DOI 10.26724/2079-8334-2020-1-71-109-115
UDC 616.89-008-001

S.V. Rymsha, I.L. Lukyanovych, O.V. Rymsha
Vinnytsya Pyrogov Memorial Medical University, Vinnytsya

PATHOGENETIC JUSTIFICATION OF DIFFERENTIAL THERAPY IN MENTAL DISORDERS WITH SOMATIC SYMPTOMS (PSS-BY DSM-5)

e-mail: lukgil03@gmail.com

The problem of prevalence and chronicity of psychogenic diseases becomes one of the most important in modern medicine in view of the economic losses associated with the compensation for this pathology treatment and its consequences. The purpose of the study was to formulate approaches for differential diagnosis and demonstrative use of medicines and psychotherapy for treatment of psychiatric disorders with somatic symptoms, taking into account pathogenic factors and their pathomorphosis. Conclusion was made that the evidence-based use in treatment of psychiatric disorders with somatic symptoms, taking into account pathogenic factors and their pathomorphosis, involves the predominant use of pregabalin as a universal neuromediator balance stabilizer in therapy of both anxiety disorders and other psychogenic disorders.

Key words: psychogenic disorders, anxiety disorders, neurotransmitters, pregabalin, somatic component, differential therapy.

The work is a fragment of the research project "Scientific substantiation of diagnostic and treatment-rehabilitation measures for endogenous and exogenous-organic psychotic and non-psychotic mental disorders", state registration No. 0116U000856.

Chronic stress can lead both to behavioral reactions and structural changes in many areas of the brain, as a consequence of cerebral hypoxia, due to nitric oxide increase, its cytotoxic effect on neuroglial elements, both in the cerebral cortex and in the hippocampus. [9].

Duration and intensity of stress effects on functionally overloaded cells depletes adaptation reserves and leads to their destruction by apoptosis / necrosis.

Under the influence of chronic stress, structural and functional changes occur, both in the neuro- and in satellite oligodendroglia, which are responsible for the information reception and transmission, and for the formation of pathological relationship ("closed circle") in the sensory-motor area and in the hippocampus, as an adaptive reaction to their ultrastructures impairment.

Given that, vegetative dysfunction, which develops as a result of supra-segmental vegetative structures dysregulation, manifests itself both as vegetative and emotional-cognitive disorders.

The development of psychosomatic disorders (PSD) is associated with many etiologic and predisposing factors.

In addition, a shift in the balance toward ergotropically tuned amines (catecholaminergic and serotoninergic) leads to impairment of neurohumoral regulation between glutamate - aspartate and the GABA-ergic system.

Shifting the balance towards the excitatory amines leads to the growing level of anxiety, agitation, insomnia. A shift towards GABA-ergic results in sedation, drowsiness, decreased mental activity, impaired attention and memory [9].

Serotonin and histamine are included into the humoral system of physiological processes regulators and modulators, which, under pathology or stress, turn into a disease releasing factor.

As a neurohormone, serotonin regulates noradrenaline release from synaptic nerve endings, and regulates vascular tone due to binding to specific receptors on vascular walls' endothelial cells [8].

Hereditary-constitutional predisposition plays an important role. Usually the inherited type of vegetative response, which depends on a certain ratio of MLA antigens, the activity of α- and β-adrenergic receptors, the ANS suprasegmentary centers sensitivity, metabolism features. (Multifactorial and autosomal dominant type of inheritance. The type of autonomic response determines the adaptability of the body or the stress-limiting activity.)

Thus, it can stated that simultaneously with the psychopathological response to the psycho-traumatic effects (stress) of any somatic disease, the symptoms of autonomic dysfunction are necessarily formed, and only at a later stage they are transformed into a somatic disorder, somatoform or affective disorder of a particular organic system.

The purpose of the work is to carry out differential diagnosis and evidence-based use of medicines for treatment of psychiatric disorders with somatic symptoms.

Materials and methods. In order to study clinical features of psychosomatic disorders in adolescence, we examined 329 adolescents.

The criteria for inclusion into the study were: signing of the informed consent by both parents, individuals of both genders aged 10 to 18 years and an expert-proved diagnosis of a psychosomatic disorder according to International Classification of Diseases ICD-10 or PSD according to DSM-V.

The average age of the patients under study was 14.0±2.0 years, male - 49.54%, female - 50.46%.

The patients were divided into groups according to the main functional syndrome affecting this or that particular system.

In order to exclude organic pathology, the patients were subjected to clinical and instrumental studies.

Diagnosis of mental disorders was carried out using: clinical-psychological questionnaire by Maria Rovacs (1992), Spielberger's method (STPI-State Trait Personal Inventori), clinical-psychopathological (clinical) interview, follow-up methods "Questionnaire of the adolescent health status", filled in by parents.

Statistic processing was performed using Statistica v.12.0 (StatSoft) software package. Nonparametric correlation analysis was performed using the Spearman method (correlation coefficient, r). The results were considered significant at $p < 0.05$.

Results of the study and their discussion. Studies of the somatic complaints incidence depending on adolescents' age are presented in table 1 with the reliability determined ($p < 0.05$).

Complaints of the cardiovascular system were dominated by heart pains, palpitations, rapid or slow pulse. On the part of the digestive system, complaints of epigastric pain, heartburn and constipation were prevalent. Shortness of breath, coughing, labored breathing, timed inspiratory capacity, expiratory hold exhalation, dominated among the complaints of the respiratory system. Pain and frequent urination were the main complaints of the excretory system.

Adolescents associated the onset of symptoms, i.e., the onset of the disease, with stress factors, such as family and school conflicts, parents' divorce, death or serious illness of their near and dear ones, moving with change of school.

Table 1

Somatic complaints incidence, depending on adolescents' age

Symptoms	adolescents aged 10-14 n=179		adolescents aged 15-16 n=96		adolescents aged 17-18 n=54	
	Young males n=94	Girls n=85	Young males n=46	Girls n=50	Young males n=21	Girls n=33
Cardio-vascular system	8 8.51 %	4 4.71 %	3 6.52 %	3 6.0 %	1 4.76 %	1 3.03 %
Respiratory system	5 5.32 %	5 5.88 %	4 8.69 %	8 16.0 %	1 4.76 %	2 6.06 %
Digestive system	4 4.26 %	4 4.71 %	7 15.22 %	5 10.0 %	6 28.57 %	4 12.12 %
Presence of Several syndroms	10 10.64 %	9 10.59 %	13 28.26 %	16 32.0 %	6 28.57 %	9 27.27 %

It is known that in the formation of psychosomatic diseases an important role is played by a personal factor, which determines the appropriate response of the individual to stressful impacts [12]. Various psychosomatic disorders are united by a common feature - the combination of mental and somatic disorders, which emphasizes the close correlation between the individual's personality development and the biological factors acting on him [13]. This fact prompted the analysis of the two traits correlation without taking into account the nature of their distribution among adolescents of different age groups and social status by means of nonparametric Spearman correlation analysis (correlation coefficient, r). The results were considered reliable at $p < 0.05$.

We have established reliable correlations between somatic complaints and mental disorders manifestations. Thus, there is a correlation between the stress factor's impact and the intensity of central nervous system complaints ($r = 0.63$, $p < 0.05$); those of the cardiovascular system ($r = 0.71$, $p < 0.05$), in particular in girls ($r = 0.79$, $p < 0.05$); of the digestive system ($r = 0.84$, $p < 0.05$), in particular in young males ($r = 0.87$, $p < 0.05$). In addition, impaired digestive function under the stress impact correlated with neuropsychic disorders ($r = 0.76$, $p < 0.05$). The identified reliable correlations between the effects of stressors and the internal organs disorders in adolescents indicate the leading role of the stress factor.

The following syndromes have been verified in the clinic of somatic psychopathological disorders: hysteroconversive, anxiety-phobic, depressive, autonomic dysfunction.

The results of studying the incidence of psychopathological disorders depending on the adolescents' age are presented in table 2.

Table 2

Psychopathological disorders depending on adolescents' age

Syndroms	Adolescents aged 10-14: n=179		Adolescents aged 15-16: n=96		Adolescents aged 17-18: n=54	
	Young males n=94	Girls n=85	Young males n=46	Girls n=50	Young males n=21	Girls n=33
hysteroconversive	3 3.19 %	3 3.53 %	2 4.35 %	2 4.0 %	2 9.53 %	2 6.06 %
anxiety-phobic	10 10.64 %	6 7.06 %	18 39.13 %	14 28.0 %	6 28.57 %	11 33.33 5
depressive	4 4.26 %	5 5.88 %	8 17.39 %	9 18.0 %	4 19.05 %	8 24.24 %
autonomic dysfunction	13 13.83 5	10 11.76 %	17 36.96 %	14 28.0 %	7 33.33 5	9 27.27 %

Hystero-conversive disorders in the form of globus pharyngis in swallowing, chilly sensation, palpitations and irregular heart rhythm, were reliably ($p < 0.05$) frequently observed in adolescents aged 17-18 years (7.41%).

Anxiety-phobic syndromes dominated with panic attacks and sleep disorders ("pavor posturnus") in 33.3% of adolescents aged 15-16, 31.48% of persons aged 17-18.

Depressive syndrome with anhedonia, hypotension, circadian oscillation of affection is more commonly diagnosed in adolescents aged 15-16 (17.7%), 17-18 years (22.2%).

The syndrome of autonomic dysfunction in the form of vascular dystonia, impaired secretory and motor function of the gastrointestinal tract, long-term subfebrility was found in adolescents aged 15-16 (32.3%), 17-18 years (29.63%).

Thus, the performed analysis of the somatized psychopathological disorders incidence depending on age has determined the dominance of these symptoms in adolescents of 15-16 and 17-18 years.

Spearman's rank correlation method revealed a relationship between causative factors and psychosomatic disorders.

The existence of reliable correlation between the stress factor impact and the complaints severity of the digestive system ($r = 0.83$, $p < 0.05$), cardiovascular system ($r = 0.74$, $p < 0.05$) and of the central nervous system ($r = 0.61$, $p < 0.05$) was established. In addition, impaired digestive function under the stress factor impact was correlated with neuropsychic disorders ($r = 0.79$, $p < 0.05$). Thus, the reliable correlations revealed between the stressor's impact and digestive, cardiovascular and neuropsychic functional disorders in adolescents testify to the significant effect of stress factor in the pathogenesis of pathological manifestations.

В результаті нашого дослідження встановлено високу частоту (81,5 %) психосоматичних розладів серед тих підлітків, які потребували медичної допомоги.

Psychosomatic disorders (PSD) treatment requires a step-by-step multidisciplinary client-centered approach (family psychiatrist-psychotherapist) for treatment of somatic, anxiety, and depressive symptoms. The results obtained are confirmed by the survey data. It has been proved that psycho-traumatic events contribute to the development of psychosomatic disorders [13].

Pharmacotherapy of patients with psychosomatic disorders is directed to the main groups of target symptoms: affective and somatic vegetative.

Among the syndromes in the clinical structure of psychosomatic disorders are anxiety, asthenic and depressive disorders.

Features of the depressive syndrome clinical picture in children include atypical symptomatology, polymorphic structure of the syndrome, asthenic coloration of depressive disorders, neurotic level of their manifestations, rudimentary affective component, requiring the use of specific pharmacotherapy. At the initial stages of the anxiety syndrome development, in autonomic disorders, the main pathogenetically justified treatment method is prescription of anxiolytics. [2].

The considered pathogenetic mechanisms of somatic symptoms formation require a comprehensive approach, both to the use of diagnostic instruments and to the provision of care taking into account socially determined factors, atypical course of pathological symptoms, features of medical care stages with selection of the most appropriate pharmacotherapy drug, within the treatment protocols.

Currently, one of the most important problems, both in clinical pharmacology and in practical medicine, is selection of the most appropriate pharmacotherapy drug for a particular patient, based on the pathogenetic principles of his symptoms formation within the treatment protocols.

The best efficacy of a particular drug's action is determined not only by its "nerve-point" effect on one of the neurally mediated systems or chains of neuronal metabolism, but by its universal regulatory influence at the level of the CNS as a whole, which will ensure its maximum safety and "multiple" selectivity.

Table 3

Algorithm for PSD treatment

Without concomitant anxiety or depressive syndrome		With concomitant anxiety or depressive syndrome	
Line I	Eclectic psychotherapy	Line I	Eclectic psychotherapy
Plus	Psychiatrist's consultation	Plus	Psychiatrist's consultation
Additionally	Physical activity	Plus	Antidepressant drugs
Additionally	Relaxation technique	Additionally	Physical activity
		Additionally	Relaxation technique
Line II	Antidepressant drugs	Line II	Other types of psychotherapy
		Plus	Antidepressant drugs
Line III	Other types of psychotherapy	Line III	Atypical antipsychotics

Such a natural universal inhibitory neurotransmitter is GABA, which has most of the receptors in the CNS, which are located in the vast majority of structures (cerebral cortex, olfactory bulb, hypothalamus, amygdaloid body, cerebellum, dorsal horn of the gray matter). GABA is synthesized from glutamic acid due to glutamate dehydrocarboxylase only in the CNS.

The structural analogue of GABA is pregabalin, whose mechanism of action is to bind to the α2-σ-protein substance of the CNS potential-dependent calcium channels, which reduces the release of excitatory neurotransmitters, in particular glutamate, norepinephrine (noradrenaline) and P-substance, which participate in forming anxiety disorders. This process only occurs under the conditions of increased (pathological) depolarization of the neuron, which determines the singularity of pregabalin action mechanism. That is, Ca^{2+} ions cannot enter the middle of the excited neuron (key in the lock), thus inhibiting the release of the excitatory neurotransmitters into the synaptic cleft.

In physiological depolarization, the "lock is open", resulting in maintaining neurotransmitter balance between excitatory and inhibitory neurotransmitters. In this case pregabalin does not bind to any of the known mediator receptors in the CNS, both pre- and postsynaptic, which confirms its maximum "multiple" selectivity, especially in treatment of anxiety disorders in which, as it was noted, a "closed circle" is formed due to the imbalance between activating and inhibitory neurotransmitters, namely the activation of noradrenaline, P-substance, glutamate, and attenuation of anti-anxiogenic GABA systems, adenosine.

The result of medical treatment in adolescents was the positive dynamics of psychopathological symptoms.

Thus, after 18 days of therapy, there was a tendency for the indices improvement, and after 60 days changes were pronounced, especially in the reactive and personal anxiety indices.

Given the above data, it was of scientific interest to determine the impact of drug therapy on the dynamics of psychopathological syndromes. Thus, in the case of somatized conversion-dissociative syndrome, a high level of personal anxiety was diagnosed in 57.14% of patients before treatment, 50.00% - after 18 days of treatment and 42.86% of patients after 60 days of treatment. Low level of personal cognitive activity was found in 35.71% of adolescents before treatment. After 18 days of treatment, the level of personal cognitive activity increased and was diagnosed low in 28.57% of patients and after 60 days of treatment - in 14.29%.

High values of personal negative emotional experiences occurred in 21.43% of persons before treatment, 35.71% - after 18 days and in 42.86% of students after 60 days of treatment. High values of situational anxiety were found in 78.57% of persons before treatment, in 64.29% and 57.14% of persons - 18 days and 60 days after treatment, respectively. Low levels of situational cognitive activity were found in 14.29% of adolescents before treatment and 7.14% after treatment. High values of situational negative emotional experiences occurred in 57.14% of persons before treatment and in 64.29% of schoolchildren after 18 days and 60 days of treatment, respectively (table 4).

In the case of somatized depressive syndrome, a high level of personal anxiety was diagnosed in 33.33% of patients before treatment and in 25.0% of patients after 18 days and 60 days of treatment. A low level of personal cognitive activity was found in 33.33% of adolescents before treatment, in 50.0% after 18 days and in 41.67% after 60 days of treatment, respectively. High values of personal negative emotional experiences occurred in 25.0% of persons before treatment and these values did not change against the background of treatment. High rates of situational anxiety were found in 50.0% of patients before treatment,

in 41.67% of patients after 18 days of treatment and in 33.33% of patients after 60 days of treatment. Low levels of situational cognitive activity were found in 8.33% of adolescents before treatment and in 16.67% after treatment. High values of situational negative emotional experiences occurred in 58.33% of patients before treatment and in 50.0% and 41.67% of schoolchildren after treatment.

In somatic phobic syndrome, a high level of personal anxiety was diagnosed in 25.0% of patients before treatment and in 45.45% of patients after treatment. Low levels of personal cognitive activity were detected in 72.73% of adolescents before treatment in 50.0% and in 45.45% after 18 days and 60 days of treatment, respectively.

High values of personal negative emotional experiences were not determined before treatment and occurred in 22.72% of schoolchildren after treatment. High indices of situational anxiety were found in 45.45% of patients before treatment. After treatment, high values remained in 22.73% after 18 days and in 18.18% of patients after 60 days. A low level of situational cognitive activity was detected in 22.73% of adolescents before treatment and this index did not change after treatment. High values of situational negative emotional experiences occurred in 72.73% of persons before treatment. After 18 days and 60 days of treatment, these values remained high in 50.0% and in 40.91% of schoolchildren, respectively (table 4).

Analysis of the school anxiety dynamics by the Phillips test, against the background of drug therapy, revealed a tendency to increase the body's adaptive capacity in stressful situations. The expediency of analyzing each anxiety factor and their changes dynamics according to the Phillips method within the biopsychosocial approach to helping clarify the role of psychopedagogical work (psychoeducation) with family, teachers and peers and was carried out in all the study groups.

Table 4

Indices of Spielberger anxiety scale (modified by A.D. Andreeva) against the background of drug treatment (M ± σ)

Groups	anxiety	cognitive activity	negative emotional experiences	anxiety	cognitive activity	negative emotional experiences
	Personal			Situational		
Conversion-dissociative syndrome, n=23						
Before treatment	24.09 ± 0.24	23.72 ± 0.27	22.36 ± 0.45	26.54 ± 0.23	22.18 ± 0.20	22.36 ± 0.40
18 days after treatment	23.92 ± 0.27	26.14 ± 0.22	23.85 ± 0.42	24.96 ± 0.25	24.71 ± 0.16	24.21 ± 0.43
60 days after treatment	23.80 ± 0.31	24.80 ± 0.26	24.10 ± 0.55 *	24.40 ± 0.32	24.40 ± 0.19 *	24.70 ± 0.53 *
Depressive syndrome, n=24						
Before treatment	24.07 ± 0.25	24.21 ± 0.20	22.42 ± 0.22	23.07 ± 0.21	25.57 ± 0.22	19.92 ± 0.20
18 days after treatment	22.58 ± 0.27	24.50 ± 0.21	23.08 ± 0.23	23.08 ± 0.17	25.25 ± 0.19	19.75 ± 0.30
60 days after treatment	22.06 ± 0.26 *	25.46 ± 0.21	23.06 ± 0.25	23.40 ± 0.17	25.26 ± 0.18	20.73 ± 0.33 *
Phobic syndrome, n=10						
Before treatment	23.80 ± 0.23	23.60 ± 0.37	21.40 ± 0.44	25.40 ± 0.10	22.80 ± 0.24	19.40 ± 0.23
18 days after treatment	24.00 ± 0.66	25.00 ± 0.70	22.75 ± 0.88	25.00 ± 0.38	23.75 ± 0.62	20.75 ± 0.89
60 days after treatment	23.80 ± 0.51	26.00 ± 0.57 *	23.80 ± 0.68 *	24.20 ± 0.29 *	25.00 ± 0.48 *	22.60 ± 0.75 *

Note. "*" a reliable difference ($p < 0.05$) when compared to pre- and post-treatment data.

The main feature and advantage of this test is that it permits to identify the level of anxiety in different school situations, to determine what spheres of intraschool relationships anxiety is localized in and what specific forms it takes.

The performed analysis of school anxiety before treatment revealed an increased level of general anxiety in 29.63% of adolescents in group 1 and 30.00% - in group 2.

In general, our results are consistent with those reported by medical researchers from around the world [1, 2, 3, 4, 5, 8, 10]. Thus, the feasibility is emphasized [1] of using anticonvulsants in the PSD treatment, the complexity of drug selection in the disease manifestations diversity [2], the PSD formation in adolescence with differentiation of certain somatic manifestations prevalence [9], a sharp increase in stress effects on school-age children with simultaneous reduction of their adaptive capacity, with formation of anxiety and depressive disorders [3, 12].

Features of the depressive syndrome clinical picture in children include: atypical symptomatology, polymorphic structure of the syndrome, asthenic coloration of depressive disorders, neurotic level of their manifestations, rudimentary affective component, that require the use of specific pharmacotherapy. At the initial stages of the anxiety syndrome development, with autonomic disorders, the main pathogenetically justified method of treatment is prescription of anxiolytics (Lytvyn LB, 2016).

Conclusion

Evidence-based use of medicines and psychotherapy for treatment of psychiatric disorders with somatic symptoms, taking into account pathogenic factors and their pathomorphosis, involves the preferential use of pregabalin as a universal stabilizer of neuromediator balance in therapy of anxiety and other disorders, which is sufficiently effective. The results of numerous randomized placebo-controlled trials allow us to draw the following conclusions:

-anxiolytic effect of pregabalin is not inferior to the action of benzodiazepines;

- it has an impact on both the mental and somatic PSD components;

-it has ability to influence concomitant comorbid symptoms (dysomnia, cephalgia);

- the drug provides rapid therapeutic effect (1 week of therapy);

- pregabalin has high profile of safety (even in old age);

- it does not cause addiction and dependence;

- the drug has a high degree of compliance;

- there are no side effects of GABA hyperactivation (CNS suppression, addiction) or serotonergic effects (dyspepsia, sexual disorders), cholinolytic effects, excitomotor crises at the beginning of treatment with selective serotonin reuptake inhibitors (SSRIs).

References

1. Vysochyn YeV, Rachkauskas HS. Vplyv likopidu na funktsionalnyy stan makrofahalnoyi fahotsytuyuchoyi systemy u pidlitkiv z somatyzovanymy depresyvnymy rozladamy .Ukrayinskyy morfolohichnyy almanakh. 2012; 10(1): 73-77. [in Ukrainian]

2. Grigoryeva YeA, Khokhlov LK. K probleme psikhosomaticheskikh, somatopsikhicheskikh otnosheniy. Obozreniye psikhiatrii i meditsinskoy psikhologii im. V.M. Bekhtereva. 2011; 2: 30-33. [in Russian]

3. Kopchak OO. Suchasni uyavlennya pro patohenez i likuvannya tryvozhnykh rozladiv. Mizhnarodnyy nevrolohichnyy zhurnal. 2018; (96) [Internet] Dostupno na: http://ww.mif-ua.com/archive/issue-34662. [in Ukrainian]

4. Kudinova YeI. Klinika, diagnostika i terapiya somatoformnykh rasstroystv. Muzhskoye zdorovye, gendernaya i psikhosomaticheskaya meditsina. 2015; 1-2(02): 45-52. [in Russian]

5. Levada OA, Troyan OS. Psykhichni rozlady iz somatychnymy symptomamy: mistse v suchasnykh klasyfikatsiyakh, definitsiyi, diahnostyka ta likuvannya. Arkhiv psykhiatriyi. 2018; 24, 1 (92): 6-14. [in Ukrainian]

6. Neudakhin YeV. Khronicheskiy stress v obshchey patologii u detey. Voprosy detskoy diyetologii. 2014; 12(5): 44–49. [in Russian]

7. Nurlygayanova LR, Akhmadeyeva EN. Psikhosomaticheskiye rasstroystva u detey. 2011; [Internet] Dostupno na: https://internist.ru/publications/detail/psihosomaticheskie-rasstroystva-u-detey. [in Russian]

8. Pilyagina GYa, Dubrovskaya YeV. Psikhosomaticheskiye rasstroystva v detskom i podrostkovom vozraste. Novyny medytsyny ta farmatsiyi: rozdil nevrolohiya ta psykhiatriya (Tematychnyy nomer) [Internet] Dostupno na: http://www.mif-ua.com/archive/gazeta-novosti-meditsinyi-i-farmatsii/numbers. [in Russian]

9. Pypa LV, Rymsha SV, Svistilnik RV, Lysytsya YuM. Depresiya i povyazana z neyu suyitsydalna povedinka v ditey i pidlitkiv: suchasni uyavlennya i stan problemy. CH.1. Zdorovye rebenka. 2014; 6(57): 92-99. [in Ukrainian]

10. Ratsyboryns′ka-Polyakova NV, Masik OI. Porivnyalna otsinka riznospryamovanykh pidkhodiv do likuvannya psykhosomatychnykh rozladiv u pidlitkiv. Ukrayinskyy terapevtychnyy zhurnal. 2017; 3: 58-64. [in Ukrainian]

11. Herzog A, Jordan P, Löwe B. Duration of untreated illness in patients with somatoform disorders. Journal of Psychosomatic Research. 2018 April; 1-6. Available at: https://doi.org/10.1016/j.jpsychores.

12. Paulzen M, Veselinovic T, Gründer G. Effects of psychotropic drugs on brain plasticity in humans. Restorative Neurology and Neuroscience. 2014; 32(1): 163-181. DOI: 10.3233/RNN-139004

13.Pinquart M, Shen Y. Depressive symptoms in children and adolescents with chronic physical illness: an updated meta-analysis. Journal of Pediatric Psychology, 2011; 36(4): 375-384.

Реферати

ПАТОГЕНЕТИЧНЕ ОБГРУНТУВАННЯ ДИФЕРЕНЦІЙОВАНОЇ ТЕРАПІЇ ПСИХІЧНИХ РОЗЛАДІВ ІЗ СОМАТИЧНИМИ СИМПТОМАМИ (РСС ЗА DSM-V).

Римша С.В., Лук'янович І.Л., Римша О.В.

Проблема поширеності та хронічності психогенних захворювань стає однією з найважливіших у сучасній медицині з огляду на економічні втрати, пов’язані з компенсацією лікування цієї патології та її наслідками. Метою дослідження було сформулювати підходи до диференціальної діагностики та демонстративного використання медикаментів та психотерапії для лікування психічних розладів із

ПАТОГЕНЕТИЧЕСКОЕ ОБОСНОВАНИЕ ДИФФЕРЕНЦИРОВАННОЙ ТЕРАПИИ ПСИХИЧЕСКИХ РАССТРОЙСТВ С СОМАТИЧЕСКИМИ СИМПТОМАМИ

Рымша С.В., Лукьянович И.Л., Рымша Е.В.

Проблема распространенности и хроничности психогенных заболеваний становится одной из важнейших в современной медицине ввиду экономических потерь, связанных с компенсацией за лечение этой патологии, и ее последствий. Целью исследования было сформулировать подходы к дифференциальной диагностике и демонстративному использованию лекарственных средств и психотерапии для лечения психических расстройств с

соматичною симптоматикою з урахуванням патогенних факторів та їх патоморфозу. Зроблено висновок, що доказове використання при лікуванні психічних розладів із соматичними симптомами з урахуванням патогенних факторів та їх патоморфозу передбачає переважне застосування прегабаліну як універсального стабілізатора балансу нейромедіатора в терапії як тривожних, так і інших психогенних розладів.

Ключевые слова: психогенные расстройства, тревожные расстройства, нейромедиаторы, прегабалин, соматический компонент, дифференциальная терапия

Стаття надійшла 24.05.2019 р.

соматическими симптомами с учетом патогенных факторов и их патоморфозов. Был сделан вывод о том, что доказательное использование в лечении психических расстройств с соматическими симптомами с учетом патогенных факторов и их патоморфозов предполагает преимущественное использование прегабалина в качестве универсального стабилизатора нейромедиаторного баланса в терапии как тревожных, так и других психогенных расстройств.

Ключевые слова: психогенные расстройства, тревожные расстройства, нейромедиаторы, прегабалин, соматический компонент, дифференциальная терапия.

Рецензент Скрипніков А.М.

DOI 10.26724/2079-8334-2020-1-71-115-120
UDC 616-092-616.6-616-006

R.V. Savchuk, F.I. Kostyev, V.V. Vit[1]
Odesa National Medical University, Odesa
[1]SI " Filatov Institute of Eye Diseases and Tissue Therapy of the NAMS of Ukraine", Odesa

DYNAMIC CHANGES IN THE CELLULAR COMPOSITION IN THE UROPSAMMUS OF ARTIFACTUAL BLADDER

e-mail: savrus7@rambler.ru

The purpose of the work was to evaluate the dynamic changes in the cellular composition of the artifactal bladder uropsammus. The dynamics of structural changes in the urine sediment after surgery was revealed, which indicates that, in the presence of positive clinical results after the operation, the processes of restructuring the epithelial lining of the intestinal fragment transplanted instead of the bladder, aimed at performing other functions, are being completed. Based on the data obtained, it is possible to use a cytological study in the clinic to establish the dynamics of the process after surgical treatment, to determine the degree of epithelium exfoliation in the transplanted intestine, as well as to correct individual links of the adaptation process under the new conditions of the transplanted intestinal fragment functioning, which are fundamentally different.

Key words: artifactual bladder, cell composition, adaptation.

The work is a fragment of the research project "Phenomenology, pathogenesis, features of clinical course, topical diagnosing and treatment of dysfunctional pelvic pain syndromes and neurogenic disorders of urination", state registration No. O115U006656.

The gold standard of treating the muscular invasive cancer of the bladder is the radical cystectomy with the orthotopic bladder formation [4, 6]. Many studies have been carried out on the safety and efficacy of using a fragment of the colon and small intestine, stomach, but the best transplant is considered to be a site of the terminal ileum: due to the smallest electrolyte disturbances and the ability of adaptive restructuring it is considered the optimal transplant [3].

Initially, the ileum mucosa contains many cells: Paneth cells, goblet, absorbent, enteroendocrine, stem, undifferentiated, and M-cells with known diverse functions [5]. The enterocyte microvilli are covered with a glycocalyx membrane, which contains various protective proteases, lysozyme, etc. [10]. The physical barrier is formed by the mucosal epithelial absorbent goblet cells and mucus secreted by the latter [1].

Functioning of the ileum site under new conditions, the influence of urinary components on the artifactual bladder's mucous membrane, the possibility of adaptation and transformation of the neocyst epitheliocytes, early detection of atypical cells have determined our interest to the study of the urine sediment cytological features in dynamics. The data of the researchers are quite diverse: some scientists report the hypersecretion of sulfomycin, sialomycin, progressive microvilli atrophy, adenomatous hyperplasia and dysplasia of mucous cells in the artifactual bladder [13, 14]. Cytological control of atypical cells is defined by many authors as a non-invasive way of early detecting the recurrence of urothelial carcinoma [7].

In the routine practice, study of urine sediment is an integral and important part of the general urine analysis. The main elements of organized urinary sediment are erythrocytes, leukocytes, epithelium, and cylinders; unorganized sediment includes crystalline and amorphous salts. Normally in the field of view of the microscope, single cells of the squamous (urethra) and transitional epithelium (bowl, ureter, bladder) are detected. The renal epithelium is normally absent.

The purpose of the work was to assess dynamic changes in the cellular composition of the artifactual bladder's urine sediment (uropsammus).

Materials and methods. The study of the urinary sediment cellular composition was performed in 26 patients after radical cystectomy with orthotopic ileocystoplasty for muscular invasive bladder cancer