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

tissue resistance, prevents abnormal proliferation and differentiation of fibroblasts with the formation of hypertrophic and keloid scars.

Conclusions. Despite the progress made in the treatment of purulent-inflammatory processes, including combined ointments, it should be pointed that the creation of new semisolid MF with substances that stimulate reparative processes remains relevant.

NEW DRUG FOR SUBLINGUAL APPLICATION

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Introduction. Sublingual (under the tongue) administration of drugs is based on the fact that the mucous membrane of the oral cavity has a rich blood supply, especially in the area of the tongue and its root. This administration of drugs ensures their rapid entry into the systemic bloodstream, bypassing the liver, with a high degree of bioavailability and accordingly the rapid development of the therapeutic effect. Preparations for sublingual use belong to different pharmacological groups, namely inorganic salts, monosaccharides, amino acids and other low molecular weight organic compounds, that have different spectra of therapeutic action.

The clear representatives of these are drugs, which based on glycine. Chemical structure of glycine is a common substitute aliphatic amino acid, which synthesizes in the body of every person. Glycine ingests through the gastrointestinal tract firstly to the the liver with the bloodstream, where it is used for protein synthesis. When glycine is used sublingually, it is absorbed into the bloodstream and enters the brain immediately. Under the action of glycine, neurons produce less glutamic acid, which has a "stimulating" effect, and more - gamma-aminobutyric acid, which exhibits "inhibitory" activity, including pregnant women.

In developing of the new drug for the prevention of negative effects on the hormonal status of pregnant women of various etiologies, primarily stress, it was proposed to use in its composition as a second active ingredient - glycine.

Therefore, an important step in the development was finding out about the technology of obtaining a dosage form for sublingual use.

Aim. Identify the technological aspects of creating a tool in the form of sublingual tablets.

Materials and methods. Object – a new drug, which based on glycine for sublingual use. Methods - pharmaceutical technology.

Results and discussions. It is known that under conditions of sublingual administration, it is important to evenly and completely absorb the appropriate dosage form, otherwise the flow of active substance into the blood decreases and the effectiveness of therapy decreases.

To achieve such decomposition is possible by using one or more excipients. The choice should be made among organic compounds, possibly in the form of hydrates, namely dextrose monohydrate, maltodextrin, lactose monohydrate, dextrin, mannitol, sorbitol, xylitol, sucrose and lactose, in an amount of 15 to 75% by weight.

A necessary requirement for sublingual tablets is the addition of a component that absorbs liquid upon contact in a liquid medium and promotes disintegration. The water-swellable excipient may be selected from superdisintegrants such as crospovidone, croscarmellose, sodium starch glycolate, cellulose derivatives (microcrystalline cellulose), starch, alginic acid and inorganic clays (approximately bentonite, aluminosite from aluminosilicates). up to 5% of the total weight of the tablet.