

Zinc-ihthiolovaya paste – a combined medicinal product that provides bactericidal and astringent action (it is necessary to apply it on the cleansed face once or twice a day);

«Metrogyl gel» (on the basis of metronidazole) – a remedy with pronounced anti-demodic activity, which must be applied to the affected areas of the skin twice a day;

Sulfoedecortem (a hormonal ointment of demodicosis, consisting of sulfur and hydrocortisone) – a drug combination that suppresses the activity of the tick and provide anti-inflammatory effect (helps remove excess horny layer of the epidermis, allowed to use for no more than two weeks, after which you need to take a break).

Systemic drug preparations are represented by antibiotics. The most commonly used metronidazole, which is a derivative of the nitroimidazole group. Metronidazole has a pronounced anti-inflammatory, anti-edema, immunomodulatory effect. Another drug of choice is ornidazole. The drug has both antiparasitic and bacteriostatic effects, increases the activity of neutrophils, stimulates adrenergic structures, enhances reparative processes.

Conclusions. Thus, it has been established that the range of medicinal products for the treatment of demodicosis is represented predominantly by foreign manufacturers on the basis of substances of synthetic origin. Taking into account the above, the expansion of the range is due to the creation of new domestic medicinal products of combined action.

THE DEVELOPMENT OF EXTEMPORANEOUS GEL OF ANTIMYCOTIC ACTION WITH TERBINAFINE HYDROCHLORIDE AND TEA TREE ESSENTIAL OIL

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Introduction. According to large epidemiological studies conducted in the European Union, mycoses of smooth skin make up about 2%, and mycoses of feet and onychomycosis account for 22% of the reasons for seeking medical attention. Combined antifungal medicines for local therapy of mycoses are very popular today.

The **aim** of this work is the development of extemporaneous gel of antimycotic action with terbinafine and tea tree essential oil.

Materials and methods. As the objects of research were used: terbinafine hydrochloride, tea tree essential oil, various hydrophilic non-aqueous solvents, gelling agents and neutralizers. Organoleptic, physical-chemical and microbiological properties of model gel's samples by the methods of State Pharmacopoeia of Ukraine were determined.

Results and Discussion. As active pharmaceutical ingredients of extemporaneous antimycotic gel terbinafine hydrochloride and tea tree essential oil have been chosen. In order to justify their rational concentration in the composition of the investigated gel were conducted microbiological researches. As rational concentration of active ingredients of the gel were chosen the following: terbinafine hydrochloride – 0.5%, essential oil of tea tree – 1.5%. In order to substantiate the type of gelling agent and its concentration, the following compounds were obtained: five gelling agents with concentrations from 1.0 to 3.0%, terbinafine was introduced into the samples as a solution in propylene glycol, and tea tree essential oil as a solution in ethanol. Based on the research conducted for further study were taken gel's samples with Carbopol 940. Considering all experimental data, we have conducted research on the development of rational technology of extemporaneous antimycotic gel. The gel obtained according to the developed technology has uniform consistency with a specific pleasant smell, while color, pH 5.5-6.0.

Conclusions. The composition of extemporaneous antimycotic gel was experimentally substantiated. Based on microbiological, technological and physical-chemical researches rational technology of the proposed gel was developed. The stability of the developed medicine during storage (3 months at two temperature regimens of 8-15°C and 15-25°C) was studied. Research of microbiological purity established the compliance of the proposed gel to requirements for soft medicines for topical application.