

pharmaceutical activity of the pharmacy, sites pharmacies, which produce an extemporaneous drugs and information which are in the methodical recommendations «Extemporaneous formulation».

Among analyzed prescriptions, the largest share is taken by semi-solid drugs, namely, liniments. Among the active ingredients, the most common are: local anesthetics, irritating and anti-inflammatory substances. This is due to the clinical manifestations of arthritis and other diseases of the musculoskeletal system.

Aim. In this aspect, the aim of our research was to improve the composition of the extemporaneous ointment for local treatment of arthritis.

Materials and methods. As a research object, a multicomponent ointment was selected which, due to its composition, has antimicrobial, anti-inflammatory and analgesic effects. The carrier functions are performed by the lanolin-vaseline base, which has a number of disadvantages, namely, does not provide sufficient release of the active ingredient from the composition, does not contribute to the penetration of active ingredients into the tissues.

One of the main criteria for the effectiveness of ointment is the degree of release of the drug. Therefore, the strengthening of penetrating ability for external dosage forms, in our opinion, is very important.

In our opinion, for the intended enhancement of the penetration effect, it is advisable to introduce into the composition of the chosen composition dimethyl sulfoxide, which, along with anti-inflammatory activity, is a penetrator and does not have pronounced side effects in skin applications in a concentration of up to 40%.

In order to justify the type of basis and the expediency of introducing dimexid into the ointment, we conducted biopharmaceutical studies of model specimens of ointments by diffusion into agar gel method.

As penetrating components, propylene glycol and polyethylene oxide-400 were also used.

Taking into account the solubility of the active components, samples, which contain dimethyl sulfoxide, were injected in dissolved form, and in the other by the type of suspension.

Due to the fact that the selected penetrators do not mix with vaseline, emulsifiers were introduced into the model specimens.

Results and discussion. The degree of diffusion of salicylic acid from the samples studied was determined by the diameter of the colored zone formed during its interaction with the solution of iron oxide chloride introduced into the agar gel. The diameter of the painted area was measured every hour for 6 hours. and after 24 hours.

The obtained results indicate that the introduction of dimethyl sulfoxide into the ointment has led to a significant increase in the diameter of the colored zone, which makes it advisable to use it as a penetrator and activator of absorption of active substances. The highest rate of release is ensured by the use of the emulsifier # 1 to obtain the emulsion o/w.

In the development of ointment technology, we investigated the effect on the quality of the ointment of the following factors: the method of administration of active components; mixing sequence of ointment components; temperature regime.

Conclusions. Thus, the conducted studies have proven the feasibility of introducing into the ointment an absorption activator – dimethyl sulfoxide. This allowed to increase the release of active substances. The technology of the ointment of the improved composition in the conditions of the pharmacy is substantiated.

IMPROVING THE TECHNOLOGY OF EXTEMPORAL OIL SUSPENSION

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Introduction. One of the main advantages of thermal recipes is the ability to rationally combine drugs. Another advantage is that pharmacotherapy in terms of the bioavailability of medicinal substances from finished medicinal products is inferior to medicinal forms prepared in pharmacies (solutions, aqueous extracts, mixtures), suppositories.

Aim. Improvement of the technology of extemporaneous oil suspension to increase the bioavailability of the drug.

Materials and methods. The object of our research was the extemporal suspension of Anestezin and Norsulfazol in Vaseline oil. Technological and biopharmaceutical research methods.

Results and discussion. The active pharmaceutical ingredients in this suspension are not soluble in the prescribed solvent, Vaseline oil. Therefore, a suspension system formed. To increase the bioavailability of drugs it is necessary to grind them as much as possible and distribute them evenly in the oil. Therefore, we have suggested crushing with ethanol. Smaller particles obtained. This increases stability of the suspension.

It known from the literature that the bioavailability of drugs is better from vegetable oils than from Vaseline oil. We have prepared a suspension with norsulfazole and anesthetic with sunflower oil.

Then we carried out biopharmaceutical studies. The release of anesthesia into agar investigated. These studies have shown that the fastest release occurs from suspensions in which the substances have been ground with 10 drops of ethanol. More release was from the suspensions prepared with sunflower oil.

The suspensions were stored for 1 month at room temperature. During the whole period of observation biopharmaceutical studies gave reproducible results. This fact confirms the stability of the suspension.

Conclusions. The technology of extemporaneous dental suspension has improved. Pre-shredding of drugs with ethanol proposed. Preparation with sunflower oil is proposed. According to the new, improved technology and with the use of sunflower oil suspension with Norsulfazol and Anestezin is prepared. A more complete release of drugs from the new suspension by biopharmaceutical research has established. The stability of the suspension in the process of preservation for 1 month at room temperature studied.

STUDY OF ASSORTMENT OF MEDICAL PREPARATIONS FOR TREATMENT OF DEMODECOSIS

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Introduction. The mite of the genus Demodex is absolutely in each person and this disease affects about 65% of the population of the Earth, there is no specific cause of the disease, the symptoms of demodicosis can be confused with the symptoms of other skin diseases. To date, the problem of treatment and rehabilitation of patients with demodex is very relevant, as there is an increase in morbidity among people of working age. As a result of the chronic inflammatory process on the face of the skin formed defects resistant to most methods of external therapy and cosmetic correction. Cosmetic defects affect the socio-psychological state of the person, often cause depression, reduce the quality of life of patients, which makes this problem relevant not only in the medical, but also in the social aspect. There are many direction of pharmacotherapy of demodicosis, among which are etiotropic and symptomatic therapy. The treatment of demodicosis is prescribed by the physician individually (depending on the form and severity of the course of the disease). For effective treatment, a combination of systemic and topical drugs is used (for example, a combination of Trihopol antibiotic with "Ichthyol" ointment).

The aim of our research was to carry out an analysis of the range of medicinal products presented in the pharmaceutical market of Ukraine, which are intended for local treatment of demodicosis.

Materials and methods. The analysis of the range of drugs was carried out using the electronic information retrieval system of the electronic version of the State Register of Medicinal Products of Ukraine.

Results and discussion. Today, domestic and foreign medicines are used in the pharmaceutical market of Ukraine for the treatment of demodicosis. The share of foreign producers is 69%. The range of medicines for the treatment of demodicosis is presented as traditional pharmaceutical forms with solutions, creams, pills, ointments, and newer forms in the form of gels, emulsions. Cosmetic products for the treatment of demodicosis are creams, lotions, gels, emulsions, suspensions.

Basic preparations for the treatment of demodicosis of the face: