

A.Vasylyeva, N.Kyrychenko

**EFFICIENCY OF CORRECTION OF EMOTIONAL DISORDERS IN WOMEN SUFFERING FROM MALIGNANT TUMORS OF REPRODUCTIVE SYSTEM**

Donetsk national medical university of ministry of public health of Ukraine

Key words: women, malignant tumors, reproductive area, emotional disorders, psycho-correction methods

Providing medical care to patients suffering from malignant tumors – one of the most important problems of modern medicine in Ukraine. Currently registered in cancer institutions are more than 960,000 patients annually registers more than 160,000 new cases of malignant tumors and a projected growth to over 200,000 in 2020 (Bulletin of the National Cancer Registry of Ukraine, 2010–2011). Cancer of the female reproductive area is the most frequent in the structure of cancer pathology and women make up 35% of all cases. In addition, the growing recent interest in this problem is also associated with a significant rejuvenation of patients. At the present stage of development of oncology, much attention has been paid not only to somatic condition of the patients, but also to psychological and psychiatric aspects of this disease. No less significant stress than the actual cancer, for patients is crippled operations and change in appearance due to endocrine disorders. Among patients with malignant tumors of reproductive system significant part contain women of working age, which makes high demands on their complete rehabilitation, including an effective correction of an associated emotional disorders, which caused to this investigation, which purpose was to study the emotional state of patients suffering from malignant tumors of the reproductive system and development of methods of psychological adjustment of emotional disorders in the complex rehabilitation.

**Material and Methods:** In accordance with the purpose we examined 210 women with the cancer: 68 patients with cancer of the body ( $32,4 \pm 3,2\%$ ) and 85 ( $40,5 \pm 3,4\%$ ) – cervical cancer, and 57 patients with malignant ovarian tumors ( $27,1 \pm 3,1\%$ ). In 13 women ( $6,2 \pm 1,7\%$ ) oncologists diagnosed first stage of tumor in 88 ( $41,9 \pm 3,4\%$ ) – second stage and in 109 ( $51,9 \pm 3,4\%$ ) – third stage. For the duration of oncology process all the studied patients were divided as follows: the most numerous was the group of patients with duration of tumor less than 1 year – 105 women ( $50,0 \pm 3,4\%$ ); from 1 to 3 years old – 61 patient ( $29,1 \pm 3,1\%$ ); 3 to 5 years – 36 patients ( $17,1 \pm 2,6\%$ ) and more than 5 years – 8 women ( $3,8 \pm 1,3\%$ ).

All surveyed patients knew or guessed the nature of their illness, and in all cases were obtained informed consent for their participation in the study. Diagnosis of clinical form of the underlying disease carried by oncologists. In addition, patients were having complex somatic and neurological examination in the standard amount. We analyzed the data as subjective and objective (according to family) history, outpatients and hospital medical records of cancer patients. Exclusion criteria were the presence of severe concomitant systemic diseases, additional exogenous (intoxications, traumatic brain injury history), endogenous mental

disorders, organic brain damage (including metastatic origin). For clinical verification, determination of the degree of severity of anxiety and depressive disorders and assess their reduction during therapy we used detailed comprehensive clinical structured interview according to the diagnostic criteria of Section V for ICD-10 and Montgomery-Asberg scale MADRS (SAMontgomery, M. Asberg, 1979) [11] and Hamilton HAM-A (M.Hamilton, 1959) [12]. In conducting the analysis of the results of the study we have used methods of biostatistics in licensing packages Statistical Analysis «Med-Stat» (E.Lyah, V.H.Huryanov, 2004) and «Statistica 5.5» (StatSoft Inc., 1999) [13]. The results: In 152 women with malignant tumors of the reproductive system ( $72,4 \pm 3,1\%$ ) were found nonpsychotic mental disorders, depressive disorders are presented within symptomatic depressive disorders (F 06.32;  $31,0 \pm 3,2\%$ ), and adjustment disorder – prolonged depressive (F 43.21;  $5,2 \pm 1,5\%$ ) and mixed anxiety-depressive reaction (F 43.22;  $11,4 \pm 2,2\%$ ). Preferably violations presented as symptomatic anxiety disorders (F 06.4;  $11,4 \pm 2,2\%$ ) and adjustment disorder as a reaction with a predominance of anxiety (F 43.23;  $13,3 \pm 2,3\%$ ). In  $27,6 \pm 3,1\%$  of patients surveyed emotional disturbances were not reached the clinical level, that allowing to assign them to a group of psychiatric norms (Z 85). The most common clinical signs of emotional disorders in patients who suffered from malignant tumors of the reproductive system, were depressed with grief, a sense of sadness and hopelessness, loss of interest in the surrounding events, combined with a lack of initiative, a marked decrease in general activity and fatigue even with little effort, decreased ability to concentrate, negative reevaluation of previous experiences with its projection into the future, and were present objective evidence of psychomotor retardation or agitation. Most women have not only signs of depression, but also they have anxiety disorders – in their statements clearly sounded alarming concerns about possible failures in the treatment of tumor, cancer patients focused on almost constant feeling of excitement or uncertain dangers awaiting misfortune not only for themselves but for friends too, inability to relax, if they only think about the nature of their illness, the memories of surgery (hysterectomy, ovariectomy) and conservative (aids therapy) treatment in the form of so-called invasive experiences (flashback) and «invasion of thought.» Obsessive thoughts amplified in the evening-night, which prevented sleep or gleamed in the structure of dreams. In addition, sleep disorders characterized by horrific dreams, broken sleep, early awakening with the inability to sleep. This patient insisted on aspiration of avoiding situations which are directly or indirectly related to cancer disease.

Dominance symptoms of positive affectivity were typical for patients with the initial stages of tumor and patients who

have undergone successful treatment. In patients with newly diagnosed malignancies precision, stability and diversity of alarming concerns addressed to his physical condition, allowed to talk about anxiety and hypochondrical disorders. Almost in all patients were revealed asthenic symptoms, as manifested by general weakness, malaise, fatigue, difficulty in concentration, low productivity of mental and physical work. However, in the early stages of cancer asthenic manifestations were mild and, to a considerable extent, ranged parallel dynamics of main malignancy. As the disease progressed, and especially in case of failure of conducted anticancer treatment in the structure of depressive disorders began to show signs of negative affectivity with asthenic-apatetic syndrome. Some patients admitted the existence of opinions about the futility of life and desire of death as a way of getting rid of existing or anticipated in the near future torment, but activity to implement them we have not found. Timeous recognition and proper qualification of emotional disorders in oncological practice acquire real meaning only in conjunction with their effective correction related to critical factors to improve the quality of treatment and rehabilitation measures in patients suffering from malignant tumors of the reproductive system. The main aim of psycho-surgery is to reduce anxiety and depression, deprivation of patients from a feeling of hopelessness associated with manifestation, recurrent and / or metastatic cancer pathology, to help patients more adequately estimate the significance of traumatic events, overcome pain, pessimistic perception of the situation related to the illness, correct an irrational settings, select appropriate goals, mobilize the forces, reduce fear of recurrence and death, to generate new prospects beyond the disease.

Because treatment of psychooncology disorder involves not only the symptoms but also the correction of therapeutically adverse personality characteristics of patients and the return of their social roles and functions (family, professional, interpersonal, and others.) We have developed an integrative therapeutic package that includes methods of psychotherapeutic and psychopharmacological interventions in conjunction with the designated antitumoral treatment of the underlying disease, which contributed to the changing attitudes of patients to their condition and improve complaints of the therapeutic schemes.

In organizational terms, we applied consulting and unifying model of care [14], which includes joint supervision of patients by oncologist and psychiatrist / psychotherapist. This model not only provides direct contact with patients who are ready to psychological and psychiatric intervention, but fruitful collaboration with oncologists.

Psychopharmacotherapy of emotional disorders was carried out on the basis of monotherapy and differentiated use of antidepressants in past generations who have high levels of efficacy, tolerability and safety for use in combination with chemotherapy in cancer patients. This approach is associated with the desire to minimize side effects and gave the opportunity to actively engage patients to psychotherapeutic process, thereby facilitated to faster disupdatance of painful experiences and restore emotional state. The

advantage of past generations of antidepressants (SSRI, IZZSN, Nass and MT) for the correction of non-psychotic mental disorders in patients suffering from malignant tumors of the reproductive system, in our opinion, related to the following factors: a minimal effect on cholinergic,  $\alpha$ -adren-ergic and histamine receptors in the brain, which causes a slight range of side effects of this group of drugs, the possibility of a one-off during the day, a high therapeutic index, lack of need for individual selection of dosing, high bio-availability, which provides an earlier antidepressant effect, «morphin-saving» action of antidepressants (potentiation of the analgesic effect of chronic pain syndrome in cancer patients is associated with both immediate damage nerve fibers and with neuropathy) does not decrease the activity of drugs in their long-term use, including during maintenance therapy somatically debilitated patients, the minimum interaction between doctors with anticancer drugs [15; 16]. Duration of stopping stage of therapy was on average 8 weeks, due to the clear manifestation of antidepressive effect no sooner than 4–6 weeks of continuous medication, supportive therapy by timoanaleptics lasted 6–9 months. Psychotherapy of women who suffered from malignant tumors of the reproductive system, performed according to the conception of B. Mikhailov (2002) [14], and was based on general principles, but has a number of specific features according to the population of patients and conditions of antitumor specialized hospital – differentiated combination pathogenic, symptomatic and preventative psychotherapeutic interventions during both individual and group («ward») forms of work with cancer patients using the methods of rational, cognitive-behavioral therapy, positive short-term psychotherapy and psychological methods of self-regulation (deliberate self-hypnosis, positive creative visualization support of audio modality of perception specially selected musical compositions and sounds of nature in a state of progressive muscle relaxation by Jacobson), and active involvement of family members of patients in the treatment process (in the framework of family therapy). Thus, the main task of integrative psychotherapy in complex of modern rehabilitation program for women who suffer from malignant tumors of the reproductive system, was to create the most adaptive (within the individual resources) ways to respond against the disease, which is accompanied by a denial of the reality of the disease, refusal of treatment and other violations complaints. To achieve this goal, we relied on the following target of psychotherapeutic effects: reduction of the intensity of anxiety and depressive feelings, harmonizing the perception of illness, is aimed to reduce feelings of powerlessness and the formation of a less catastrophic illness image creation in cancer patients with a positive attitude on the passage of anti-tumoral treatment and active combat with the disease, overcoming in patients the syndrome of lack in meaning of life and adaptation of patients themselves and their loved ones to the new conditions of life, resolving conflict inside family directly or indirectly associated with the disease. Complex of psycho-correctional measures which we have developed against specific antitumor treatment was applied on 77 cancer patients with

non-psychotic mental disorders (therapeutic group). Patients from comparison group (I comparison group – 75 cancer patients with non-psychotic mental disorders who refused from psychotherapy, II comparison group – 58 women without mental disorders) was conducted only for treatment of the underlying malignancy. The effectiveness of the proposed correctional system of emotional state of women with cancer evaluated at the end of stopping stage of therapy – after 8 weeks of using self-assessment by patients of their emotional state combined with an unstructured clinical interviews and objective (standardized) assessment of the severity of anxiety and depression before and after correction. 79,4 ± 3,2% of women from therapeutic group noted varying degrees of positive dynamics in the reduction of emotional disorders (significant improvement noted 41,9 ± 3,8% of patients) and 20,6 ± 3,2% of cancer patients from this group anxious depressive symptoms continued to abstain. In I compared group subjective improvement in emotional state revealed only in 28,6 ± 3,9% of patients, and in the majority of women in this group (52,9 ± 4,0%) changes in the emotional state were reported, and 8,5 ± 2,3% of patients admitted reinforce of the anxiety-depressive disorders. In II comparison group, which included patients, suffering from malignant tumors, whose emotional disturbances have not reached the level of symptomatic mental disorders, emotional state stabilization against organized specially marked anticancer therapy 71,5 ± 3,8% of women. Besides the subjective assessment by patients of their emotional state the efficacy of our medical complex was assessed in the dynamics using depression scales of Montgomery-Asberg (MADRS) and the Hamilton Anxiety (HAM-A). In the therapeutic group we observed we have found a significant decrease in the severity of symptoms of anxiety and depression, this is reflected in the reduction of the average score as depressive severity (on a scale MADRS at 49,1 ± 9,4% of the initial level – to 17,5 ± 1,1 points) and anxious symptoms (on a scale HAM-A at 57,1 ± 7,6% of the initial level – up to 18 ± 1,6 points). Reduction of the original total score over 50% on a scale of depression Montgomery-Asberg (MADRS) was observed in 41,9 ± 3,9% of patients suffering from malignant tumors, and the scale Hamilton Anxiety (HAM-A) – in 40,6 ± 3,9% patients. In 51,3 ± 3,9% of patients were found improvement of subjective emotional state on a background of incomplete reduction of anxiety and depressive disorders (depressive and anxious symptoms by the scales MADRS and HAM-A corresponded to mild severity of emotional disorders), which, obviously, due to both the effect of frustrating the strong stress factor (the presence of severe physical illness – cancer), and with the related special diagnostic and treatment. According to that complete reduction of anxiety and depressive symptoms in such circumstances is impossible, but the real purpose of conducted psycho-correctional measures is to achieve maximum and sustainable reduction of psychopathology. In 6,33 ± 1,9% patients suffering from malignant tumors correction of anxiety-depressive disorders was ineffective, which was due primarily to their difficult physical condition caused by the prevalence of tumor – multiple metastatic lesions in bones,

liver and lungs. Clinical effect is characterized by subjective improvement in mood, decreased the amplitude of affective disorders, reduction of signs and symptoms of emotional lability syndrome, irritable weakness, improved sleep, increased levels of performance in daily activities, decreased expression of anxiety and restlessness, restructuring perception of cancer with a reduction of disadaptive patterns related to the disease and the formation of new adaptive solutions to the situation like malignant tumors, that accompanied by awareness and acceptance of this fact. In addition, under the influence of the therapeutic complex, which we have developed, the patients noticed improved subjective perception of quality of life. Increased satisfaction with quality of life, both physical and psychological components of health of cancer patients, suffering from nonpsychotic mental disorders who participated in integrative psycho-correctional complex, in our opinion, is connected on the one hand with the reduction of the symptoms of cancer, connected with the implementation of radical surgery, improving the general physical condition, and the other – with the normalization of emotional state, and as a result, changing attitude to his own «I» and reality. In this case, the main task of integrative psychotherapy in complex of modern rehabilitation program for women who suffer from malignant tumors of the reproductive system, was to create the most adaptive (within the individual resources) ways to respond against the disease, which is accompanied by a denial of the reality of the disease, refusal of treatment and other violations compliens. To achieve this goal, we relied on the following target of psychotherapeutic effects: reduction of the intensity of anxiety and depressive feelings, harmonizing the perception of illness, is aimed to reduce feelings of powerlessness and the formation of a less catastrophic illness image creation in cancer patients with a positive attitude on the passage of anti-tumoral treatment and active combat with the disease, overcoming in patients the syndrome of lack in meaning of life and adaptation of patients themselves and their loved ones to the new conditions of life, resolving conflict inside family directly or indirectly associated with the disease.

In addition, it is appropriate to share psychopharmacological and psychotherapeutic interventions in the treatment of non-psychotic mental disorders in patients suffering from cancer of the reproductive system, in a specialized oncological centers. Such an approach, as a destigmatisational form of psychiatric help, has contributed not only to the elimination of emotional distress, but also therapeutically beneficial influenced on the dynamics of the primary cancer.

#### Literature:

1. *Cancer in Ukraine 2010-2011 years // Bulletin of the National Cancer Registry. – 2012. – № 13. – 111 p. – Mode of access: <http://www.ucr.gs.com.ua/dovidb0/index.htm>*
2. *Karseladze AI Questions epidemiology and diagnosis of cancer yaychnykov / AI Karseladze // Practical. onkol. – 2000. – № 4. – S. 21-28.*
3. *Komkova EP Neuro-psycho disorders in Oncological patients (medical and rehabilitational aspects) / EP Komkova, A. Maharyll, N. P. Kokoryna, A. Sergeev // Siberian onkol. Zh. – 2009. – № 2 (32). – P.40-43.*
4. *Petrov DS Psychopatological condition and his dynamics as a result of surgery and psychotherapy in patients with cancer uterine pathology / DS Petrov, B. Yu Volodin, EP Kulikov // Diagnosis and treatment of*

- major diseases oncological location. Tue. scientific. May. / Ed. prof. EP Kulikova. – Ryazan: Uzoroch, 2006. – P.182-184.
5. Sukegawa A. Post-traumatic stress disorder in patients with gynecologic cancers / A. Sukegawa, E. Miyagi, R. Suzuki // *J. Obstet. Gynecol. Res.* – 2006. – Vol. 32, N 3. – P. 349-353.
  6. Smulevich AB Psychological disorders in oncology (the results of multicentral program «synthesis») / AB Smulevich, A. Andryushchenko, DA Beskov // *Psychological total disorders in medicine.* – 2009. – № 1. – P.4-11.
  7. Andrykovski M. Affective, cognitive and behavioral response to an abnormal ovarian cancer screening test result: a longitudinal case control study / M. Andrykovski, E. J.Pavlik // *Abstracts of the 8th world congress of psycho-oncology.* – 2006. – Vol. 151. – P. 65.
  8. Ell K. Cancer treatment adherence among low-income women with breast or gynecologic cancer: a randomized controlled trial of patient navigation / K. Ell, B. Vourlekis, B. Xie, F. R. Nedjat-Haiem et al. // *Cancer.* – 2009. – Vol. 115 (19). – P. 4606-4615.
  9. Kuchler Th. Impact of psychotherapeutic support for patients with gastrointestinal cancer undergoing surgery: 10-year survival results of a randomized trial / Th. Kuchler [et. al.] // *Journal of clinical oncology: official journal of the American Society of Clinical Oncology.* – 2007. – Vol. 25. – P. 2702-2708.
  10. Kharchenko EN Complex therapy psychopathological disorders in oncological patients in rates with the different types of surgical intervention / EN Kharchenko, A. Chaban, SG Buhaytsov // *History of Psychiatry.* – 2002. – № 3. – S. 158-163.
  11. Montgomery S. A. A new depression scale designed to be sensitive to change / S. A. Montgomery, M. Asberg // *Br. J. Psychiatry.* – 1979. – Vol. 134.
  12. Hamilton M. The assessment of anxiety states by rating / M. Hamilton // *Br. J. Med. Psychol.* – 1959. – Vol. 32. – P. 50-55.
  13. Lyakh JE, Gur'yanov VG Khomenko VN, Panchenko AA *Fundamentals of computer byostatystyky. Analysis of information in biology, medicine and pharmacy statistic package MedStat.* – D.: Papakytsa EK, 2006. – 214 s.
  14. *Psychotherapy in Medicine (Klynycheskoe MANUAL)* / [B. V. Mikhailov, AI Serdyuk, VA Fedoseev]. – Kharkov, 2002. – 108 p. Ermakov NB
  15. *Treatment pain syndrome in practice onkolohycheskoy / NB Ermakov, E.. A. Zhavryd // Recipe.* – 2001. – Vol. 17 (3). – P. 40-45.
  16. Miller A. The effectiveness of antidepressants in the treatment of chronic non-cancer pain – a review / A. Miller, J. Rabe-Jablonska // *Psychiatr Pol.* – 2005. – Vol. 39 (1). – P. 21-32.

#### ЭФФЕКТИВНОСТЬ КОРРЕКЦИИ ЭМОЦИОНАЛЬНЫХ НАРУШЕНИЙ У ЖЕНЩИН, КОТОРЫЕ СТРАДАЮТ ЗЛОКАЧЕСТВЕННЫМИ НОВООБРАЗОВАНИЯМИ РЕПРОДУКТИВНОЙ СФЕРЫ

А. Ю. ВАСИЛЬЕВА, Н. И. КИРИЧЕНКО

В статье представлены данные о эмоциональных нарушениях у женщин, страдающих злокачественными новообразованиями органов репродуктивной сферы, а также направления и методы психофармако- и психотерапевтической коррекции эмоциональных нарушений в комплексе реабилитационных мероприятий. Оценена эффективность разработанной системы психокоррекции непсихотических психических расстройств женщин с опухолями репродуктивной сферы.

**Ключевые слова:** женщины, злокачественные новообразования, репродуктивная сфера, эмоциональные нарушения, психокоррекционные мероприятия

#### EFFICIENCY OF CORRECTION OF EMOTIONAL DISORDERS IN WOMEN SUFFERING FROM MALIGNANT TUMORS OF REPRODUCTIVE SYSTEM

A. VASYLYEVA, N. KYRYCHENKO

The article presents data about emotional disturbances in female patients, suffering from cancer of reproductive system. Directions and methods of psychopharmaco-and psychotherapeutic correction of emotional condition in the rehabilitation complex for female patients, suffering from malignant tumors of reproductive system. The efficiency of the developed system psychocorrection of nonpsychotic mental disorders of women with tumors of reproductive system.

**Key words:** female patients, cancer, reproductive system, rehabilitation

УДК 615.895.8

#### В. А. Вербенко, Г. Н. Вербенко ПРИНЦИПЫ ФОРМИРОВАНИЯ НЕЙРОКОГНИТИВНЫХ НАРУШЕНИЙ ПРИ РАССТРОЙСТВАХ АФФЕКТИВНОГО СПЕКТРА

Государственное учреждение «Крымский государственный медицинский университет  
им. С. И. Георгиевского»

**Ключевые слова:** нейрокогнитивные нарушения, аффективные расстройства

Приведено теоретическое обоснование принципов формирования нейрокогнитивных нарушений при расстройствах аффективного спектра. Расширенный обзор литературы демонстрирует наличие нейрокогнитивных дисфункций разной степени выраженности при расстройствах аффективного спектра. Отмечено, что остаются недостаточно изученными особенности реагирования данных нарушений на терапию антидепрессантами и стабилизаторами настроения. Подчеркнута значимость использования нейропсихологических методов диагностики для определения специфической структуры нейрокогнитивных расстройств в зависимости от нозологии и оценки динамики нейрокогнитивных нарушений в процессе терапии расстройств аффективного спектра.

Современное состояние нейронаук характеризуется взаимодействиями между нейропсихологией, психиатрией, нейрофизиологией с все более широким применением методов нейровизуализации в изучении расстройств аффективного спектра. В сочетании с нейровизуализационными методами, нейропсихология и психиатрия вносят значимый вклад в изучение патогенеза морфо-функциональных мозговых механизмов формирования симптомов нарушений настроения. В последние годы в работах исследователей [1–4] стали общепринятыми такие понятия, как «нейрокогнитивные нарушения» (neurocognitive defects) и «нейрокогнитивные заболевания» (neurocognitive disorders). Термин «нейрокогнитивные нарушения» подчеркивает