Characteristics of psycho-emotional manifestations and evaluation of the quality of life indicators in women with ovarian endometrioma combined with pelvic inflammatory diseases

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The objective: an assessment of the psycho-emotional status and quality of life in women with endometrioid ovarian cysts combined with inflammatory diseases of the pelvic organs.

Materials and methods. The study included 44 patients with endometrioid ovarian cysts combined with inflammatory processes of the pelvic organs (I group), and 46 women with isolated ovarian endometriosis (II group). The control group consisted of 30 patients without endometriosis and symptoms of chronic pelvic pain. The SF-36 questionnaire (The MOS 36-Item Short-Form Health Survey) was used to assess the quality of life, the level of depression and anxiety were determined by the Beck depression scale and the Spielberger–Khanin anxiety scale. Pain was assessed using a visual analogue scale.

Results. The reasons for doctor’s visit were: menstrual irregularities (43.2% of patients in the I group and 34.8% – II group), infertility (77.3% and 63.0%, respectively), miscarriage (13.6% and 8.7%), pain syndrome (up to 61.1% in general), as well as psycho-emotional and neurological conditions, urogenital disorders – cystalgia, irritable bowel syndrome, dysuria, frequent urination during menstruation, hematuria, dryness of the mucous membrane and dyspareunia.

More than half of the women in the I group (56.8%) had severe pain combined with an expressed decrease in activity and transient disability, while in the II group only a quarter of the surveyed persons (23.9%) had pronounced manifestations of pelvic pain. The average level of depression in the II group was mild, while in the I group the parameters of moderate and mild depressive disorders were found in equal proportions. In the control group there were no manifestations of a depressive state. The indicators of trait anxiety and state anxiety scores in women in the I group were 52.12±12.26 and 49.84±8.29 points, respectively, in the II group – 40.12±10.22 and 44.26±6.24 points versus the data of the control group – 31.14±8.12 and 31.16±4.22 points (р<0.05).

The results of the SF-36 questionnaire presented that the patients in the I group had lower quality of life parameters on the following scales: general health, physical functioning, the pain, dissatisfaction with the emotional state.

Conclusions. In women with ovarian endometriosis combined with chronic pelvic inflammatory processes an increased level of anxiety and depression and significantly low indicators of all scales of the SF-36 questionnaire were determined.

Keywords: ovarian endometriosis, pelvic inflammatory diseases, quality of life.
Міжгрупове порівняння результатів тести SF-36 продемонструвало, що пацієнки І групи мали більш низькі параметри якості життя за такими шкалами: загальний стан здоров’я, фізичне функціонування, наявність боляк як перешкоди у фізічній активності, незадоволення своїм емоційним станом.

Заключення. У жінок з ендометріозом яєчників, посіднім із хронічними запальними процесами статевих органів, встановлено значно низькі показники за всіма шкалами опитувальника SF-36 та підвищений рівень тривожності та депресії.

Ключові слова: ендометріоз яєчників, запальні процеси органів малого таза, якість життя.

Характеристика психоемоціональних проявлень і оцінка параметрів якості життя у жінок з ендометріоидними яєчниками, що живуть у соціально-психічних умовах.

Цель исследования: оценка психоэмоционального статуса и качества жизни у женщин с эндометриоидными яичниками, сочетаными с воспалительными заболеваниями органов малого таза.

Материалы и методы. В исследование вошли 44 пациентки с эндометриоидными кистами яичника (I группа), сочетанными с воспалительными процессами органов малого таза, и 46 женщин с изолированным эндометриоидом яичника (II группа). Контрольную группу сформировали из 30 пациенток без эндометриоза и симптомов хронической тазовой боли.

С целью оценки качества жизни применяли опросник SF-36 (The MOS 36-Item Short-Form Health Survey), уровня депрессии и тревожности — шкалы депрессии Бека и тревожности Спилбергера–Ханина. Оценку боли проводили по визуально-аналоговой шкале.

Результаты. Причинами обращения к врачу стали: нарушение менструального цикла (43,2% пациенток в I группе и 34,8% — во II группе), бесплодие (77,3% и 63,0% соответственно), невынашивание беременности (13,8% и 19,5%), болевой синдром (до 61,1% в целом), а также психоэмоциональные и неврологические состояния, урогенитальные расстройства — цистит, цистаденома яичника, неврологические состояния.

В контрольной группе проявления депрессивного состояния отсутствовали. Показатели ситуативной и личностной тревожности у женщин I группы составили 52,12±12,26 и 49,84±8,29 балла соответственно, во II группе – 40,12±10,22 и 38,75±8,29 балла. В контрольной группе отсутствовали проявления депрессии.

Резюме. Направления научной работы в решении таких важных вопросов. Пациентки I групpee були с признаками психоэмоциональных расстройств. В то время как пациентки II группы имели более низкий уровень психоэмоциональных расстройств.

Ключевые слова: эндометриоз яичника, воспалительные процессы органов малого таза, качество жизни.

Insufficient information on the leading pathogenetic mechanisms of the most mysterious disease of modern times—genital endometriosis [2, 3, 7, 11, 12]—attracts particular attention of domestic and foreign scientists. According to the literature, the prevalence of endometriosis among women of reproductive age is up to 20%, and among women with algodysmenorrhea — 40-60%. One in three infertile women suffers from endometriosis, and there are about 300 million women in the world with this diagnosis [1-3, 7, 11].

Despite numerous literature reports, the main questions in the pathogenesis of this multi-component and complex disease, which occupies a dominant third place in the structure of gynecological conditions after uterine fibroids and genital inflammation, and affects women not only of reproductive age but also adolescent girls, and postmenopausal women, remain unresolved [4, 8, 9, 13]. Variety of factors, clinical manifestations and localization, atypical forms, ambiguous risk factors for cancer, contradictory diagnostic issues, and insufficient effectiveness of existing treatments are the main directions of scientific research in solving such a complex clinical problem [1, 4-6, 10, 13].

It should be emphasized that the occurrence and development of endometriosis are accompanied by disorders of the autonomic nervous system and sexual dysfunction (in addition to disorders of menstrual and generative functions). This, in turn, leads to the development of social and personal maladaptation which dramatically deteriorates the quality of life. Thus, according to Vdovychenko Yu. et al., the frequency of various manifestations of endometriosis in the general population of women of reproductive age ranges from 3.0% to 30.0%, and the problem of psycho-autonomic and sexual disorders in such patients is diagnosed in every second case, and characterized by reduced quality of life, relationship breakdown and unstable psychological state [19].

Decrease in quality of life, low self-esteem, impaired self-perception, emotional lability, anxiety, and depression, along with severe clinical symptoms of pelvic pain, dysmenorrhea, and sexual disorders are important components of this problem both in medical and social aspects [1, 5, 10]. Modern domestic and foreign scientific sources present quite contradictory data on psycho-emotional disorders and changes in quality of life indicators in patients with chronic pelvic pain associated with endometrial disease [4, 8, 9, 11, 13]. Considering various manifestations of endometriosis and the number of options for localization of endometrial foci, there are still unresolved issues regarding the pathogenesis of ovarian endometrioma, close relationship with the mechanisms of the systemic inflammatory response, orientation of treatment tactics mainly based on the restoration of reproductive function, and monitoring and tactics of patients with ovarian endometrial cysts (OEC) combined with pelvic inflammatory disease, approaches to
The standard questionnaire SF-36 (The MOS 36-Item Short-Form Health Survey), which is widely used in most medical fields for different nosologies, was used to survey patients, allowing to compare parameters in a healthy population. The criteria for quality of life according to the SF-36 are Physical Functioning (PF), Role-Physical Functioning (RP), Bodily Pain (BP), General Health (GH), Vitality (VT), Social Functioning (SF), Role Emotional (RE), and Mental Health (MH). Statistical processing of the material was performed by means of the Microsoft Excel application program using the package “STATISTICA-6.0”.

**RESULTS**

The major women’s complaints were: menstrual disorders (43.2% and 34.8%, respectively, in groups), infertility (77.3% and 63.0%, respectively), miscarriage (13.6% and 8.7%, respectively), pain syndrome (up to 61.1% in total), psycho-emotional and neurological conditions, urogenital disorders – cystalgia, irritable bowel syndrome, dysuria, frequent urination during menstruation, hematuria, dry mucous membranes, and dyspareunia. A comparative analysis of socio-demographic indicators of women with ovarian endometriosis and patients of the control group was carried out. It revealed unrealized reproductive function in two-thirds of observations without statistical differences between the main study groups.

In 38.8% of cases in Group 1 and 26.1% of cases in Group 2, patients were not satisfied with their family relationships; they had difficulties in communicating with their family members and were not able to cope with family responsibilities. In the control group - all patients realized their reproductive function, were married, dissatisfaction with social and family relations was demonstrated in single questionnaires.

In both groups, the visual analog scale (VAS) was used to assess the intensity of pain, and it was found that mild pain was noted by 9 people (10.5%) in Group 1, 10 women (22.7%) had moderate pain, discomfort and decreased daily activity, and in more than half of the cases (25-56.8%) severe pain combined with a pronounced decrease in activity and transient disability was observed; in Group 2, only 11 patients (23.9%) noted severe manifestations of pelvic pain (p<0.05), in the control group - patients did not provide data on pain.

The emotional state of patients with OEC and PID was characterized by a low mood background significantly more often than in patients of the control group (p<0.05). The analysis of questionnaires revealed that women in Group 1 had 1.6 times more often deterioration in their sense of bodily well-being, decreased activity, the bad mood than patients of Group 2, where two-thirds of women showed positive indicators in the control (p<0.05). The average level of depression in Group 2 corresponded to mild – 12.2±6.12 points; in the control group, according to the average values, there was no depression (7.32±6.24 points); while in patients with OEC combined with PID, indicators of moderate and mild depression were in equal proportions.

According to the results of the comparative analysis of SKAI, patients from Group 1 and Group 2 also had high indicators of situational and personal anxiety. The average data of SKAI in Group 1 were 52.12±12.26 points and 49.84±8.29 points, respectively; in Group 2 – 40.12±10.22 points and 44.26±6.24 points against a control group – 31.14±8.12 points and 31.16±4.22 points (p<0.05).

A comparative analysis of quality of life indicators in women with ovarian endometrioma and patients in the control group
showed statistically significant differences in most categories of the SF-36 questionnaire. Patients with ovarian endometriosis, primarily on the background of pelvic inflammatory disease, had lower scores on the scale of role functioning associated with physical functioning, which correlated with high rates of pain on the scale of VAS (8.6±1.2 points) and indicated a significant limitation of vital functions and social and role activity of patients in the case of severe pelvic pain syndrome in Group 1 (p<0.05). Special attention should be paid to health self-assessment: patients in Group 1 gave lower scores (2.0 and 1.4 times, respectively) than women in the control group and Group 2; they felt exhausted, tired, and depressed, had low levels of vital energy, and limited social contacts.

Intergroup comparison of SF-36 test results showed that Group 1 had not only a more severe clinical picture of the disease with clear symptoms, especially in terms of the severity of pain and menstrual disorders, compared to Group 2, but also a lower degree of life satisfaction in general, according to the following scales: general health (56.2±4.2 points), physical functioning (32.8±1.8 points), pain as a barrier to physical activity (49.6±3.8 points), dissatisfaction with own emotional state (42.2±2.4 points). Indicators of mental health and the role of emotional problems in limiting vital functions were also significantly lower than in women of Group 2 (64.1±2.1 points and 52.4±1.6 points and 42.8±2.0 points and 46.2±1.6 points, respectively). These rates were particularly low in women with ovarian endometriosis combined with adnexal affection and external genital endometriosis.

Thus, the psycho-emotional state of women (level of depression, anxiety, general well-being, activity, and mood) in the case of ovarian endometriosis combined with PID, was significantly worse against the data of the group of patients with isolated endometriomas and the control group.

CONCLUSION
The obtained results show that patients with OEC on the background of the pelvic inflammatory disease have higher levels of depression, situational and personal anxiety, lower level of well-being, activity, and mood. Psychological reactions in such women are mainly illustrated by psycho-emotional disorders in the form of anxiety, anxiety-depressive, depressive, and neurotic reactions.

Patients in this group underestimated their emotional background, had a lower level of mental health and felt severe pain in half of the observations. Even moderate external genital endometriosis combined with ovarian endometrioma can be accompanied by severe pain and affect performance. Besides, mental health indicator is much lower in women whose disorder is associated with chronic pelvic inflammatory disease.

Significantly low scores on all scales of the SF-36 questionnaire in the group of women with ovarian endometriosis combined with chronic pelvic inflammatory diseases indicate that physical activity, daily activities, and physical capabilities are notably limited by the state of physical and emotional health, which violates social contacts and level of communication, promotes the development of neurotic states, anxiety and anxiety-depressive disorders of a neurotic nature, generating pathogenetic aspects of chronic stress.

Conflict of interest: No conflict of interest to declare.

REFERENCES
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