

EVALUATION OF THE EFFICACY OF THE USE OF INTERLEUKIN-2 WITH EXTERNAL GENITAL ENDOMETRIOSIS**Mansurova D.O.****Bukhara State Medical Institute named after Abu Ali Ibn Sina. Uzbekistan.**

ANNOTATION. The use of polyoxidonium after electrosurgery of ovarian cysts in the experiment significantly reduces the perifocal inflammatory response and hemodynamic disorders, reduces the frequency of cysts recurrence, has a protective effect on the generative and endocrine apparatus of the ovaries.

Keywords. dienogest, endometrium, ovarian cysts, hormonal and combined treatment.

At present, there has been an increase in the frequency of functional cysts (fnCs) from 11% to 25%. This is due to the increase in the number of invasive interventions, reconstructive operations on the uterus and appendages, the introduction of assisted reproductive technologies, etc. [14,16,18,20,22,25]. Many authors do not deny the role of inflammation in the formation of cysts, in which the development of the phenomena of perioophoritis, the adhesive process in the pelvic organs of various genesis is of great importance [1,3,5,7,9,11]. Surgical intervention on the ovaries reduces their functional and morphological reserve and promotes the recurrence of cysts [26,28,30]. Pathogenetically justified treatment of FNCS and prevention of their relapses can be the use of immunomodulatory and metabolic therapy. Complex therapy with polyoxidonium and mildronate potentiates each other's effect and has significantly greater clinical and immunological efficacy [2,4,6,8,10,12].

Thus, it is necessary to study the effect of immunomodulatory and metabolic therapy in FnC on the pato and morphogenesis of the ovaries. An urgent task of gynecology is to search for methods of preventing recurrent course and restoring reproductive function of women with ovarian FnC [27,29,31].

The purpose of the study: To study the morphofunctional state of the ovaries in various clinical variants of functional cysts and complex treatment with the use of immunomodulatory and metabolic drugs.

Material and methods of research. The basis of the work was a comparative study of clinical and laboratory parameters of reproductive health of 80 patients aged 15-40 years with FnC, depending on the method of treatment of functional ovarian cysts. The work was carried out in 2019-2022 in the gynecology department of the regional perinatal center of Navai. Criteria for inclusion in the study: 1) the patient's written consent to this study; 2) somatically healthy women of reproductive age with normoprolactinemia; 3) the presence of cystic ovarian formations; 4) the presence of concomitant gynecological pathology (infertility, inflammatory diseases of the uterine appendages in the anamnesis, adhesive process of the pelvis, endometriosis). Exclusion criteria: 1) non-compliance with the inclusion criteria; 2) hypothalamic syndrome, adrenal cortex hyperplasia, thyroid pathology; 3) concomitant gynecological pathology requiring organ-bearing surgery; 4) extragenital pathology revealed during the examination, accompanied by immune and endocrine disorders; Depending on the clinical course and the complex of therapeutic measures, both the main group (I) and the comparison group (II) were divided into two subgroups by the numbered envelope method: Ia (n=20) - patients with uncomplicated clinical course who underwent conservative treatment: basic therapy (antibacterial, nonsteroidal anti-inflammatory drugs, antispasmodics) and the purpose of mildronate and polyoxidonium; 16 (n=20) - patients with complicated clinical course of functional cysts who underwent similar complex therapy as in subgroup Ia, but after surgical treatment; Pa subgroup (n=20) - patients with uncomplicated clinical course who, along with basic therapy, were prescribed combined oral contraceptives; Pb subgroup (n=20) -

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patients with complicated clinical course who received combined oral contraceptives after surgical treatment and basic therapy.

Upon admission, the women's medical history was studied, general and gynecological examination, laboratory and instrumental studies (hematological, biochemical, immunological, hormonal parameters, ultrasound) were performed before and after treatment. The effectiveness was evaluated after 3, 6 and 12 months. To study the state of the humoral and cellular components of the immune system, the leukocyte formula, CD3, CD4, CD8, CD16, CD20 markers of lymphocyte subpopulations were determined (monoclonal antibody immunofluorescence analysis on a laser flow cytometer EPICS-C France), IgA, IgG, IgM, (determination of the content of immunoglobulins using the commercial Immunocap system) functional neutrophil activity. The assessment of hormonal status included the determination of 7 blood serum: follicle-stimulating hormone (FSH), luteinizing hormone (LH), prolactin, estradiol, progesterone, inhibin B, testosterone, DHA-S, TSH, T4 free. The control was the indicators of conditionally healthy women (n=158) residents of the city of Tomsk (data provided by the laboratory "Diatom Plus").

The age of the women studied ranged from 15 to 40 years, 84.9% of them were of young reproductive age. According to the literature, FNCS predominate in this age group [13,15,17]. 44 (55%) women indicated the early (14-15 years) onset of sexual activity. The change of sexual partner, promiscuity preceded the exacerbation of chronic inflammatory diseases of the pelvic organs or reinfection in 31 patients (54.4%). Previously transmitted sexually transmitted infections were noted by 41 (51.3%) patients, and their repeated episodes were indicated by 23 (56.1%) of them. Sex life without contraception was in 73% of patients. About half of the women (48.8%) indicated an artificial termination of pregnancy, every third woman noted post-abortion complications. Acute and chronic inflammation of the uterine appendages in the anamnesis was indicated by 98.8% of patients, acute and chronic endometritis - 13.8% of women. Surgical treatment for inflammatory diseases of the pelvic organs was carried out by 26.3% of patients. Surgical interventions in the anamnesis on the pelvic organs for ovarian cysts were performed in 55% of women.

Operative delivery (cesarean section) was performed in four patients. Surgical intervention for tubal pregnancy was noted in 10% of patients. Early onset of sexual activity, promiscuity, lack of contraception, abortion and post-abortion complications, high incidence of sexually transmitted infection, pelvic inflammatory processes and surgical interventions may be, in fact, the causes of functional ovarian cysts. According to the literature, this pathological process in the ovaries develops most often with long-term inflammatory diseases of the uterine appendages and the occurrence of anovulatory cycles against the background of adhesive periadnexitis [32,34]. The problem of adhesions after surgical trauma, the inflammatory process currently remains very relevant, as it is one of the main causes of infertility and functional ovarian cysts. Tubal-peritoneal factors account for 60-70% in the structure of infertile marriage. With long-term chronic inflammation, adhesive process of the pelvic organs, pronounced sclerotic and dystrophic changes affecting all structural components of the uterine appendages are noted [19,21,23].

When studying the immune status indicators in patients with ovarian cysts, a decrease in all components of the T-cell link was found. Activation of the nonspecific humoral immune response due to Ig M is noted, with a decrease in the activity of the specific one and a decrease in phagocytic activity in women with FnC, which is consistent with the results of studies by I.N. Nikolaeva (2016), M.Araki (2016). Indications for surgical treatment of patients were: pain syndrome of varying severity, the presence of bulky formations with a diameter of more than 5-7 cm, persisting during 2-3 menstrual cycles, infertility and suspicion of endometriosis. The operations were performed by laparoscopic access. Laparoscopic cystectomy is the method of

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choice of surgical treatment for tumor-like formations and benign ovarian tumors [33,35]. In patients with FnC, an increase in the CD4/CD8 immunoregulatory index was found (2.63 ± 0.23 ; $p < 0.05$). by reducing the number of cytotoxic T lymphocytes (15.37 ± 2.94 ; $p < 0.05$). There is a decrease in the level of NK cells (9.72 ± 0.65 ; $p < 0.05$) and the activity of HCT-stimulated (21.33 ± 2.99 ; $p < 0.05$).

The presented picture indicates the reaction of all components of the T cell link. Activation of the nonspecific humoral immune response is noted due to Ig M (3.54 ± 0.48 ; $p < 0.05$), with a decrease in the activity of specific Ig A (0.12 ± 0.02 ; $p < 0.05$), Ig G (5.05 ± 0.68). When comparing spontaneous HCT and stimulated HCT, attention is drawn to the lack of activity of the latter (21.33 ± 2.99 ; $p < 0.05$), which indicates a decrease in phagocytic activity in women with cystic ovarian formations. Normalization of immune system parameters is observed in patients of the 16 (main) subgroup on the 10th day after surgical treatment and postoperative immunomodulatory and metabolic therapy.

Optimization of immune system parameters is reflected in the activation of the cellular link, restoration (compared with the control subgroup) of CD3 (68.53 ± 0.12 ; $p < 0.05$), CD4 (40.95 ± 0.22 ; $p < 0.05$), CD8 (27.93 ± 0.02 ; $p < 0.05$), CD 16 (14.72 ± 0.04 ; $p < 0.05$), normalization of the ratio immunoregulatory index CD4 / CD8 (1.47 ± 0.04 ; $p < 0.05$), an increase in neutrophil activity, which is accompanied by activation of the phagocytosis process, also marked an increase in the indicators of HCT-stimulated (57.89 ± 2.15 ; $p < 0.05$) compared with HCT-sponsored (29.92 ± 1.03 ; $p < 0.05$). Noteworthy is the significant ($p < 0.05$) increase, within normal values, of specific and high-affinity immunoglobulins of class G (9.87 ± 0.96) and A (4.10 ± 0.04), the indicators of immunoglobulins of class M (1.84 ± 0.13) decrease and continue to remain within normal values. This picture

it is observed in all periods of observation and continues to remain within the reference values for up to 12 months.

Conclusions 1. The use of polyoxidonium after electrosurgery of ovarian cysts in the experiment significantly reduces the perifocal inflammatory response and hemodynamic disorders, reduces the frequency of cysts recurrence, has a protective effect on the generative and endocrine apparatus of the ovaries.

2. Patients with ovarian cysts have a history of high incidence of inflammatory diseases of the genital tract (97%) and surgical interventions on the ovaries (55%), accompanied by a decrease in ovarian reserve, inhibition of cellular and humoral immunity

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