

TECHNOLOGICAL ASPECTS OF THE CREATION OF EXTEMPORANEOUS OINTMENT FOR THE TREATMENT OF PSORIASIS

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Introduction. Psoriasis occupies one of the first places among various diseases in dermatology. It is a system chronic disease that strikes a skin and joints mainly. Without regard to long-term researches and enormous amount of theories of reason of psoriasis origin is not educed. The compatible clinical protocol of medicare is used in Ukraine, in that certain schemes of applied medications of therapy for treatment of psoriasis is certain, such as: anti-rheumatic medicines, non-steroid anti-inflammatory medicines and others. But the state of problem of psoriasis gets worse, that's why a search of new medicines for local treatment of psoriasis as ointment is actual.

Aim. Development of the composition and technology of extemporal ointment on the emulsion base for the treatment of psoriasis.

Materials and methods. For the decision of the tasks of our work such methods have been applied: physical-chemical (structural-mechanical and osmotic) and chemical.

Results and discussion. The preliminary conducted analysis of assortment of ointment bases showed that for the treatment of psoriasis it is necessary to use emulsion base that is most acceptable to treatment of this pathology from the medical-biological point of view. As a hydrophilic phase of emulsion base a water extracts of herbs matricaria and beggars-ticks are used that shows anti-inflammatory, regenerative and antiseptic action. Extemporal emulsion base was prepared according to general rules of preparation of emulsion ointments by the method of inversion of phases. The results of researches allowed to choose the rational composition. On the basis of analysis of literary data and interview with doctors-dermatologists the most active pharmaceutical ingredients are select: salicylic acid, zinc oxide, tar, sulphur. The technological process of the ointment's samples preparation was carried out according to the generally accepted rules by preparations of ointments, taking into account a nature and physical and chemical properties of medicinal and auxiliary substances. For the purpose of grounding of the temperature conditions of the ointment preparation and choice of emulsifier the structural-mechanical researches have been studied.

Conclusions. On the basis of investigations, the extemporal emulsion base in the composition of that introducing a water extracts of herbs matricaria and beggars-ticks has been developed. Extemporal ointment for the treatment of psoriasis with salicylic acid, zinc oxide, tar and sulphur has been developed on the selected emulsion base.

DEVELOPMENT OF THE COMPOSITION OF WOUND HEALING WIPES BASED ON DENSE EXTRACT OF OAK BARK

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Introduction. Treatment of extensive wounds and burns requires an integrated approach aimed at both preventing contamination of the wound or suppressing the development of pathogenic microorganisms, and creating an optimal environment for the further healing.

According to traditional approaches, the direction of treatment and the choice of the optimal drug in a suitable dosage form is determined depending on the phase of the wound process. One of the most important methods of treating wounds is the application of bandages, the purpose of which is different in each of the phases. In the phase of inflammation, the dressing should protect the wound from contamination and damage, have high drainage properties and, due to the applied medicines, have an antimicrobial, anti-inflammatory effect. In the regeneration phase, the ability of the dressing to exert an antimicrobial effect and provide regenerative processes in the wound without injuring the

young granulation tissue is important.

In practice, all the phases of the wound process proceed consecutively and inseparably, passing into each other, and the duration of each phase can not be predicted accurately. The impossibility of a clear delineation of the end of the inflammation phase and the beginning of the granulation phase necessitates the development of new pharmacologically active dressings that have a complex of therapeutic properties: anti-exudative, antimicrobial and anti-inflammatory activity.

Aim. The purpose of this work was to develop the composition and technology of wound healing wipes based on dense extract of oak bark (DEOB), developed at the department of technology of drugs.

Materials and methods. Textile nonwoven materials which are allowed for use in medical practice, was used as the carrier of new wipes. They are highly absorbent, have a high gas exchange rate, do not cause irritation when applied.

Results and discussion. In order to provide a wide range of activities, it was advisable to introduce sodium alginate into the solution for saturation, which has hemostatic and wound healing properties. Sodium alginate is also used in pharmacy as a thickener and gel formulation agent. Therefore, in order to immobilize the DEOB on the wipes, we chose the method of applying the DEOB as the alginate hydrogel composition. Taking into account the technological properties of sodium alginate, namely very slow dissolution in water with the formation of a viscous colloidal solution, we investigated the dependence of the dissolution process on the presence of difference auxiliary substances. Taking into account the appointment of dressings, PEO-400 was chosen as an excipient, which has the highest osmotic activity. The optimal concentration of PEO-400 was set at a level that would significantly increase the rate of dissolution of sodium alginate. An optimal temperature of dissolution of sodium alginate is also established. Based on the study of the antimicrobial activity of the model samples, an optimal concentration of DEOB in alginate hydrogel was studied.

Conclusions. Based on the obtained results the composition of wipes, which have antimicrobial, hemostatic, antiexudative, wound healing activity, is theoretically and experimentally substantiated.

CHOICE OF EXCIPIENTS FOR PIROXICAM FAST DISSOLVING TABLETS

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Introduction. Piroxicam, 4-hydroxy-2-methyl-N-(2-pyridyl)-2H-1,2-benzothiazine-3-carboxamide-1,1-dioxide) belongs to the class of nonsteroidal antiinflammatory drugs (NSAIDs). Piroxicam is the frequently prescribed NSAIDs for the treatment of inflammation, pain and stiffness caused by rheumatoid arthritis, osteoarthritis and gout disease. Piroxicam's benefits still outweigh its risks. Piroxicam is characterized by good absorption when taken orally. After a single application, the effect is almost 24 hours, which allow taking piroxicam, depending on up to 1-2 times a day. The convenience of use is one of the factors that determines the compliance of patients with treatment, on which the success of therapy depends significantly. Modern dosage forms as fast dissolving tablets disintegrate rapidly in saliva without the need of swallowing with drinking water since the tablet is placed in the mouth. Traveling patients who can not have access to water are benefitted by such solid dosage form.

Aim. The choice of excipients for the development of fast dissolving tablets composition with piroxicam was the aim of this research work.

Materials and methods. Piroxicam, excipients, mixtures for compression and prepared tablets on their basis were research subject. The pharmaco-technological tests which presented in State pharmacopoeia of Ukraine were used for experiments.

Results and discussion. The most common method of fast dissolving tablets obtaining is the compression method. Analysis of literature data indicates that no changes in the properties of piroxicam in