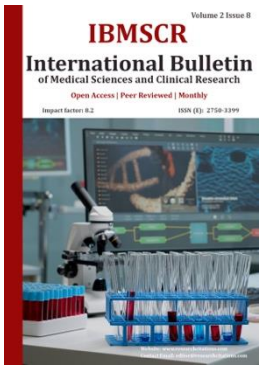

RESULTS OF MEDICAL INDICATORS OF INDIVIDUALIZED METHODS OF INFERTILITY TREATMENT

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Annotation. Despite the introduction into clinical practice of modern methods of infertility treatment using assisted reproductive technologies (ART) and, above all, in vitro fertilization (IVF), the pregnancy rate is still low [2,6]. Approaches to infertility treatment at the present stage seem to be rather complicated. It should be said that the study of the human genome, convincingly proves that each patient requires a personalized approach to treatment, taking into account his so-called "personal data" [1,2,6].

Keywords: individualized, antibacterial, IVF, indicators

Today, such approaches seem encouraging and promising. When developing treatment programs in patients with infertility, it is often impossible to solve the problem with a single course of therapy [3, 5]. And even in these cases, the effect of treatment is not always obvious. Unfortunately, today, prognostic criteria for the effectiveness of infertility therapy have not yet been developed [4,7]. The aim of the study was to develop personalized approaches to the treatment of infertility of inflammatory etiology to improve the effectiveness of therapy.

Materials and methods. 250 women with infertility were under our observation. Of these, group 1 included 180 women with infertility of inflammatory etiology and group 2 included 70 women with infertility of inflammatory-hormonal etiology. The study design was prospective, clinical, controlled, randomized, simple, open. Medical statistical methods were used to analyze the material.

Based on our research, we believe that treatment should consist of the following stages:

- Conservative treatment (one, two, etc. courses): general and local.

-Surgical treatment: traditional operations, as well as with the use of laparoscopy; coagulation treatment of cervical diseases.

-Application of ART.

Conservative treatment: antibacterial drugs - broad-spectrum antibiotics, taking into account the sensitivity to them detected microflora: cephalosporins III and IV generation, fluoroquinolones, aminoglycosides, tetracyclines. Also, the actual antibacterial drugs: metronidazole, miramistin; non-steroidal anti-inflammatory drugs (NSAIDs); antioxidants: vitamin C, B1,D, tocopherol, Q3,Q8,Q10; trace elements: zinc, selenium; enzymes: longidase, vobenzyme. If necessary, hormonal drugs should be used: agonists, antagonists, progestagens, microdosed progesterone, ovulation stimulating agents.

Restoration of vaginal microbiota we believe should be carried out in two stages: specific treatment: antibacterial drugs (taking into account sensitivity to antibiotics) and / or antiseptic drugs; restoration of vaginal microbiota (probiotics; eubiotics, symbiotics); restoration of pH of vaginal contents. After consultation with a gastroenterologist,

nephrologist, it is possible to develop joint therapy with them, aimed at restoring the microbiota of the intestine, urinary tract.

If a woman (couple) is found to be sensitized to natural antigens, it is necessary to develop a rational (hypoallergenic) diet, with the mandatory exclusion of animal and vegetable products to which sensitization has been detected. In addition, if antisperm IgE antibodies are detected: we recommend abstinence from sexual activity for at least three weeks.

Surgical treatment: lower and upper genital tract. In surgical treatment of the lower genital tract, coagulation treatment of cervical pathology is used: radio wave, laser, electrocoagulation. Diagnostic and therapeutic hysteroscopy and/or laparoscopy are used in the treatment of pathology of the upper genital tract. With the help of hysteroscopy it is possible to perform operations in the uterine cavity to remove synechiae, septum, submucosal myomatous nodes, polyps, IUDs in its disposition, as well as to perform bouching of the uterine tubes' mouths. Surgical treatment on the body of the uterus, tubes, ovaries is preferable to perform laparoscopic access. Different scope of surgical intervention is performed depending on the established pathology: salpingolysis, ovariolysis, fimbrioplasty, cystectomy, myomectomy.

All courses of treatment should be carried out under the control of clinical, laboratory and instrumental diagnostic methods. As a rule, the selected treatment regimens are performed in combination of conservative and surgical treatment.

Approaches to the necessity of using ART (IVF) in each specific case are complicated, both from the medical point of view and from the financial point of view. Given that ART is a highly financially costly procedure, it is often difficult to make a decision in favor of ART. In this regard, the existence of the law, favorable conditions for the implementation of ART, financial support from the state play a paramount role in solving the treatment of infertility in this contingent of patients. Although it should be noted that infertility treatment at all stages is mainly financially costly. However, it should be said that delaying the use of ART (IVF) in each individual case can be fatal.

Based on the results of our study, we believe that this issue should be addressed by specialists: obstetricians-gynecologists, endocrinologists and other related specialists (if there is pathology). In practical medicine, the best decision is always made by a consilium.

Our research and substantiated conclusions make it possible to determine according to the results of our studies indications for the use of ART: age over 35 years; anomaly of genital organs; absence of fallopian tubes and ovaries on both sides, uterus; genetic, hereditary pathology in the couple; long-term treatment of infertility: five years and more, especially after the age of 30 years; lack of effect from the conducted treatment programs.

The scientifically grounded approach to personalized treatment proposed by us was applied in 250 women with infertility of inflammatory and mixed genesis. According to the results of our treatment, we had the need to evaluate the results of our proposed diagnostic and therapeutic measures. Thus, after the conducted treatment measures pregnancy occurred (Table) in 172 (68,8%) patients, and in the 1st group - in 127 (70,6%), in the 2nd group - in 45 (64,3%).

As can be seen from the table, the course of pregnancy was complicated by threatened abortion of the first half of pregnancy in 106(61.6%), threatened abortion of the second half of pregnancy in 130(75.6%), undeveloped pregnancy in 16(9.3%), and hypertensive

conditions in 42(24.4%). Pregnancy terminated at premature term in 57(33.1%) and at premature term in 46(26.7%). Also, 28 (16.3%) patients had PONRP and 7 (4.1%) had placenta previa.

Table

Pregnancy course in women with infertility after treatment

Indicators	1st group n=180		2nd group n=70		General group n=250	
	абс.	%	абс.	%	абс.	%
Pregnancy came	127	70,6	45	64,3	172	68,8
Pregnancy did not occur	53	29,4	25	35,7	78	31,2
Threat of interruption of pregnancy I half	72	56,7	34	75,6	106	61,6
Threatened abortion of the II half	92	72,4	38	84,4	130	75,6
Undeveloped pregnancy	11	8,7	6	13,3	16	9,3
Spontaneous early miscarriage	19	15,0	9	20,0	28	16,3
Spontaneous late miscarriage	18	14,2	7	15,6	25	14,5
Vomiting of pregnant women	65	51,2	19	42,2	84	48,8
Pregnancy hypertension	32	25,2	11	24,4	43	25,0
Preeclampsia	22	17,3	7	15,6	29	16,9
PONRP	22	17,3	6	13,3	28	16,3
Placenta previa	5	3,9	2	4,4	7	4,1
Multiple pregnancy	7	5,5	2	4,4	9	5,2
Premature pregnancy	45	35,4	12	26,7	57	33,1
Preterm labor	30	23,6	16	35,6	46	26,7
Childbirth	75	59,0	28	62,2	103	59,9
Independent labor	38	29,9	19	42,2	57	33,1
CS	37	29,1	9	20,0	46	26,7
IVF	21	11,7	15	21,4	36	14,4
Normal neonatal period	29	36,7	8	28,6	37	35,9
Premature newborns	28	36,0	15	53,6	43	41,7
Antenatal mortality	3	4,0	1	3,6	4	3,9
Early neonatal mortality	1	1,3	-	-	1	1,0
Moderate to severe neonatal asphyxia	43	59,7	19	70,3	62	62,0
Neonatal hydrocephalus	2	2,7	1	3,6	3	2,9

Pregnancy ended with delivery in 103 (59.9%). Thus, 57 (33.1%) delivered through natural birth canal and 46 (26.7%) through CS surgery. Pregnancy did not occur within 1.5 years after treatment in 118 (47.2%). Reproductive losses in patients with infertility, in whom

personalized diagnostic and therapeutic measures were performed, occurred in 53 (21.2%) patients (Table).

Due to ineffectiveness of the performed treatment, 36 (14.4%) patients were referred to IVF. As a result of IVF treatment, pregnancy occurred in 13 (36.1%) patients.

Conclusion. Based on our research, we believe that treatment should consist of the following stages: conservative treatment (one, two, etc. courses): general and local. Surgical treatment: traditional operations, as well as with the use of laparoscopy, coagulation treatment of cervical diseases. Use of ART.

Conservative treatment should include: broad-spectrum antibiotics: III and IV generation cephalosporins, aminoglycosides, tetracyclines, fluoroquinolones; antibacterial drugs: metronidazole, miramistin; anti-inflammatory drugs: NSAIDs; antioxidants: vitamin C, B1, tocopherol, Q3, 8, 10, vitamin D, trace elements (zinc, selenium); enzymes (longidase, vobenzyme); hormonal (GnRH antagonists and agonists, gestagens, estrogen-gestagen); ovulation stimulation, probiotics.

Treatment of vaginal microbiota disorders should be carried out in two stages: specific (taking into account sensitivity to antibiotics): antibacterial, antiseptic treatment; restoration of pH of vaginal contents; restorative - probiotics. At the same time, it is necessary to restore the microbiota of the intestine, urinary tract. If there is no effect from therapy, it is necessary to switch to the use of ART. The decision on this stage of treatment should be made by a consilium.

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