

CLINICAL AND IMMUNOLOGICAL EFFECTS OF GROPRINOSIN IN VIRAL INFECTIONS

Oripova J.N.

assistant department of infectious diseases Andijan State Medical Institute

Uzbekistan, Andijan

Summary: In recent years, one of the leading places in the genesis of premature termination of pregnancy is occupied by viral infections, among which herpetic infections dominate. The etiological role of herpesvirus infection caused by herpes simplex virus (HSV-1) and cytomegalovirus (CMV) in recurrent miscarriage has been proven. According to a number of authors, the main pathogenetic link in spontaneous miscarriages is an imbalance in the immune system and, as a result, activation of the replication activity of HSV and generalization of infection with damage to the placenta and fetus.

Key words: Human immunodeficiency virus, intrauterine infection, herpes simplex virus, blood-brain barrier, iron deficiency anemia.

КЛИНИЧЕСКИЕ И ИММУНОЛОГИЧЕСКИЕ ЭФФЕКТЫ ГРОПРИНОСИНА ПРИ ВИРУСНЫХ ИНФЕКЦИЯХ

Орипова Ж.Н.

ассистент

кафедра инфекционных болезней Андijanский государственный медицинский институт

Узбекистан, Андijan

Резюме: В последние годы одно из ведущих мест в генезе преждевременного прерывания беременности занимают вирусные инфекции, среди которых доминируют герпетические инфекции. Доказана этиологическая роль герпесвирусной инфекции, обусловленной вирусом простого герпеса (ВПГ-1) и цитомегаловирусом (ЦМВ) в привычном невынашивании беременности. По мнению ряда авторов, основным патогенетическим звеном самопроизвольных выкидышей является дисбаланс в иммунной системе и, как следствие, активизация репликационной активности ВПГ и генерализация инфекции с поражением плаценты и плода.

Ключевые слова: Вирус иммунодефицита человека, внутриутробная инфекция, вирус простого герпеса, гематоэнцефальный барьер, железодефицитная анемия.

Relevance. Despite the great progress of modern medicine, the problem of habitual miscarriage (HM) in viral infections remains relevant.

Herpes virus infection (HVI) in patients with HM often occurs in a subclinical form, has no characteristic clinical manifestations, which complicates its diagnosis, and antiviral treatment is necessary. The existing number of chemotherapeutic drugs with antiherpetic activity quickly and effectively relieve acute manifestations of simple herpes, without preventing relapses of chronic herpes virus infection, which necessitates the search for new effective methods of treatment.

In this regard, it is of scientific and practical interest to study the mechanisms of antiviral and immunomodulatory drugs on viral infections, including herpes virus infection, as well as to study the effect of drugs on the cytokine profile in women with habitual pregnancy losses against the background of HVI and persistent ineffectiveness of previously conducted treatment measures.

Purpose of the study. Study of antiviral and immunomodulatory effect of groprinosin in patients with habitual miscarriage of viral genesis (HSV).

Materials and methods of the study. The clinical part of the work was carried out at the Department of Infectious Diseases and Epidemiology of the Altai State Medical Institute, Department 4 based on the Andijan Regional Infectious Diseases Hospital. The prospective group consisted of 50 non-pregnant women, including 27 patients (the main group) with recurrent herpesvirus infection (HSV-1). Patients of the main group (27 women) underwent complex treatment with groprinosin. The comparison group consisted of 23 patients with a history of RMP and recurrent HSV, who received complex treatment with acyclovir (group 2) and 10 conditionally healthy women without clinical manifestations of infections caused by HSV (control group).

Methods of clinical examination included collection of anamnestic data, general examination, special gynecological examination. All patients underwent clinical and biochemical blood tests, coagulogram, urine analysis, blood group, Rh factor, HIV, HBsAg, HCV determination; PCR diagnostics of sexually transmitted infections, determination of HSV antibodies (IgG and IgM) in the blood; ultrasound examination of the internal genital organs. All patients had peripheral blood taken before treatment and after completion of the course of treatment (18-20 days) to study immunological parameters. All patients were provided with written information about the drug before the study, the essence of the study, its purpose and the health risks associated with participation in the study were explained. Before the study, the patient signed an informed consent form confirming her voluntary participation.

If the avidity index (AI) of the studied serum is less than 30%, the serum contains low-avidity antibodies, which indicates a primary infection that occurred on average 3 months ago. Serum AI of 30-50% indicates a primary infection that occurred on average 3 to 5 months ago. AI over 50% indicates high-avidity antibodies, i.e. a long-standing infection.

Results and discussion. Clinical analysis revealed that the age of patients in the study groups did not differ significantly, ranged from 18 to 35 years and averaged 25.8 ± 4.0 years, which corresponded to the most active period of female reproductive function.

When studying the medical history of the examined women, it was found that 100% (27) of the women in the main group had acute respiratory viral infections (ARVI). Frequent catarrhal

phenomena of the upper respiratory tract were found in 88.8% (24) of the women, acute bronchitis was observed in 66.6% (18) of the women, infectious diseases were suffered by 8.6% (3) of the women. Diseases of the pelvic organs were observed in 51.4% (18) of the women.

In the women of the comparative group, 100% (23) of the women had acute respiratory viral infections from the medical history. Frequent catarrhal phenomena of the upper respiratory tract were found in 60.6% (20) of the women, acute bronchitis was observed in 73.9% (17) of the women, infectious diseases were suffered by 12.1% (4) of the women. Diseases of the pelvic organs were observed in 45.5% (15) of the women. Statistical data processing revealed differences in the frequency of relapses and the duration of exacerbations of acute respiratory infections (ARVI), with herpesvirus infection in patients of the main group (HSV). In women with habitual miscarriage, the frequency of relapses per year was statistically significantly higher than in patients without miscarriage (5.4 ± 1.2 and 2.9 ± 1.1 , respectively). Evaluation of the obstetric history revealed that in the control group, the number of spontaneous miscarriages was significantly lower than in women with RPL against the background of herpesvirus infection (the main group and the comparison group), which contributes to infection of the genital tract. Almost all the examined patients suffered from gynecological diseases. In HSV-infected patients with habitual miscarriage, the main group most often had various menstrual cycle disorders 17.1% (6), recurrent colpitis 40% (14), cervical ectopia 39.1% (9), chronic inflammatory processes of the uterine appendages 20% (7), while in the comparative group there were menstrual cycle disorders 15.2% (5), recurrent colpitis 21.2% (7), cervical ectopia 15.2% (5), chronic inflammatory processes of the uterine appendages 12.1% (4). In the main group with a complicated obstetric history, 48.6% (17) of women had spontaneous miscarriages, 20% (7) did not carry a pregnancy to term, and in the comparative group, 45.5% (15) of women had spontaneous miscarriages, 15.2% (5) did not carry a pregnancy to term.

Conclusion. Patients with RPL have a high frequency of predisposing risk factors for reproductive loss compared to the group of conditionally healthy women: the presence of recurrent (HSV) herpesvirus infection in combination with a high frequency of chronic infectious diseases, extragenital foci of infection, chronic inflammatory diseases of the genital tract and a complicated reproductive history. At the experimental stage of the study, a model of herpesvirus infection was created to study the mechanisms of the antiviral action of goprinosin, allowing to study the direct and indirect action, optimize the dose of the drug to obtain an antiherpetic effect, which was realized at a concentration. Under these experimental conditions, the titer of the virus was significantly reduced by 1.5-2 orders of magnitude.

References:

- Vetokhina E.L., Kruk A.V., Kruk N.V. Belarusian State Medical University International reviews: clinical practice and health No. 4 2014 p. 91
- D.V. Isakov, V.A. Isakov, E.A. Alekseeva Immunomodulators in the therapy and prevention of respiratory and herpesvirus infections Journal Clinical Pharmacology and Therapy 2018 No. 5
- Akovbyan V.A. Genital herpes: modern problems and ways to solve them [Text] / V.A.

Akovbyan, S.A. Masyukova, E.V. Vladimirova, A.B. Zudin, S.B. Pokrovskaya // Clinical microbiology and antimicrobial chemotherapy. 2003. - No. 1, T. 5.

Akovbyan V.A. Modern therapy of sexually transmitted diseases [Text] / V.A. Akovbyan, K.K. Borisenko // Collection of works of the VII Russian Congress of dermatologists and venereologists. Kazan, 1995. P. 126-127 5..Akovbyan V.A., Masyukova S.A., Zudin A.B. Clinical and epidemiological aspects and modern recommendations for the treatment of genital herpes. // Military Medical Journal. - 2002. - No. 12.- P. 32-37.

Aleksandrov, V.V. Data analysis on a computer (using the SITO system as an example) [Text] / V.V. Aleksandrov, A.I. Alekseev, N.D. Gorsky. Moscow: Finance and Statistics, 1990. 245 p.

Aleksandrov, V.V. Processing of medical and biological data on a computer [Text] / V.V. Alexandrov, V.S. Shneiderov. L.: Medicine, 1984. - 160 p.

Aleksakhin, S.V. Applied statistical analysis of data. Theory. Computer processing. Application areas. [Text] / S.V. Aleksakhin // In 2 volumes. - M. PRIOR, 2002. -688 p.