

the endometriosis nodi, 2 – pharmacotherapy) is pathomorphologically substantiated. First stage envisages destruction of all or most of endometriosis nodi which cause num-

ber of condition leading to depressed generative function, while the second stage inactivates eutopic endometrium which is the constant source of endometriosis.

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**Preface.** Hormonal therapy is the integral component of complex treatment of all forms of endometriosis. The saved up 20-years world experience shows, that the best results are achieved with GnRH-agonists using, and the basic mechanism of their action is amenorrhea achievement. The mentioned mono- or adjuvant therapy is always coexisting with development of by-effects: the developed picture of climacteric infringements, mental and vegetative frustration. It does impossible and inexpedient carrying out of hormonal therapy during more, than 6-8 months. Frequency of relapse of clinical signs reaches 48% after GnRH canceling within first two years of supervision. Works by Thipgen J.T. et al. (2004) have proved expediency of carrying out of intraperitoneal chemotherapy with doxorubicin and cisplatin in disseminated endometrial cancer management, and also have confirmed efficiency of application intraperitoneal chemotherapy (ICT) with these drugs with the purpose of suppression of growth and resorbition activation of endometrial deposits.

**Objective.** To show expediency of carrying out of ICT with cytostatics in treatment of the widespread endometriosis.

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At a hyperthermal variant it is better to begin the intraperitoneal chemotherapy (ICT) right after performance of a surgical stage. Perfusion is better to carry out by introduction through trocar ports of 2 laparoscopic irrigation tips connected to perfusion system. It's need to provide a horizontal position of the patient, so that the pelvis would be covered with perfusing fluid. An irrigation tip leaves in Douglas pouch, aspirational – collects perfusate from utero-vesical pouch. Perfusion speed is not less than 500 ml/min, perfusing temperature on input – 42C, duration of perfusion – 30 minutes. The total perfusate amount is 2000-3000 ml in which the

### SUBSTANTIATION OF ADJUVANT INTRAPERITONEAL CHEMOTHERAPY IN COMPLEX TREATMENT OF WIDESPREAD ENDOMETRIOSIS (III-IV STAGES)

**Material and methods.** Carrying out of hyperthermal intraoperative intraperitoneal (ICT) and normothermal postoperative chemotherapy with doxorubicin 60 mg/m<sup>2</sup> and cisplatin 50 mg/m<sup>2</sup> at 23 patients with endometriosis III-IV (ASRM staging). Control group – 10 women – adjuvant therapy with GnRH agonists for 3 months

**Results.** Adjuvant ICT was effective at treatment of the widespread endometriosis and has led to proof positive clinical effect at 93,4% of women within the first year of supervision. Single-staged adjuvant ICT at the widespread endometriosis is not accompanied by development after operation of any by-effects; and performance of second-look laparoscopy at 14 (60,9%) women has shown, that efficiency of ICT is higher, than adjuvant 3-4 month courses of GnRH agonists (Zoladex, Buserelin) and leads to full resorbition of endometriosis heterotopies and surrounding infiltration. The use of "soft" modes of CT (30 minutes perfusion of 42 C solutions) was not accompanied by development of adhesive process after operation in any case, and, hence, had no negative mechanical action on fertility patients. The specified variant of therapy did not result in ovulatory function disturbances.

### OPTIMAL PROTOCOL OF NORMO- AND HYPERTHERMAL INTRAPERITONEAL CHEMOTHERAPY (ICT) IN COMPLEX MANAGEMENT OF THE WIDESPREAD ENDOMETRIOSIS (III-IV STAGES)

demanding dose of cytostatics is contained. There could be a fractional injection of 1000 ml of warm (42C) perfusate intraabdominally and its replacement each 3-4 minutes with new portion of warm solution – duration has to be increased up to 40 minutes, we leave drainage for removal of the rests of perfusate.

At normothermal variant – after performance of a surgical stage we place in an abdominal cavity 1000 ml of the saline containing cytostatics dose. In Douglas pouch we leave a drainage not less than 7 mm in diameter which was opened later with 20-24 hours after the primary surgery for removal of the rests of perfusing fluid. Calculation of cy-

tostatics dose is conducted depending on the area of body surface – recommended dose is 60 mg/m<sup>2</sup> of doxorubicine and 50 mg/m<sup>2</sup> of cisplatin.

Efficiency of therapy is based on following factors: 1. Direct damaging action of cytostatics doxorubicine and cisplatin on endometrial deposits with activation of the subsequent infiltrates resorbtion. 2. Creation of effective cytostatics concentrations at increasing of perfusate temperature up to 42-45 C on depth up to 5

mm under peritoneum in 30-minutes exposition or at normothermic hydroperitoneum within 20-24 hours after a surgical stage; 3. An opportunity of organ-saving surgery performance in management of uni- and bilateral endometriomas (cysts marsupialization with their subsequent internal layer exposition to cytostatics), and also at retrocervical infiltrative endometriosis; 4. Absence of provocation of development of postoperative adhesive proc

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**Introductions.** Anamnesis and clinical examination helps to determine the signs with high prognostic value for adenomyosis diagnosis, which justify usage of invasive diagnostic technique.

**Material and methods.** 47 patients were inquired for investigation, in 26 cases adenomyosis was confirmed by 6-nodular puncture biopsy, in 18 – by histological investigation of hysterectomy specimen, 13 – made up the control group.

**Results.** Inter-group differences were observed of

#### ANAMNESIS AND MENSTRUAL FUNCTION AT ADENOMYOSIS PATIENTS

age, menorrhage volume, duration of disease, connection of dysmenorrhea beginning with life anamnesis, size of uterus, parity, tenderness of uterus. No differences were observed of menorrhage length, number of uterine curettage, menarche age, chronicle pelvic inflammatory diseases. Predictive value of different signs were evaluated.

**Conclusions.** Indicated clinical signs allow to ground the using of additional methods of patient examination.

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**Introduction:** Various components of immune system take part in pathogenesis of endometriosis. Their role might be paramount or minor during different periods of the disease. From our point of view, the most important is investigation of immune system in the aspect of immunological surveillance.

**Objectives.** To study changes of antiproliferative components of immune system in peripheral blood and peritoneal fluid in patients with endometriosis and to work out schemes of pathogenetic immune orientated therapy.

**Materials and methods.** 546 patients with endometriosis aged 20-44 were examined. The diagnosis was stated during surgery (493 laparoscopies and 53 laparotomies) and proved by the results of histology. The degree of dissemination was determined using R-AFS classification. 43 healthy fertile women were enrolled in control group. To specify the role of immune system in pathogenesis of endometriosis and as a method of control of effectiveness of immunomodulation therapy we prospectively evaluated interferon status and cytotoxic activity of NK-cells in peripheral blood and peritoneal fluid. The evaluation of NK-cells was carried out

#### THE ROLE OF CYTOTOXIC CELLS AND INTERFERON SYSTEM IN REGULATION OF PROCESSES OF PROLIFERATION IN ENDOMETRIOSIS

by radiometric test, in which cells of erythromyeloid line K-562 marked with Tritium were used as target cells. Interferon status was evaluated by biological test using lung carcinoma cells L-41 sensitive to the virus of vesicular stomatitis as a test culture.

**Results.** In patients with endometriosis we found a relative decrease of NK-cells' activity in peripheral blood and peritoneal fluid in comparison with control group. Cytotoxic index (CI) of NK-cells had negative correlation with the degree of the disease ( $r = -46$ ;  $p < 0.01$ ). CI of NK-cells in peritoneal fluid was equal to this index in peripheral blood. The relative increase of the level of total serum interferon in all patients with endometriosis in comparison with control group was revealed ( $p < 0.05$ ). The level of total serum interferon in peritoneal fluid was relatively lower than its concentration in peripheral blood. When interferon status in patients with endometriosis was analyzed, we marked a relative decrease of lymphoid cells' activity in secretion of  $\alpha/\beta$  and  $\gamma$ -interferons which was maximal in patients with the IV degree of dissemination of endometriosis (ability to produce IFN- $\alpha/\beta$  was 66,3% lower; ability to secrete IFN- $\gamma$  was 84,2% lower than in control group).