

# Peculiarities of the psycho-emotional state of patients with endometrial pathology

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**The objective:** a determination of anxiety and depression levels in patients in perimenopausal period with hyperplastic processes of the endometrium and myometrium.

**Materials and methods.** 150 patients in the perimenopausal period were examined. The main group included 100 persons with hyperplastic process, the control group – 50 healthy women in perimenopausal period. We used the PHQ-2 and PHQ-9 questionnaires to study the level of anxiety and depression. In order to objectively assess the degree of anxiety and depressive symptoms, a questionnaire was conducted according to the Hospital Scale of Anxiety and Depression (HADS).

**Results.** The analysis of data on the frequency of major types of extragenital pathology in the examined patients demonstrated that in the structure of extragenital pathology the following diseases dominated: varicose veins of the lower extremities –  $61.0 \pm 4.9$  %, arterial hypertension of 2–3 stages –  $46.0 \pm 4.98$  %; coronary heart disease, stenocardia –  $8.0 \pm 2.7$  %; obesity –  $43.0 \pm 4.95$  %, liver, gallbladder and pancreas pathologies –  $42.0 \pm 4.93$  %. In 78.0 % of patients, somatic pathology was represented by two or more diagnoses.

The results of the survey demonstrated that in the main group 23.0 % of women had mild «subclinical» depression; 19.0 % – moderate, and 12.0 % – moderate depression. The women in the main group had the following psycho-emotional disorders: the feeling of fatigue and exhaustion –  $64.0 \pm 4.8$  %, sleep disorders –  $64.0 \pm 4.8$  %, appetite problems –  $46.0 \pm 4.98$  %, depressed mood and low interest in ordinary affairs –  $54.0 \pm 4.98$  %, the difficulty concentrating –  $33.0 \pm 4.7$  %, hypodynamia –  $26.0 \pm 4.4$  %. Four percent of patients intended to do something with themselves. Analysis of the results obtained using the HADS scale revealed that both anxiety and depressive symptoms in patients in the main group were more pronounced than in the control women.

**Conclusion.** The identified psycho-emotional disorders are the result of adverse effects of somatic diseases and gynecological pathology. The results of the study indicate the need to correct psycho-emotional disorders and take them into account when choosing a method of treatment for such patients.

**Keywords:** endometrial pathology, extragenital pathology, psycho-emotional disorders, diagnosis.

## Особливості психоемоційного стану пацієнток із патологією ендометрія

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**Мета дослідження:** визначення рівнів тривожності та депресії у пацієнток у перименопаузальний період з гіперпластичними процесами ендометрія.

**Матеріали та методи.** Обстежено 150 пацієнток у перименопаузальний період. До основної групи зараховано 100 пацієнток з гіперпластичними процесами ендометрія, до контрольної групи – 50 здорових жінок у перименопаузальний період. Для вивчення рівнів тривожності та депресії використовували анкети PHQ-2 та PHQ-9. З метою об'єктивного оцінювання ступеня тривожно-депресивної симптоматики було проведено анкетування за Госпітальною шкалою тривожності і депресії (HADS).

**Результати.** Аналіз даних стосовно поширення основних видів екстрагенітальної патології в обстежених пацієнток засвідчив, що у структурі екстрагенітальної патології переважали: варикоз вен нижніх кінцівок –  $61,0 \pm 4,9$  %, артеріальна гіпертензія 2–3-го ступеня –  $46,0 \pm 4,98$  %; ішемічна хвороба серця, стенокардія –  $8,0 \pm 2,7$  %; ожиріння –  $43,0 \pm 4,95$  %, захворювання печінки, жовчного міхура та підшлункової залози –  $42,0 \pm 4,93$  %. У 78,0 % хворих соматична патологія була представлена двома і більше діагнозами.

Результати анкетування продемонстрували, що в основній групі 23,0 % жінок мали легку «субклінічну» депресію, 19,0 % – помірного рівня і 12,0 % – депресію середньої тяжкості. У психоемоційному стані обстежених жінок основної групи спостерігали такі розлади: почуття втоми та знесилення –  $64,0 \pm 4,8$  %; порушення сну –  $64,0 \pm 4,8$  %; проблеми з апетитом –  $46,0 \pm 4,98$  %; пригнічений настрій та низька зацікавленість у звичайних справах –  $54,0 \pm 4,98$  %; труднощі з концентрацією уваги –  $33,0 \pm 4,7$  %; гіподинамія –  $26,0 \pm 4,4$  %. У чотирьох відсотків пацієнток були наміри щось заподіяти собі. Аналіз результатів, отриманих за допомогою шкали HADS, виявив, що як тривожна, так і депресивна симптоматика у пацієнток основної групи була більш вираженою, ніж у жінок контрольної групи.

**Заключення.** Виявлені психоемоційні порушення є результатом несприятливого впливу соматичних захворювань і гінекологічної патології. Отримані результати дослідження свідчать про необхідність корекції порушень психоемоційного стану, які слід враховувати під час вибору методу лікування у таких пацієнток.

**Ключові слова:** патологія ендометрія, екстрагенітальна патологія, психоемоційні порушення, діагностика.

## Особенности психоэмоционального состояния у пациенток с патологией эндометрия А.Я. Сенчук, Р.М. Загороднец, И.А. Доскоч, Т.П. Андрейчук

**Цель исследования:** определение уровней тревожности и депрессии у пациенток в перименопаузальный период с наличием гиперпластических процессов эндо- и миометрия.

**Материалы и методы.** Исследовано 150 пациенток в перименопаузальный период. В основную группу включены 100 пациенток с гиперпластическими процессами эндо- и миометрия, в контрольную группу – 50 здоровых женщин в перименопаузальный период. Для изучения уровней тревожности и депрессии использовали анкеты РНҚ-2 и РНҚ-9. С целью объективной оценки тревожно-депрессивной симптоматики было проведено анкетирование по Госпитальной шкале тревожности и депрессии (HADS).

**Результаты.** Анализ данных о частоте основных видов экстрагенитальной патологии у обследованных пациенток показал, что в структуре экстрагенитальной патологии преобладали: варикоз вен нижних конечностей –  $61,0 \pm 4,9\%$ , артериальная гипертензия 2–3-й степени –  $46,0 \pm 4,98\%$ ; ишемическая болезнь сердца, стенокардия –  $8,0 \pm 2,7\%$ ; ожирение –  $43,0 \pm 4,95\%$ , заболевания печени, желчного пузыря и поджелудочной железы –  $42,0 \pm 4,93\%$ . У 78,0% больных соматическая патология была представлена двумя и более диагнозами.

Результаты анкетирования показали, что в основной группе 23,0% женщин имели легкую «субклиническую» депрессию, 19,0% – умеренного уровня и 12,0% – депрессию средней тяжести. В психоэмоциональном состоянии обследованных женщин основной группы наблюдали такие расстройства: чувство усталости и изнеможения –  $64,0 \pm 4,8\%$ ; нарушение сна –  $64,0 \pm 4,8\%$ ; проблемы с аппетитом –  $46,0 \pm 4,98\%$ ; подавленное настроение и низкая заинтересованность в обычных делах –  $54,0 \pm 4,98\%$ ; трудности с концентрацией внимания –  $33,0 \pm 4,7\%$ ; гиподинамия –  $26,0 \pm 4,4\%$ . У четырех процентов пациенток были намерения что-то причинить себе. Анализ результатов, полученных с помощью шкалы HADS, обнаружил, что как тревожная, так и депрессивная симптоматика у пациенток основной группы была более выраженной, чем у женщин контрольной группы.

**Заключение.** Обнаруженные психоэмоциональные нарушения являются результатом неблагоприятного влияния соматических заболеваний и гинекологической патологии. Полученные результаты исследования свидетельствуют о необходимости коррекции нарушений психоэмоционального состояния, которые следует учитывать при выборе метода лечения.

**Ключевые слова:** патология эндометрия, экстрагенитальная патология, психоэмоциональные нарушения, диагностика.

The results of our own research and data from scientific sources indicate that patients of the perimenopausal period are 50.0–55.0% of all patients with endo- and myometrial pathology, aimed at diagnostic scraping of the walls of the uterine cavity [1, 2, 3]. The frequency of combination of hyperplastic processes of the endometrium (GPE) and adenomyosis in them is 40.0–46.6%. Such patients should be included in the risk group of endometrial cancer, as more than a third of them (33.0%) show a complex atypical form of hyperplasia (endometrial adenomatosis) and in 65.6% of cases of endometrial polyps (PE) [4, 5]. In the presence of a clinical diagnosis of «uterine leiomyoma with hemorrhagic syndrome» during perimenopause there is a high coefficient of diagnostic load [6, 7], as well as a high frequency of detection of severe atypical hyperplasia (adenomatous endometrial hyperplasia – AGE – 38.6%) and PE – 71.3% [1, 6, 7, 8, 9].

Perimenopausal period of a woman's life is quite difficult in terms of physiological reorganization of the body, which in the case of pathological course is manifested by neurovegetative, psychoemotional and metabolic-endocrine symptoms [10, 11, 12, 13]. The pathological course of physiological reorganization of the body of women in this period can be provoked by existing extragenital diseases (in 57.0–90.0% of women) and hyperplastic processes of the endometrium and myometrium (in 17.0–35.0%). That is why the attention of many researchers is drawn to the medical problems of these age groups and of particular importance are the issues of corrective therapy, which ensures the adaptation

of the woman's body to the new metabolic balance after ovarian failure [2, 6, 7].

According to research by S.M. Kornienko [14], hyperproliferative processes of the endometrium significantly worsened the full range of indicators of quality of life, subjectively assessing their psychological well-being, patients rated it lower than physical [15]. Disorder of social life caused by the disease, patients experience more acutely than dysfunction of the body. The psychopathic personality structure of a woman with endometrial pathology is characterized by neuroticism, depression, emotional lability, and shyness. Moreover, neuroticism significantly reduced not only the psychological but also the physical component of patients' health and had a significant impact on all parameters of quality of life [2, 14, 16, 17, 18].

By perimenopause, the incidence of endometrial pathology increases significantly and is characterized by the appearance of somatoform disorders, which significantly limit the social and physical capabilities of women [19, 20]. Existing gynecological pathology has a negative impact on the quality of life of women, but, unfortunately, this fact is rarely paid attention in the process of choosing a method of treatment and rehabilitation [17].

The above causes an unsatisfactory state of the question of timely, effective, recurrent and safe treatment of combined pathology of the uterus and endometrium in women of perimenopausal period with somatic pathology. That is why timely diagnosis and adequate therapy, taking into account the existing somatic pathology in patients

Table 1

Frequency of extragenital pathology in the examined patients (P ± m)

Extragenital pathology	Main group n=100	Control group n=50
Anemia	25,0±4,36*	2,0±1,98
Hypertension stage 2–3	46,0±4,98*	20,0±5,66
Coronary heart disease	8,0±2,7*	4,0±2,8
Varicose veins of the lower extremities	61,0±4,9*	8,0±3,8
Obesity	43,0±4,95*	14,0±4,69
Diffuse euthyroid goiter	17,0±3,76*	6,0±3,36
Diseases of the gastrointestinal tract	42,0±4,93*	16,0±5,2
Diabetes mellitus	13,0±3,36*	4,0±2,8

Note: \* – p<0,05 between indicators in the main and control groups.

Table 2

PHQ-9 questionnaire results (P±m)

Indicator	Main group n=100	Control group n=50
Very low interest or satisfaction with ordinary things	54,0±4,98*	10,0±4,2
Bad mood, depression or helplessness	52,0±4,99*	18,0±5,4
Difficulty falling asleep, intermittent or too long sleep	64,0±4,8*	28,0±6,3
Feeling tired or exhausted	64,0±4,8*	14,0±4,9
Poor appetite or overeating	46,0±4,98*	18,0±5,4
Bad thoughts about yourself	5,0±2,2*	0
Difficulty concentrating	33,0±4,7*	20,0±5,6
Your movements or speech are so slow that others may notice	26,0±4,4*	4,0±2,8
Thoughts about to harm oneself	4,0±1,95*	0

Note: \* – p < 0.05 between indicators in the main and control groups.

during perimenopause, is the key to successful prevention of cancer in this localization.

**The aim of the study was** to determine the level of anxiety and depression in patients with hyperplastic processes of the endometrium and somatic pathology in the perimenopausal period.

### MATERIALS AND METHODS

3–5 days before the expected surgery, we conducted a survey of 100 patients of the perimenopausal period with hyperplastic processes of the endometrium and myometrium (Main group). The survey data of 50 healthy women of perimenopausal period served as a control. By age, the control group of patients was representative of the patients of the Main group.

To study the level of anxiety and depression in patients with hyperplastic processes of the endometrium in the perimenopausal period, we used questionnaires PHQ-2 and PHQ-9 in accordance with the requirements of the Ministry of Health (MOH) of Ukraine from 25.12.2014 № 1008. Questionnaire PHQ-2 – consisted of two points.

If answered yes to at least one question, the survey was conducted using the PHQ-9 questionnaire, a nine-point depression self-assessment scale that is effective in diagnosing major depressive disorder (ADD). Criteria for assessing the severity of depression were performed in points: 0–4 points (no depression); 5–9 points (mild «subclinical» depression); 10–14 points (moderate depression); 15–19 (moderate severe depression); 20–27 (severe depression).

In order to objectively assess the degree of anxiety and depressive symptoms, a questionnaire was conducted according to the Hospital Anxiety and Depression Scale (HADS). The HADS scale, developed by A.S. Zigmond and R.P. Snaith (1983) is subjective and is designed to screen for anxiety and depression in somatic hospital patients. This scale is easy to use and treat by doctors and patients, which allows us to recommend it for use in general practice for the initial detection of anxiety and depression in patients. and using computer software products included in Microsoft Office Professional 2000, Russian Akademik OPEN No Level license.

## RESULTS

The frequency of extragenital pathology in our examined patients is shown in table 1.

Analysis of data on the frequency of major types of extragenital pathology in the examined patients showed that the structure of extragenital pathology was dominated by: varicose veins of the lower extremities –  $61.0 \pm 4.9$ , arterial hypertension of 2–3 stages –  $46.0 \pm 4.98$ ; coronary heart disease, angina –  $8.0 \pm 2.7$ ; obesity –  $43.0 \pm 4.95$ , liver, gallbladder and pancreas –  $42.0 \pm 4.93$ . In 78.0% of patients, somatic pathology was represented by two or more diagnoses.

However, it should be noted that in healthy women who were included in the control group, anemia was diagnosed in only one case  $2.0 \pm 1.98$ , the above extragenital pathology was diagnosed 2 times less often. This may indicate that vascular and endocrine pathology has a role in the etiopathogenesis of endo- and myometrial pathology, which should be taken into account when choosing a method of treatment of this pathology.

In the psychoemotional state of the examined women of the main group: feeling of fatigue and exhaustion  $64.0 \pm 4.8\%$ ; sleep disorders  $64.0 \pm 4.8\%$ ; appetite problems  $46.0 \pm 4.98\%$ ; depressed mood and low interest in ordinary affairs  $54.0 \pm 4.98\%$ ; difficulty concentrating  $33.0 \pm 4.7\%$ ; hypodynamia  $26.0 \pm 4.4\%$ . 4 percent of patients intended to do something with themselves (Table 2).

## DISCUSSION

According to the results of the questionnaire revealed a fairly high level of psycho-emotional stress in the surveyed women of the main group. These results may indicate the presence of constant stress in the examined patients, as well as emotional instability and anxiety.

The results of the survey showed that in the main group 23.0% of women had mild «subclinical» depression; 19.0% – moderate, and 12.0% – moderate depression.

Analysis of the results obtained using the HADS scale revealed that both anxiety and depressive symptoms in patients of the main group were more pronounced than in women of the control group.

Clinical manifestations of depressive syndrome in patients of the main group were a state of depression, hypodynamics, passivity and apathy. Anxiety syndrome was manifested by tension, inner anxiety and fear, excitability and panic.

## CONCLUSIONS

Thus, patients with hyperplastic processes of the endometrium and myometrium show a high level of concomitant somatic pathology and psycho-emotional stress, which indicates the presence of chronic stress, emotional instability and anxiety. Identified psycho-emotional disorders are the result of adverse effects of somatic diseases and gynecological pathology. The results of the study indicate the need to correct psycho-emotional disorders and take them into account when choosing a method of treatment for such patients.

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