RESEARCHES FOR THE CREATION OF ORAL SUSPENSION ON THE BASIS OF SILICS

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Introduction. Enterosorption is a method of detoxification of the body, based on the removal of toxic substances from the gastrointestinal tract with the introduction of sorbents. The purpose of all methods of enterosorption is to remove from the human body various undesirable components that play a role in the etiology and pathogenesis of various diseases. The variety of enterosorbents with different properties permits clinicians to select the appropriate one for correction of the body medium. One of them is highly dispersed silica.

It is known that the most effective way of introducing enterosorbents is oral, when the process of persorption begins in the stomach and completed in a thin bowel. As you know, suspensions are liquid dosage forms, the quality, efficiency and safety of which depend on the degree of medicinal substances triturating, the nature of the dispersion medium, the effectiveness of stabilizers and preservatives, technology and storage conditions. Therefore, when creating the composition of suspension much attention is paid to selection of active and auxiliary substances, to development of the rational technology and storage conditions, in which it is possible to provide the necessary therapeutic activity.

Aim. The purpose of our work was to develop the composition of the liquid dosage form (suspension) on the basis of silics for usage in the treatment of diarrhea.

Materials and methods. For realization of researches the following methods were used: physical, physical-chemical, microbiological.

Results and discussion. As stabilizers, natural and synthetic high-molecular compounds are applied, namely: apple pectin, methyl cellulose, polyvinyl pyrrolidone, sodium carboxy methyl cellulose. Prepared samples of suspension have been investigated on the following parameters: original appearance, time of stratification, re-suspendability. On the basis of the obtained results of suspension's samples the optimal amount of stabilizers was selected and their physical and chemical properties (stability, viscidity, pH, surface-tension) was studied. The sorption activity of the experimental samples of the suspension was studied in relation to the most common microorganisms that induce intestinal diseases with diarrhea syndrome.

Conclusions. Based on the obtained results of researches the optimal composition of oral suspension with silics was developed. It has been proved that the selected auxiliaries do not affect the sorption activity of the developed suspension.

STUDY SELECTION OF EMULSIFYING AGENT FOR ANTI-ALLERGIC EMULSION

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Introduction. The development of prescription mixtures of drugs depends on many factors, one of which is the solubility of the constituents chosen for the composition. Stability is an important characteristic of the preparation obtained. The instability and poor solubility of certain mixtures makes it difficult to prepare the preparations. One way to solve this problem is to introduce a surfactant into the formulation. In modern drugs, synthetic surfactants are widely used. Emulsions belong to microheterogenic systems, which are quite unstable in storage. The stability of emulsions is very important, their stratification violates the precision of the dosage of the active substance. To obtain stable emulsions it is necessary to add stabilizers. Among other stabilizers of emulsions, surfactants deserve the greatest attention due to their polyfunctionality. Preference is given to such surfactants that are safe for humans.