

by API, the purposeful nature of API biotransformation and the necessary pharmacotherapeutic action is provided by the ointment base. Therefore, at present, much attention is paid to the development of new bases that have valuable properties and meet the purpose of soft dosage forms, the main ones are osmotic activity and biological acceptability, which determine the effective biotransformation of API.

Perspectives of creation of pessaries with antifungal activity

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Introduction. In recent years, the frequency of detection of candidiasis has increased by 2 times, the number of chronic and often recurrent forms of fungal damage to the vagina has increased. Thus, about 75% of women endure at least one episode of vaginal candidiasis (VK) during their lifetime, and 40-50% of them develop at least one relapse [2,4]. The causative agent of the disease is yeast-like fungi of the genus *Candida*. These fungi are unicellular aerobic microorganisms of 1.5 to 10 microns in size. The factors predisposing to the development of candidiasis are quite diverse: intoxication, neoplasms, metabolic disorders and other diseases leading to the development of immunodeficiency conditions. Most patients have got candidiasis secondarily.

However, it should be remembered that candidiasis in most cases develops in association with other microorganisms and should be considered as a polyethylene-friendly disease [6]. Therefore, the issues of finding rational therapy for candidiasis remain relevant.

Vaginal drugs are important and widely used in the complex treatment of mixed urogenital infections. Their advantages are obvious - the drugs provide a rational combination of various pharmacological effects of substances that reduce the undesirable side effects of individual ingredients; the optimal base-carrier is selected, which creates the possibility of uniform distribution of composition on the mucous membranes, taking into account the anatomical and physiological characteristics of the urogenital organs. Treatment of vaginal candidiasis is etiological and includes the use of vaginal antifungal drugs [7]. The pharmaceutical market of Ukraine is represented by medicines based on synthetic substances that have a significant number of side effects and a high level of resistance.

Extemporal production of drugs makes possible an individual approach to the patient, which allows you to take into account the characteristics of the body, the course of the disease, symptoms, the disease and its stage. This is the main principle and advantage of the manufacture of drugs "ex tempore." Therefore, the creation of extemporal combined drugs for vaginal use based on substances

of synthetic and natural origin will largely solve the above-mentioned problem, which in turn will improve the reproductive health and quality of life of women.

Purpose of the research. Justification of the development of the composition of combined pessaries for the treatment of vaginal candidiasis.

Materials and methods. In order to develop extemporal vaginal antifungal suppositories, the following methods were used: literature review, marketing analysis of the pharmaceutical market, statistical methods of analysis. Research objects: vaginal suppositories, fluconazole, suppository bases, fatty oils.

Obtained results. After analyzing the data of the State Register of Drugs it was established that about 108 vaginal drugs were presented on the pharmaceutical market of Ukraine. Suppositories (pessaries) make up the largest share - 45.2%, vaginal tablets - about 36.2%, creams - 9.4%, capsules - almost 5%, gels - 2.7% [1]. The basis of the studied nomenclature of drugs is 81.2% of foreign production facilities (these are pharmaceutical companies of Western Europe and India) and only 28.6% of vaginal dosage forms of domestic production.

Pessaries are the most convenient form for use, because they provide a direct effect on the focus of inflammation, due to the rather high intensity of penetration of medicinal substances into the tissues of the urogenital organs.

According to the literature in the treatment of vaginal candidiasis, the effectiveness of clotrimazole is 70-82%, miconazole 80%, ketoconazole 68%, econazole 86.7%, fluconazole 94.2%. The bioavailability of fluconazole is high and reaches 94% [5]. That is, the most effective substance in the treatment of vaginal candidiasis is fluconazole. In the Ukrainian market there are not enough combined drugs based on fluconazole, which would have a wide range of pharmacological effects and minimal side effects.

To increase pharmacological action in the treatment of vaginal candidiasis and mitigate side effects, we proposed to introduce in the composition of the combined drug (pessaries) in addition to fluconazole - fatty oils. One of the promising fatty oils is amaranth. The source of this oil is the grain of the same name plant, in its fatty acid composition amaranth oil is close to corn - both products contain more than 50% linoleic acid. A specific and unique component of amaranth oil are the following components: vitamin E (it is considered an effective antioxidant), the second is squalene, which is a mandatory component of human skin and is actively involved in the synthesis of steroids and triterpenes, including hormones and vitamin D.

Conclusions. The analysis of the market of medicines for the treatment of vaginal candidiasis showed the prospect of creating a dosage form in the form of pessaries, which include fluconazole and amaranth oil. Also, according to the results of microbiological screening of model samples of pessaries with fluconazole and amaranth oil, synergistic action was established.

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The researches in the field of perspective development dosage forms based on Inosin pranobex

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Introduction. Perspectives of development of pharmaceutical technology are closely connected with the influence of scientific and technological progress. On the basis of the latest scientific discoveries, fundamentally new, more perfect and productive technological processes are created, which sharply increase labor productivity and improve the quality of finished products. The technology has a significant impact on the future economic performance of production, requires the development of little operational, resource-saving and waste-free processes, their maximum mechanization, automation and computerization [1,3,7,8,9].

The progress of modern pharmacy and clinical medicine is largely determined by both the discovery of new biologically active substances and the expansion of the possibilities and prospects for the use of well-known and popular medicines. This is especially relevant for pharmacotherapy, which is largely due to the growing importance of pathology as one of the leading causes of morbidity. [2,5,7].

Upper respiratory tract infections are the most common acute illness with a high risk of complications in children. According to experts from the World Health Organization, 4 million children under the age of 5 die annually from SARS and their complications in the world. The