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CLINICAL AND PSYCHOPATHOLOGICAL CHARACTERISTICS AND SOCIAL FUNCTIONING OF PATIENTS WITH HALLUCINATORY-PARANOID DISORDERS IN MODERATE VASCULAR DEMENTIA

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Ключові слова: *судинна деменція, галюцинаторно-параноїдні розлади, клініко-психопатологічна структура, соціальне функціонування, помірний ступінь тяжкості деменції*
Ключевые слова: *сосудистая деменция, галлюцинаторно-параноидные расстройства, клинико-психопатологическая структура, социальное функционирование, умеренная степень тяжести деменции*

Abstract. Clinical and psychopathological characteristics and social functioning of patients with hallucinatory-paranoid disorders in moderate vascular dementia. Maruta N.O., Shevchenko-Bitensky K.V., Kalenska G.Yu. *The relevance of the study is determined by a high prevalence of dementia, significant economic costs of treatment, negative consequences in the form of disability and decrease in the quality of social functioning. The aim of the research was to study the clinical and psychopathological characteristics and specificity of the social functioning of patients with hallucinatory-paranoid disorders (HPD) in moderate vascular dementia (MVD). To achieve this goal, a comprehensive methodological approach was used, which was implemented using the clinical and psychopathological method, supplemented by the use of psychometric scales (neuropsychiatric inventory (NPI), global assessment functioning scale (GAF), disability assessment scale (WHO/DAS), Bristol daily activity scale (BADL)) and methods of mathematical data processing. In a study of clinical-psychopathological characteristics and social functioning of patients with HPD in MVD 75 patients took part. 41 patients with HPD (main group) and 34 patients without psychotic disorders (control group) were examined. In the structure of clinical-psychopathological manifestations in patients with HPD in MVD the following symptoms were revealed: the prevalence of frequent delusional ideas of material damage, robbery and jealousy - in a moderate degree; a combination of HPD with frequent vagrancy; periodic moderate verbal aggression; frequent rhythm disturbances day / night, frequent low mood, manifested in the form of dysphoria; fear of being alone; frequent states of irritability. The expressed negative influence of HPD on communication function, quality and level of participation in fulfilling the parental role, the need and effectiveness of social contacts, the effectiveness of behavior in non-standard and difficult conditions was established. The influence of HPD on the formation of limitations of their vital functions in communication, ability to use the phone, make purchases, manage finances and use transport in patients of this group was defined. It was proved that the range of social functioning of patients corresponded to disorders ranging from a serious deterioration in functioning in the social and professional spheres - to the inability of functioning in certain areas of life.*

Реферат. Клинико-психопатологическая характеристика и социальное функционирование пациентов с галлюцинаторно-параноидными расстройствами при сосудистой деменции средней степени тяжести. Марута Н.О., Шевченко-Битенський К.В., Каленская Г.Ю. *Актуальность исследования определяется высокой распространенностью деменции, значительными экономическими затратами на ее лечение,*

негативными последствиями в виде инвалидизации и снижения качества социального функционирования. Целью исследования стало - изучить клинико-психопатологические особенности и специфику социального функционирования пациентов с галлюцинаторно-параноидными расстройствами (ГПР) при сосудистой деменции (СД) средней степени тяжести (ССТ). Для достижения поставленной цели был использован комплексный методологический подход, который реализовывался с помощью клинико-психопатологического метода, дополненного использованием психометрических шкал (нейропсихиатрический опросник (NPI), шкала глобального функционирования (GAF), шкала степени ограничения возможностей (WHO/DAS), Бристольская шкала активности в повседневной жизни (BADL)) и методов математической обработки данных. В исследовании клинико-психопатологических особенностей и социального функционирования пациентов с ГПР при СД ССТ приняло участие 75 пациентов. 41 больной с ГПР при СД ССТ и 34 больных без психотических расстройств вошли в контрольную группу. В структуре клинико-психопатологических проявлений у больных с ГПР при СД ССТ выявлено: преобладание частых бредовых идей материального ущерба, ограбления и ревности в умеренной степени выраженности; сочетание ГПР с частым бродяжничеством; периодической умеренной вербальной агрессией; частыми расстройствами ритма день / ночь, частым снижением настроения, проявляется в форме дисфории; страхом остаться одному; с частыми состояниями раздражительности. Установлено выраженное негативное влияние ГПР на функцию общения, качество и уровень участия в выполнении родительской роли, потребность и эффективность социальных контактов, эффективность поведения в нестандартных и сложных условиях. Определено влияние ГПР на формирование у больных этой группы ограничений их жизнедеятельности в коммуникации, умении пользоваться телефоном, делать покупки, распоряжаться финансами и пользоваться транспортом. Доказано, что величина общего социального функционирования пациентов соответствовала диапазону нарушений от серьезного ухудшения функционирования в социальной и профессиональной сферах – до неспособности функционирования в отдельных сферах жизнедеятельности.

Recently, dementia is recognized as one of the leading causes of persistent disability and mortality [16]. According to the latest data, almost 8 million people worldwide develop dementia each year, which corresponds to a new case every four seconds. In 2015, dementia was diagnosed in more than 47 million people worldwide, and this figure is expected to increase to 76 million in 2030 and 145 million in 2050 [1, 16].

Dementia is a great burden on society. The economic losses associated with dementia in the elderly and senile are, according to the US National Institutes of Health, $ 90 billion per year [13, 15]. In addition to being a significant problem in terms of the prevalence of the pathology and the associated costs, dementia has an extremely strong impact on people suffering from it, their families and those caring for patients. medically, psychologically and emotionally. Behavioral and psychological symptoms of dementia have a huge impact on the quality of life of patients and those who care for them (caregivers) [1, 2, 7, 8, 14].

In this regard, the study of the clinical and psychopathological structure and social functioning (SF) of patients with vascular dementia and their relatives is relevant because it provides an opportunity to improve rehabilitation measures to help patients with dementia and caregivers [3 , 4, 11, 15, 16].

The purpose of the study is to study the clinical and psychopathological features and specifics of social functioning of patients with hallucinatory-paranoid disorders (HPD) in vascular dementia (VD) of moderate severity degree (MSD).

MATERIALS AND METHODS OF RESEARCH

The study of SF features and clinical and psychopathological structure of patients with moderate VD was performed on a sample of 41 patients with mixed cortico-subcortical dysfunction with hallucinatory-paranoid symptoms – F01.3 (1-2) (main group). As a control group, the study involved 34 patients with VD of MSD (F01.3) without psychotic disorders.

To achieve this goal, a comprehensive methodological approach was used, which was implemented using a clinical-psychopathological method, supplemented by the use of psychometric scales (neuropsychiatric inventory (NPI), global assessment functioning scale (GAF); disability assessment scale (WHO/DAS), Bristol daily activity scale (BADL) [9, 10, 12]. Methods of mathematical statistics were used to determine the average values of quantitative parameters, their standard errors (in the format M±m), the significance of differences (Student-Fisher criteria [t], Kolmogorov-Smirnov [λ]), the relationships between indicators (Fisher's exact method) [FEM]). Components and elements of clinical and psychopathological features and social functioning of patients with HPD in VD of MSD were determined by calculating diagnostic coefficients (DC) and measures of informativeness Kulbak (MI) for each of the studied features with the subsequent formation of consolidated differential diagnostic tables used in sequential diagnostic Wald procedure using SPSS 15.0 and MS Excel v.8.0.3 [5, 6].

RESULTS AND DISCUSSION

Analysis of the results of the study of clinical characteristics (frequency, severity) of psychopathological and behavioral disorders in patients with VD of MSD showed that in the main group of patients statistically significant clinical characteristics of psychotic disorders were delusional disorders (3.3±0.4 points, at p=0.034, compared with a control group of patients) which were frequent, up to several times a week, but not every day, and were manifested by delusional ideas of material damage, robbery, theft, dishonesty, jealousy (Table 1). At the same time delusional disorders were moderate (2.4±0.4 points, at p=0.041, compared with the control group of patients) and caused anxiety and inappropriate behavior of the patient and were characterized by difficulties in their external correction.

Table 1

Clinical features of psychopathological and behavioral disorders in patients with HPD in VD of MSD (by mean values (M±σ) by NPI scale)

Psychopathological and behavior disorders	Clinical features			
	frequency		manifestation	
	main group	control group	main group	control group
	M ± σ			
1	2	3	4	5
A. Dilusion disorders	3.3±0.4 *	-	2.4±0.4 *	-
B. Hallucinations	2.0±0.4	-	1.3±0.3	-
C. Disprders (aggression)	2.5±0.6 *	1.4±0.3	2.3±0.3 *	1.2±0.1
D. Depression (dysphoria)	3.4±0.5 *	2.0±0.3	2.4±0.3 *	1.4±0.3
E. Anxiety	2.0±0.3	1.8±0.4	1.7±0.2	1.5±0.2
F. Hyperthymia (high spirit, euphoria)	1.6±0.2	1.4±0.1	1.4±0.3	1.5±0.3
G. Apathy (indifference)	1.9±0.3	1.8±0.3	2.0±0.4	2.2±0.3
H. Disinhibition	1.5±0.3	1.6±0.3	2.3±0.5	2.2±0.3
I. Irritation	3.1±0.5 *	1.8±0.4	2.3±0.4 *	1.3±0.2
J. Abnormal motion activity (inadequate motion behavior)	3.4±0.4 *	1.9±0.3	2.5±0.5 *	1.4±0.3
K. Sleep and sleep disorders at night	3.2±0.2 *	2.0±0.3	2.6±0.4 *	1.4±0.2
L. Appetite and nutrition disorders	1.4±0.3	1.5±0.3	2.2±0.5	2.1±0.3

Note: * – statistically significant differences at p<0.05; ** – differences are statistically significant at p<0.01.

Also in the main group the state of aggressive arousal was determined which occurred at least once a week (2.5±0.6 points, at p=0.037, compared with the control group). At the same time, in 48.8% of patients (p=0.009) the state of aggressive arousal was mainly in verbal form (patients were angry at those who tried to help, did not meet in communication, shouted, swore when being tried to help to cope with domestic problems, personal issues hygiene, etc.) and was expressed in a moderate degree (2.3±0.3 points, at p=0.027, compared with the control group), this was expressed in the presence of destructive symptoms that were difficult to correct or control. In the control group,

the state of aggressive arousal was observed in only 20.6% of patients (at p=0.009).

Among the clinical characteristics of psychopathological and behavioral disorders in patients of the main group with VD of MSD in 65.9% of cases a depressed mood with a dysphoric component (combination of depressed mood with irritability, anger, gloom, hypersensitivity to the actions of others, predisposition to spa verbal aggression) was determined, this was moderately expressed (2.4±0.3 points, at p=0.043, compared with the control group) and occurred frequently, several times a week, but not every day (3.4±0.5 points , at p=0,030, compared with the control S group), herewith symptoms of depression disturbed patients and were not subjected to correction. In the control group, depressed mood was observed in 41.2% of patients (p=0.043).

In 36.6% of patients in the main group the state of irritability of moderate severity (irritability, intolerance, outbursts of anger, emotional lability, rapid psychophysical exhaustion etc.) (2.3±0.4 points, at p=0.028, compared with the control group) was observed frequently, several times a week, but not every day (3.1±0.5 points, at p=0.037, compared with the control group). In the control group, irritability was observed only in 11.8% of patients (p=0.007).

In 41.5% of patients in the main group abnormal motor activity (mostly vagrancy – escape from home or from the caregiver) of moderate severity (2.5±0.5 points, at p=0.029, compared with the control group) was expressed, this occurred frequently, several times a week, but not every day (3.4±0.4 points, at p=0.032, compared with the control group). In the control group, abnormal motor activity was observed in 23.5% of patients (p<0.007).

In the majority of patients in the main group (78.0%) there were sleep and behavior disorders at night of moderate severity (2.6±0.4 points, at p=0.038, compared with the control group), this manifested in the fact that patients were in a state of severe distress at night, their sleep was disturbed and could not be corrected. These conditions occurred frequently, several times a week, but not every day (3.2±0.2 points, at p=0.035, compared with the control group). In the control group, sleep and behavior disorders at night were observed in 47.1% of patients (p<0.006).

The results of the analysis of global functioning, presented in Figure 1, showed that in patients with HPD of MSD the value of global functioning averaged 31.5±10.4 points (p=0.027) [21,1-41,9] and was characterized by deterioration of functioning in the social and professional spheres, from serious deterioration to the inability to function in certain spheres of life.

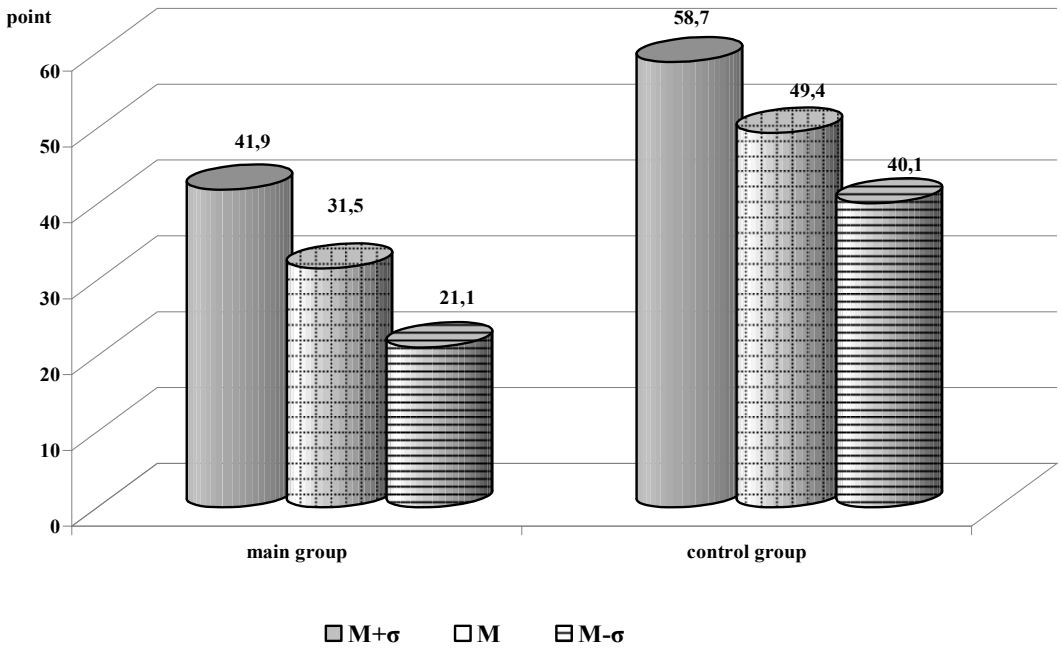

Fig. 1. Peculiarities of SF in patients with HPD in VD of MSD

In patients with VD without psychotic disorders, the value of global functioning was 49.4±9.3 points [40.1-58.7] (at p=0.041) and was characterized by a moderate deterioration in functioning in the social and professional spheres.

Analysis of the results obtained using Psychiatric Disability Assessment Schedule - WHO-DAS scale identified the main factors limiting the activity of patients with HPD in VD of MSD (Table 2).

Table 2

Factors limiting the vital functions of patients with HPD in VD of MSD (by percentage (P±m,%) by WHO-DAS scale)

Factors limiting the vital functions	Main group	Control group
Scale «General behavior disfunctions»		
Self-care	21.9±2.1	20.6±1.9
Interests and stirring life	46.3±4.5	41.2±4.2
Activities in the family and daily routine	41.5±4.1	38.2±3.9
Communication and isolation	63.4±6.4 *	32.4±3.3
Scale «Social roles performance»		
Participation in domestic chores	34.1±3.4	32.4±3.3
Family role performance	36.6±3.7	32.4±3.3
Marital role performance	36.6±3.7	29.4±2.7
Marital role performance out of wedlock	19.5±1.9	17.6±1.7
Parental role performance	58.5±5.9 *	32.4±3.3
Social contacts	68.3±6.9 *	35.3±3.7
Professional role performance 1	14.6±1.5	11.8±1.3
Professional role performance 2	60.9±6.2	55.9±6.0
Interest and awareness	56.1±5.7	52.9±5.8
Behavior in non-standard and difficult conditions	65.9±6.7 *	38.2±3.9

Note: * – statistically significant differences at p<0.05; ** – differences are statistically significant at p<0.01.

According to the results of the study of factors limiting the vital functions of patients with HPD in VD of MSD compared with patients without psychotic disorders, it can be stated that in patients of the main group the most disturbed were the following activities:

- communication function (low level of social contacts, communication skills, readiness to communicate, up to isolation, etc.) (63.4%), while in the control group communication dysfunction was observed only in 32.4% of cases (CI=2.92, MI-0.45, p=0.003);

- quality and level of participation in the parental role (low interest in children's lives, lack of need to care for children, spending time together, participating in the interests of children, etc.) (58.5%), in the control group – in 32.4% of cases (CI=2.58, MI=0.34, p=0.008);

- the need and effectiveness of social contacts (communication difficulties associated with conflict, low communication skills and low communication needs, etc.) (68.3%), in the control group – in 35.3% of cases =2.87, MI-0.47, p=0.003);

- efficiency of behavior in non-standard and difficult conditions (low efficiency of behavior in non-standard and difficult conditions that require active, purposeful and adequate actions) (65.9%), in the control group – in 38.2% of cases (CI=2.38, MI=0.33, p=0.008).

The results of the study conducted using the BADL scale, the factors limiting the activity of patients with HPD in VD of MSD are presented in Figure 2.

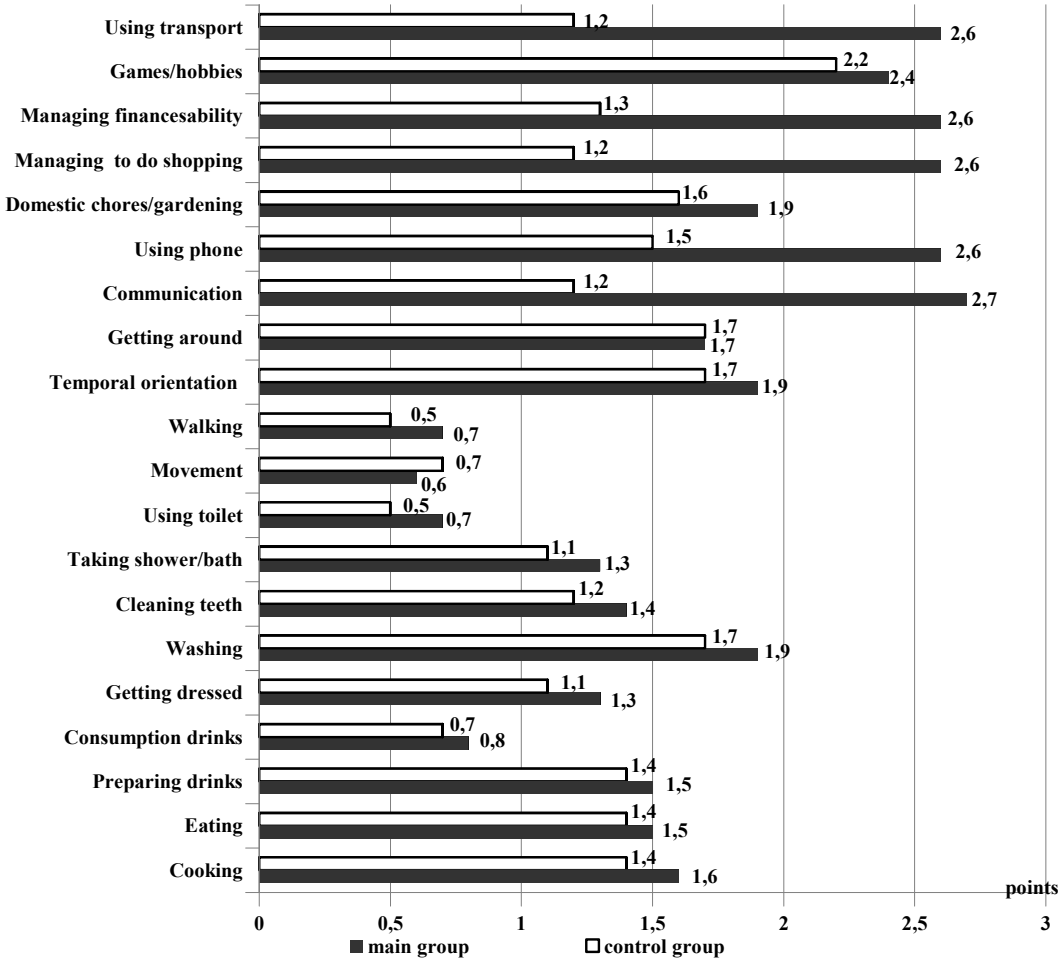

Fig. 2. Factors limiting the vital functions of patients with HPD in VD of MSD

According to the results of the study of factors limiting the vital functions of patients with APR in diabetes PST, it can be stated that in patients of the main group the most impaired vital functions were:

- communication (disorders in the range: from understands himself, but has difficulty understanding others – to completely impaired communication) (2.7±0.3 points), while in the control group the severity of communication disturbances corresponded to the functional range of 1.2±0.3 points (p=0.01);

- the ability to use the phone (disorders in the range: from the ability to answer calls, but the inability to make them – to the inability to use the phone at all) (2.6±0.3 points), while in the control group these disorders were significantly less (1.5±0.3 points) (p=0.028);

- the ability to do shopping (disorders in the range: from the inability to do shopping independently, but the ability to participate in buying with the help of others – to the inability to do shopping even with the help of others) (2.6±0.4 points), in the control group – 1.2±0.3 points, which probably differed from the main group (p=0.009);

- ability to manage finances (disorders in the range: from the ability to write the name, but not to determine the amount of money – to the inability to write the name and determine the amount of money) (2.6±0.3 points), in the control group manifestation of disorder of ability to manage finances corresponds to a functional range of 1.3±0.2 points (p=0.034);

- ability to use transport (in the range: from inability to use public transport alone – to inability

or unwillingness to use public transport even accompanied) (2.6±0.4 points), while in the control group these disorders were much less (1.2±0.2 points) (p=0.007).

CONCLUSIONS

1. In the structure of clinical and psychopathological manifestations of HPD in patients with VD of MSD the following patterns were identified: the predominance of frequent delusions of material damage, robbery, robbery and jealousy in moderate severity; combination of HPD with frequent wandering; periodic moderate verbal aggression; frequent day / night rhythm disorders; frequent mood swings, manifested in the form of dysphoria; fear of being alone; with frequent states of irritability.
2. It is proved that the value of the total SF of patients corresponded to the range of disorders from serious deterioration of functioning in the social and professional spheres - to the inability to function in certain areas of life.
3. The expressed negative influence of HPD on communication function, quality and level of participation in performance of a parental role, need and efficiency of social contacts, efficiency of behavior in non-standard and difficult conditions is established.
4. The influence of HPD on formation of restrictions of their vital activity in communication, ability to use telephone, to make purchases, to manage finances and to use transport in patients of this group is defined.
5. Thus, the obtained data on the clinical and psychopathological structure and SF of patients with HPD in VD of MSD allow to identify the main clinical characteristics of this pathology and identify problems of social functioning of patients, which is a prerequisite for developing a personalized program of psychosocial rehabilitation of patients with this pathology.

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