

Aim. Experimentally substantiate the choice of an emulsifying agent in the development of new antiallergic drugs in the form of emulsions.

Materials and methods. In carrying out the studies, Dimethindene maleate – antihistamine substance of II generation was used. As emulsifiers were used tween-80 and plant-M.

Results and discussions. During the work, samples of emulsions for the treatment of allergic manifestations of the skin with dimethindene maleate and using various emulsifiers were prepared. To obtain stable emulsions of the o/w type, hydrophilic emulsifiers with a hydrophilic-lipophilic balance of 8-18 are used. Therefore, as emulsifying agents, we chose tween-80 and plant-M. Tween-80 refers to oxyethylated sorbitans, it has high lipophilic properties and is readily soluble in water, also increases the colloidal and thermal stability of the dosage form. Planta-M forms stable emulsions with polar and non-polar oils.

Model samples of emulsions were subjected to investigation of organoleptic characteristics: color uniformity, absence of phase separation, odor. To study the stability of emulsions, the samples were stored at room temperature 15-25 °C and in a refrigerator at a temperature of 2-8 °C for 30 days. As a result of the study of stability, phase separation was found in samples prepared using Tween-80. While samples with the Planta-M emulsifier were stable for the entire shelf life.

Conclusions. As a result of the work, an optimal emulsifying agent was chosen for the preparation of an antiallergic emulsion, which will be used for further research.

STUDY OF PHYSICAL AND CHEMICAL PROPERTIES OF ANTI-HISTAMINE SUPPOSITORIES

Alkhamdani Alkhusein Ali

Scientific supervisor: assoc. prof. Herasymova I. V.

National University of Pharmacy, Kharkiv, Ukraine

iryna_herasymova@ukr.net

Introduction. Based on the results of the preliminary literature analysis of the availability of children's medicines on the modern pharmaceutical market, we previously proved the urgency of creating new medicines for children of different pharmacological actions, rational dosage form for young children – suppositories was proved and the most actual pharmacological activity of these preparations – antihistamine was chosen.

According to the analysis of literature sources, we used loratadine hydrochloride as the active substance, which proved to be an effective second-generation antihistaminic substance without pronounced side effects, it is allowed for use in children's practice. As the second active ingredient, a 30% oil solution of α -tocopherol acetate (vitamin E) was introduced into the suppository, which has an immunostimulating, anti-inflammatory effect and protects the walls of the intestine from irritating action.

Aim. The purpose of this work was to select a rational suppository basis for antiallergic extemporal suppositories for children.

Materials and methods. In the course of the studies, loratadine hydrochloride and a 30% oil solution of α -tocopherol acetate were used as active substances. As suppository bases, a solid fat type A, Witepsol W and a Suppotsire were chosen.

Results and discussions. To conduct research, we prepared model suppositories by pouring out method. Further, the physical and chemical properties of the obtained samples were studied. The melting temperature and the time of complete deformation of the suppositories were determined. Based on the results of the determination of the melting point and the time of complete deformation of the suppositories, it can be asserted that neither the base nor the active substances influence the melting point of the suppositories – it remains within the limits of statistically permissible deviations from the literature data and meets the requirements of State Pharmacopoeia of Ukraine.

Thus, based on the results of our studies, we came to the conclusion that, as suppository bases for the following studies, it is necessary to dwell on such bases as solid fat type A, Witepsol W and a Suppotsire.

Conclusions. As a result of studying the physical and chemical properties, it was determined that it is necessary to continue research on the choice of a rational suppository basis.