

The degree of destruction of the structure of the studied systems in the process of irreversible deformations was estimated by the value of "mechanical stability", which was calculated as the ratio of the strength limit of the system structure before destruction to the value of the strength limit of the structure after destruction[4].

The rheogram of the flow of the suppository mass with Black cumin oil at body temperature is presented in Fig. 1.

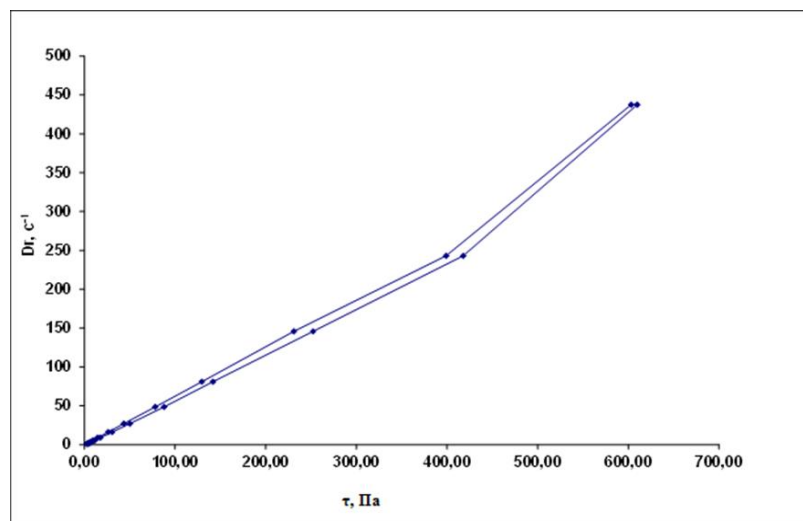


Fig. 1. Rheogram of developed suppositories

Analysis of the rheogram shows that a so-called "hysteresis loop" is formed by the ascending and descending branches, which convincingly proves the presence of coagulation bonds in the structure of the suppository mass, which are restored after destruction.

**Conclusions.** The identified thixotropic properties of the suppository mass with Black cumin oil at body temperature indicate its uniform distribution in the suppository composition.

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### DEVELOPMENT FEATURES OF THE OLIGOGEL WITH OXYCOCI MICROCARPI AND BETULAE PENDULAE EXTRACTS

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**Actuality.** The water-lipid mantle is a film on the stratum corneum epidermis. Often, the water-lipid mantle is called a "line first contact" or "first skin barrier".

The water-lipid mantle forms a barrier that has of fundamental importance for the appearance of the skin. She provides mechanical stability of the skin, prevents washing hydrophilic complexes from the epidermis, provides resistance to external irritants of a chemical nature, gives the skin its smooth, opaque, solid appearance[2,3].

**The purpose of the work.** The goal of our work was the development of an original product based on bodiaga, namely oligogel for the face. The oligogel being developed is intended for the restoration of the hydrolipid mantle of the skin, as well as for enhanced desquamating action due to oxycinnamic acids, which are part of the extracts. This product is prescribed for the care of problematic and sensitive skin.

**Materials and methods:** to carry out a complex of technological, physical and chemical researches for the purpose of a choice and a substantiation of optimum structure of a oligogel for the person of anti-aging care

**The results.** Of the two studied gel bases ("Aristoflex AVC" and sodium alginate), sodium alginate gel will be optimal for the broken oligogel, as it additionally moisturizes the skin and forms a denser film that will not be immediately absorbed[1,4].

The addition of such a significant amount of plant extracts can cause partial dehydration of the base, which, accordingly, will lead to the deterioration of the structural-mechanical, consumer and other properties of oligochar. There is also a problem with the use of hydrophilic oligogels, which is the evaporation of moisture on the warm surface of the skin. To reduce the impact of these undesirable factors, we mixed plant extracts *Oxycoci microcarpi* and *Betulae pendulae* extracts with hydrophilic non-aqueous solvents.

Based on the results of research on the wetting of bodiag powder, it is rational to use a combination of *Oxycoci microcarpi* and *Betulae pendulae* extracts in a total concentration of 10%. A smaller amount of *Oxycoci microcarpi* and *Betulae pendulae* extracts was completely absorbed by the powder, and a larger amount formed a film that impaired the application of the oligogel on the skin surface (no irritating effect).

The resulting rheograms of gels formed under the influence of different amounts of components are presented in fig. 1

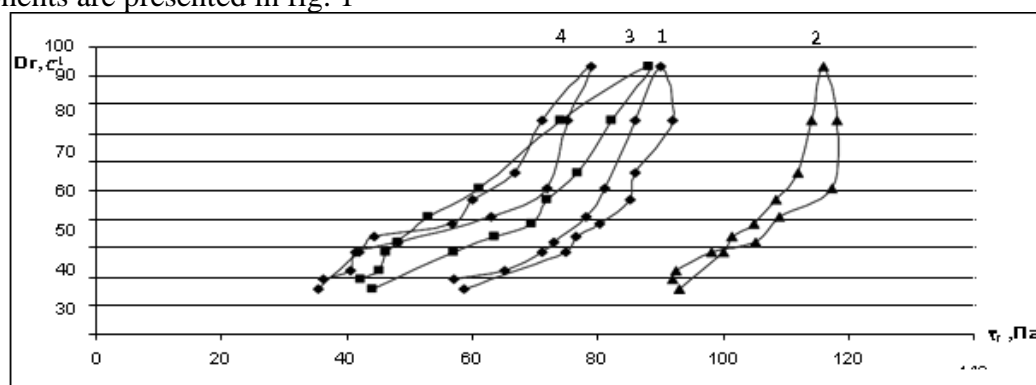


Fig. 1. Rheograms of samples of oligogels, where: 1 – sample No. 4, 2 – sample No. 2, 3 – sample No. 3, 4 – sample No. 1

**Conclusions.** It can be seen from the regram that oligogels from No. 2-4, as well as oligogel without GNR (sample No. 1), belong to the plastic type according to the type of flow; addition of HNR practically does not affect the area of hysteresis loops.

So, on the basis of the conducted studies of the developed samples of oligogels with different ratios, sample No. 3 (glycerol - propylene glycol 7.5 : 7.5) was selected. This sample had the best structural-mechanical and consumer properties.

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### **DEVELOPMENT PROSPECTS OF THE DEVELOPMENT OF A SPRAY WITH EXTRACTS OF ACORUS CALAMUS AND URTICA DIOICA**

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**Actuality.** Today, the fact that such a sociala medical problem like hair loss has focused due attention and gathered around itself noonly many scientists, dermatologists, but also specialists in related specialties with the hope of highlighting the only etiopathogenetic link of this patient and further develop an effective method therapy During the last decade under increased interest in alopecia increased not only because a significant share of it among other dermatoses (up to 6%), and also due to an increase in the incidence of skin cancer. It is believed that immunopathological mechanisms associated with microcirculatory and neurovegetative disorders are the leading influential link in the onset and development of alopecia, especially ring-shaped[1,4].

Over the last decade, there has been a trend towards an increase in the number of patients complaining of intoxication alopecia. In case of hair loss, the treatment is most often based on the use of medicines means To the means of basic therapy, which is aimed at correcting the patient's symptoms background disorders and concomitant diseases include vasodilator drugs; sedatives, dehydrating agents; central amino acid metabolites; nootropics; complexes trace elements and vitamins; biogenic stimulants; anabolics and pathogenetic agents therapy In addition, drugs that improve tissue trophicity are prescribed; drugs, improving microcirculation; silicon-containing preparations that improve the structure hair; stimulators of keratinocyte proliferation[2,3].

**The purpose of the work.** Marketing analysis analyzed the assortment of medicines, which is offered for selection in the complex therapy of patients with alopecia on the pharmaceutical side market of Ukraine.

**Materials and methods:** Content analysis was used to achieve the goal.

**The results.** More than half of the assortment of medicines of this group is made up of preparations foreign production – 53,12%, among which we identify Polish producers (22,47%). Croatia, Germany - 7,9% each; Italy and Jordan – 10,34% each, and Hungary, Spain and Belgium/USA – 3,18% each. Ukrainian manufacturers supply the market with 21,4%. As for the dosage forms in which CS of this group are represented, most of themmake up - ointments (24,37%); creams (11,54%); skin solutions (17,43%); sprays and emulsions make up 2.71% and gels and lotions - 2.55% each.

The next stage of the analysis of the assortment of medicines that are used in the complex therapy of this pathology will be a study of the assortment of herbal preparations, which presented on the market of Ukraine.