

First, we investigated the organoleptic and physicochemical properties of homeopathic matrix tincture "Capsicum annuum" according to the methods of the State Pharmacopoeia of Ukraine (Table 1).

Table 1

Physicochemical indicators of samples of homeopathic matrix tincture «Capsicum annuum»

Indicators	Sample 1	Sample 2	Sample 3
Color	yellow-red		
Smell	specific		
Taste	baking, spicy		
Transparency	transparent		
Ethanol content,%	88,91+1,45	88,85+1,38	88,93+1,42
Relative density, ρ rel.	0,905+0,002	0,904+0,003	0,904+0,002
Dry residue,%	1,51+0,01	1,49+0,02	1,46+0,01

Note: n = 3; P=95%

According to the results of the study, it was found that all samples of homeopathic matrix tincture "Capsicum annuum" are yellow liquid with a specific odor and bitter taste. The ethanol content in them is in the range of 87 – 91%, the relative density and the content of extractives correspond to the norms of indicators given in the German Homeopathic Pharmacopoeia and the manual of V. Schwabe and do not differ significantly. That is, the degree of grinding of raw materials does not have a large effect on the yield of extractives.

Conclusions. According to the results of the research, the presence of alkaloids in all samples of homeopathic matrix tincture "Capsicum annuum" was established, due to the formation of characteristic products of a chemical reaction. It should be noted that the color intensity in samples 1 and 2 was higher than in sample 3.

URGENCY OF DEVELOPMENT OF A NEW EXTEMPORAL DRUG WITH MELOXICAM

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Introduction. Rheumatoid arthritis (rheumatoid arthritis, arthritis rheumatoides) is a common inflammatory disease of the joints of autoimmune origin in which the body's immune defenses are directed against its tissues. Every year the number of people who are diagnosed with this disease increases. Rheumatoid arthritis is not a hereditary disease, and susceptibility to it is inherited poorly. Harmful effects of tobacco, alcohol, stress, joint injuries and infections increase the risk of developing the disease. In 2019 alone, according to the Center for Medical Statistics of the Ministry of Health of Ukraine, 19,152 people with this diagnosis were discharged from the hospital. Therapy is comprehensive, but the main drugs to relieve pain are nonsteroidal anti-inflammatory drugs.

Aim. Prove the need to develop a new extemporaneous drug with meloxicam in the form of a gel for the local treatment of rheumatoid arthritis.

Material and methods. Within the framework of the conducted work the materials of articles from scientific journals, irregular editions, and also educational literature were used. The

article concerning confirmation of local action of meloxicam and its working concentrations is investigated «Pharmacokinetic studies of meloxicam following oral and transdermal administration in Beagle dogs» Authors: Yue Yuan, Xiao-yan Chen et al.

Result and discussion. The main problem with nonsteroidal anti-inflammatory drugs is the side effects on the gastrointestinal tract. To reduce side effects on other body systems, it is advisable to use selective cyclooxygenase-2 inhibitors as active ingredients, namely meloxicam. Meloxicam - NSAID derivative of inolic acid, has anti-inflammatory, analgesic and antipyretic effects. The mechanism of action is the selective inhibition of prostaglandins - mediators of inflammation. Due to the constant inflammatory process that occurs in the joints, the patient experiences severe pain, so the use of NSAIDs occurs regularly. This causes new problems due to the side effects of drugs. Injections are also not the best treatment, as not all NSAIDs can be transfused due to their haemotoxicity. Therefore, the least side effect will be from transdermal delivery to the target tissues, which in turn will reduce the unwanted side effects of meloxicam on the body.

Conclusions. Thus, it is important to develop a new extemporaneous drug in the form of a gel with meloxicam for the local treatment of rheumatoid arthritis.

RATIONALE OF THE OINTMENT WITH REPARATIVE ACTIVITY DEVELOPMENT

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Introduction. Wound healing is an intricate process where the skin (or another organ-tissue) repairs itself after injury. In normal skin, the epidermis (outermost layer) and dermis (inner or deeper layer) exist in a steady-state equilibrium, forming a protective barrier against the external environment. Once the protective barrier is broken, the normal (physiologic) process of wound healing is immediately set in motion. The classic model of wound healing is divided into three or four sequential, yet overlapping, phases: hemostasis (not considered a phase by some authors), inflammation, proliferation and remodeling. At all stages of wound healing process, it is recommended to use substances that support the normal functioning of cells, including their enhanced nutrition. Starting from the stage of inflammation - stimulating wound healing.

Aim. The purpose of the work was to rationale of the ointment development with reparative activity.

Materials and methods. Database of scientific articles and Internet resources were used for search materials. During the work, the following research methods were used: search, analytical, synthetic and descriptive.

Results and discussion. Dexpanthenol is a derivative of pantothenic acid, which is involved in the process of acetylation in gluconeogenesis, the release of energy from carbohydrates, the synthesis and breakdown of fatty acids, the synthesis of sterols and steroid hormones, acetylcholine and other substances. Dexpanthenol is rapidly adsorbed when applied to the skin, converted to pantothenic acid and enters the reserve of endogenous pantothenic acid. The development of wound processes causes an increased need for pantothenic acid, and its lack in the skin can be compensated by topical application of Dexpanthenol. In addition, Dexpanthenol has an immunomodulatory effect, by stimulating the functional activity of neutrophilic granules increases