

UDC: 615.014.2:615.454.2:615.281.8:618.1

**RESEARCHES ON CREATION OF THE NEW COMBINED MEDICINE IN
FORM OF PESSARIES FOR THERAPY OF VIRAL GYNECOLOGICAL
DISEASES**

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Resume: Nowadays treatment of the genital herpes, that provoke a lot of problems with reproductive women's health, is actual and vital problem in gynaecology. Viruses of simple herpes infected approximately till 90 % of the adult and children's population of the planet.

Most widely used medicines for the treatment of herpetic genital herpes are acyclovir, famtsiklovir, valatsiklovir. But use of drugs on the basis of the substances only of the synthetic nature has the following disadvantages: violations of a normal biocenosis, high risk of emergence of side effects etc. The range of medicines of plant origin for treatment herpes virus infections in gynecology is limited.

Thus, creation of the new combined medicines local actions on the basis of substance of synthetic origin - acyclovir and natural substances for treatment of a genital form of a herpetic infection is relevant.

Key words: genital herpes, pessaries, essential oils, antiviral, acyclovir

Genital herpes (GH) among diseases which are transmitted sexually takes the second place by the prevalence after trichomoniasis. According to statistical data only in the USA the carrier of this virus is each 4-6 resident of the country. Viruses of simple herpes infected 65-90% of the adult and children's population of the planet. About 33% infected with the virus of simple herpes (VSH) have genital herpes, and it occurs among women of reproductive age in 7-40% of observations [7, p. 604]. In this regard active search of antigerpetic drugs which led to creation of group of abnormal nucleosides and its derivatives is conducted.

At GH treatment is used antiviral therapy, an immunotherapy and a combination of these methods depending on phases and disease severity.

Treatment of GH is carried out in two directions: Slowing down of replication of a virus and stimulation of specific and nonspecific resistance of an organism. Nowadays, for treatment of a genital herpetic infection medicines which inhibit virus DNA replication are used: acyclovir, famtsiklovir, valatsiklovir [4, p. 122]. GH is the second direction of complex treatment of immune correction. Carry out induction for synthesis of interferones IFN (cycloferone, neovir, amiksin) or appoint medicines of this group (viferon, reaferon, roferon and, leykinferon) and also immunomodulators [1, p. 18]. All this allows to reduce clinical manifestations, to considerably reduce the frequency and duration of a recurrence of the illness.

The modern range of antiviral medicines of synthetic origin for system treatment of GH, in particular in the form of tablets, is very wide. But use of drugs on the basis of the active pharmaceutical ingredients (API) only of the synthetic nature has the following disadvantages: violations of a normal biocenosis, development of individual resistance, high risk of emergence of side effects, allergic reactions and so on [2,

p. 182]. The range of medicines of plant origin for treatment herpes virus infections in gynecology is limited. The analysis of the pharmaceutical market of medicinal forms of local action for treatment of GH showed that it is almost absent [3, p. 2035]. The most rational is local therapy because system use of antibacterial medicines quite

often is followed by development of a number of the side effects which are absent at local application of the same means.

For creation of the combined antiviral drugs synthetic substances, in particular "the gold standard" treatment of a herpetic infection - acyclovir and also herbs which have essential oils in its composition, having antiviral properties are perspective.

Thus, creation of the new combined medicines local actions on the basis of substance of synthetic origin - acyclovir and natural substances for treatment of a genital form of a herpetic infection is relevant.

Administration of medicines is locally directed to the intravaginal area and provides their pharmacological action on the center of inflammatory process, decrease in degree and frequency of manifestation of undesirable side effects, prevention disactivating effects of enzymes of digestive tract and a liver.

Introduction of essential oils to composition of pessaries is caused by the infections caused by resistant strains gerpetic infections and also mixed infections, in particular, by accompanying Candida infection. Essential oils also provide pessaries with an effective preserving action [6, p. 79]. Essential oils of Tea tree and a Thyme strengthen antiviral effect of the offered medicine that is proved by us experimentally in laboratory of experimental chemotherapy of viral infections SU "Institute of epidemiology and infectious diseases of L.V. Gromashevsky".

Concentration of essential oils proved by a microbiological method on the basis of laboratory of biochemistry of microorganisms and the SU nutrient mediums "Institute of microbiology and immunology of I. Mechnikov ". Varied the content of essential oils in samples of medicine from 2.5% to 7.5%.

On the basis of the executed pharmacological researches it is proved that developed medicinal remedy (MR) in shape of pessaries with acyclovir and essential oils and effective prophylactic on experimental model of a herpetic infection of 2 type in guinea pigs are active inhibitor of a reproduction of a virus of herpes.

For the first time with use of modern methods of the analysis of MR it is developed techniques of high-quality and quantitative definition of acyclovir and essential oils in pessaries by methods of a spectrofotometry [8, p.357]and a gas chromatography

respectively. It is developed a technique of definition of accompanying impurity by method of a highly effective liquid chromatography. It is experimentally established stability of the developed medicine at storage within two years at a temperature of 8-15 with in PVC to a film.

The novelty of a research is protected by patents of Ukraine for invention No 115476 and for useful model No 107464 "Pharmaceutical composition in the form of suppositories (pessaries) for treatment and prevention of a genital form of herpetic infection" [5, p. 6].

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