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**RESEARCH ON THE DEVELOPMENT OF THE COMBINED GEL BASE
FOR THE TREATMENT OF MASTOPATHY**

Zuikina S. S., Vyshnevskaya L. I., Giedrė Kasparavičienė

**National University of Pharmacy, Kharkiv, Ukraine,
Lithuanian University of Health Sciences, Kaunas, Lithuania**

The pharmaceutical quality system must be aimed at achieving product quality, establishing and maintaining a controlled condition, and promoting continuous improvement. The purpose of pharmaceutical development is to create a drug of appropriate quality and justify the process of its production, in order to constantly produce products with specified functional characteristics.

The composition of the medicinal product must be grounded on the basis of scientific and experimental studies on the choice of biologically active and auxiliary substances, their required concentration. It should be noted that high therapeutic activity of the drug can be achieved only with the right combination of active components and bases.

The drugs presented in the dosage form of gel are promising for the medical and pharmaceutical field, as they provide the necessary pharmacotherapeutic action, have a number of important advantages over ointments: when applied to the skin, the thinnest smooth films are formed, which contribute to the prolongation of the action of the drug, allow not to contaminate clothing and achieve high bioavailability.

The purpose of the work was the pharmaceutical development of the base of the gel with complex action for the treatment of mastopathy.

The possibility of using hydroxyethyl cellulose (HEC) and carbopol as gelling agents was considered. To select the optimal gelling agent, we studied the texture of the obtained gel samples.

The texture analysis of the developed experimental samples of HEC and carbopol gels was performed using a TA texture analyzer. XT. plus (Stable Micro Systems Ltd, Godalming, Surrey, UK) at the Department of Pharmacy Technology of Medicines and Social Pharmacy at the Lithuanian University of Health Sciences, Kaunas.

Using the computer program Exponent, the texture parameters were measured: the deformation force of the sample, (maximum force), and the shear stress (area under the curve). Cone probe was used to conduct the experiment. Selected parameters were depth 15 mm, speed 3.0 mm / s. Each test was repeated 3 times, the average was found, and the standard deviation was calculated.

According to the results of the analysis of the texture of the samples of gel based on HEC and carbopol, the natural origin of HEC, the absence of the stage of neutralization in the technology of gel production, organoleptic and textural characteristics of the samples, it is advisable to use HEC in the development of a drug in the role of a gelling agent.