hard capsules with dry extract of tansy and pumpkin of anti-helminth effect has been selected.

DEVELOPMENT OF THE COMPOSITION – PART OF PHARMACEUTICAL DEVELOPMENT OF PESSARIES WITH ACYCLOVIR AND ESSENTIAL OILS

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Introduction. Realization of pharmaceutical development, namely all her aspects, that recommended by Guideline 42-3.0: 2011. Medicinal products. Pharmaceutical development (ICH Q8) is basic principle of creation of quality, safe and effective medicinal product.

The thorough study of literary data and realization of all necessary experimental works allow to set quality and quantitative composition of medicinal product, parameters of production and control of quality, to have the opportunity to produce products with the set functional descriptions.

Aim. The objects of researches of pharmaceutical development are components of medicinal products – active pharmaceutical ingredients (API) and auxiliary substances, their limits, and also medical