

B.V. Mykhaylov, V.B. Mykhaylov

SOMATOGENIC DEPRESSION ON CARDIOVASCULAR AND CEREBROVASCULAR DISEASES PATIENTS

Kharkiv Medical Academy of Postgraduate Education, Kharkiv, Ukraine

Kharkiv National Medical University, Kharkiv, Ukraine

Summary *In research, based on the systematic approach of evaluating results of complex clinical-psychopathological, psychodiagnostical investigation myocardial infarction and cerebral stroke patients the clinical structure features, regularities in the formation, development and course of somatogenic depression and associated disorders on these patients was determined.*

At patients with cardiac infarction in acute period, the pain syndrome is the main one, leads to severe psycho-emotional disorders. Against the background of cognitive function preservation phobic, anxiety and depressive symptoms prevail their intensity depends on the severity of pain. Subsequently, the primary psycho-emotional constituent element disappeared and anxiety-depressive disorders developed along with hypo- and anozognostical type of personal condition perception. At cerebral stroke patients, disorders of level of consciousness were primary with cognitive and asthenic disturbances with subsequent formation of psycho-emotional disorders, anxiety and depressive disorders with hypochondrical elements on the basis of persistent cognitive impairments.

Key words: *Secondary depression, anxiety, psychotherapy, myocardial infarction, cerebral stroke*

The diseases of cardiovascular and cerebrovascular systems are the main medical problem at the end of XX and beginning of XXI centuries. The growth of pace of life, changes in demographics, bad habits, scientific and technological progress, constant exposure to stress determined an increase of cardiovascular and cerebrovascular pathology. The same factors provided a significant increase of mental and behavioral disorders, a special role among which takes violations of depressive spectrum.

Herewith increase of depressive disorders is not due to endogenic forms, but due to psychogenic, reactive, masked, mixed forms, including somatogenic which characterized by primarily somatic manifestations. This trend contemporary continues in the world and in Ukraine as well.

The problem of cardiovascular diseases takes a special place in the range of psychosomatic pathologies [1]. It is connected with their significant incidence, also in productive age, high mortality and disability rates. Every year cardiovascular diseases caused 4300000 deaths in Europe in particular, there are more than 2 million fatal cases in the European Union [2, 3, 4, 5, 6].

In Ukraine, mortality associated with cardiovascular diseases occupies the first place and the hardest complications of cardiovascular diseases are myocardial infarction (MI) and Cerebral stroke (CS). MI and CS are the main causes of mortality, accounting for 55% of all fatalities [2, 5, 7].

The majority of patients (60 – 85%) with MI and CS suffered from depressive spectrum disorder that complicated the course of treatment, the outcomes of the disease, the recovery and rehabilitation processes [4, 5, 8, 9, 10, 11, 12]. Approximately 10-15% of patients with depression prone to suicidal attempts [4, 5, 7, 11].

The main objects of our research.

To study clinical structure, patterns of development, pathophysiological formation mechanisms of somatogenic depression and associated disorders in patients with MI and CS.

To conduct comparative analysis of depressive spectrum disorders and associated disorders in MI and CS patients.

To create multimodal based system of psychotherapeutical correction of depressive spectrum disorders and associated disorders in MI and CS patients.

For conducting the research 120 patients were involved and they were divided into 2 supervision groups (60 patients with MI and 60 patients with CS). Examination of the patients was carried out in four stages: Stage 1 – within 28 days after MI or CS (acute phase), Stage 2 – 3 months after the event (subacute phase), Stage 3 – 6 months after the event (the recovery period), Stage 4 – 1 year after the event (consequences period). Throughout the period of the survey on the background of basic therapy, patients have been conducted by psychotherapeutic correction and psychological support.

Methods of research: Clinical methods, psycho-diagnostic methods (Hamilton scale of depression (HDRS), Beck scale of depression (BDS), Spilberger scale of personal and reactive anxiety, Mini-Mental State Examination (MMSE), quality of life test (Mezzich I., Cohen N., Ruiperez M., Lin I., and Yoon G., 1999), statistical methods [6, 13, 14].

Dynamic of leading depressive spectrum and associated disorders in patients with MI and CS illustrated on pic. 1 and pic. 2 of Supplement № 1.

The obtained results demonstrated that the most frequent syndromes in MI patients in the acute phase were: pain (86,7%), phobic (83,3%), asthenic-anxious (43,3%) syndromes. Development and severity of panic and phobic symptoms depend on pain syndrome severity. Asthenic symptoms in this group of patients were part of the asthenic-anxiety, asthenia, depression (16,7%), asthenic-hypochondriac (10,0%) syndromes. Hysteria syndrome and cognitive deficits were observed in 6,7% of cases. In 13,3% of MI patients anozognostical attitude to the disease manifested as appropriate response impairment, denying hospital admission and treatment, decrease in critical assessments of their own state, complete disregard as to the severity of their condition. Disorders of consciousness in their superficial form, obnubilation, were observed in 6,7% of patients.

During the second stage of our research the MI patients demonstrated a decrease in pain (50,0%), phobic (40,0%) and asthenic-anxiety (33,3%) syndromes. On the contrary, incidence and severity of asthenic-depressive (26,7%), hysterophorm (10,0%) and asthenic-hypochondriac (10,0%) syndromes increased. The number of patients with cognitive impairments (10,0%) and anozognostical attitude to the disease (16,7%) increased as well.

During the third stage of our research the most frequent were asthenic-depressive (33,3%), pain (30,0%) syndromes, anozognostical attitude to the disease (23,3%). Asthenic-anxiety (23,3%) and phobic (13,3%) syndromes were also frequently diagnosed in MI patients but their intensity decreased. The incidence of cognitive impairments (13,3%) increased, especially in depressed patients.

During the fourth stage of our research, the incidence and severity of psychopathological syndromes decreased after psychotherapeutic support. Thus, pain syndrome was observed in 23,3% of cases, asthenic-depressive syndrome in 21,7% of cases, asthenic-anxiety syndrome in 13,3% of cases, phobic syndrome in 10,0% of cases and attitude to the disease in 16,7% of cases. The incidence of cognitive impairment (10,0%), hysteriform (10,0%) and asthenic-hypochondriac (6,7%) syndromes remained on the same level.

Altered consciousness syndrome was the primary one in all cerebral stroke patients in the acute phase. Superficial forms of consciousness disorders, such as somnolence (10,0%), obnubilation (46,7%), torpor (33,3%) were prevalent. 10,0% of patients developed more intensive consciousness disorders (stupor). Subsequently they developed cognitive disorders syndrome (83,3%) and asthenic syndrome (66,7%).

During the recovery period, on the second stage of the study, cognitive impairments intensity (66,7%), pain syndrome (53,3%), asthenic syndrome (40,0%), anozognostical disorders (10,0%) decreased. Psycho-emotional disorders became the main ones. Asthenic syndrome remained the basic one, developing depressive (33,3%), hypochondriac (10,0%), anxious (16,7%), hysterophorm (6,7%) features.

In the third stage of the research, the intensity of psycho-emotional disorders and depressive reactions was increasing in CS patients. Pain syndrome (40%), asthenic-depressive syndrome (40,0%), cognitive impairment syndrome (80,0%) were the main ones. The number of patients with isolated asthenic syndrome decreased to 20,0%. Asthenic syndrome was part of the asthenic-depressive (40,0%), asthenic anxiety (23,3%) and asthenia-hypochondriac (16,7%) syndromes. Representation of hysterophorm syndrome at this stage of the research was the same. Incidence of anozognostical attitude to the disease decreased to 6,7%. Depression and anxiety correlated with

the intensity of neurological deficit and its impact on quality of life.

In the fourth stage of the research against the background of psychotherapeutic correction, the intensity of psycho-emotional disorders and depressive reactions remained unchanged against cognitive impairments, although quantification of major syndromes decreased. So, asthenic-depressive syndrome was observed in 33,3% of patients, asthenic-anxiety in 23,3% of patients, asthenic-hypochondriac in 13,3% of patients, pho-

bic syndrome in 16,7% of patients, anozognostical disorders in 5,0% of patients. At this stage of the study the incidence of cognitive impairment comprised 73,3%. A decrease in cognitive impairment syndrome representation was associated with the reduction in the incidence and severity of psycho-emotional disorders.

The multimodal based system of psychotherapeutic correction of somatogenic depression depressive and associated disorders in MI and CS patients were developed (table 1).

Table 1

Multimodal psychotherapeutic correction system in MI and CS patients

Stages	AIM	Orientation of psychotherapy	Methods of psychotherapy	The numbers and forms of sessions
Diagnos-tical	Examination of the patients per-sonality	Diagnostic	Personal – orien-tated, rational, CBT	5-7 sessions during 2 weeks
Adap-ta-tional	Setting psychological, emotional contact with the patient; Trust formation to the doctor; Adequate treatment, positive attitude to psycho – therapeutic process	Mostly symptomatical, Partially – pathogenical	Rational, Inderect, CBT	2-3 individual and 2-3 group sessions During 2 weeks
Medical	Achievement of positive dynamics of the patients emotional state, learning and transformation personal reactions of the patient, his relations system, scale experience of illness and its social significance, correction psycho-emotional disorders of the patient	Mostly pathogenical, Partially – symptomatical	For MI patients- rational, personal – orientated, CBT Autogenic (AT). For CS patients – hypnosuggestive, cognitive training, AT, CBT	5-6 individual and 8-12 group sessions During 9 weeks
Final	Consolidating process of thera-peutic results, skills of psycho-logical self-regulation, correction of the system of life goals, values, attitude to the disease	Mostly preventive, Partially – pathogenical	AT, rational, personal – ori-entated, self – hypnosugges-tive, cognitive training, CBT	3-5 individual and 6-7 group sessions During 8 weeks
Psycho-preven-tive	Consolidating therapeutical pro-cess	Mostly preventive, Partially – pathogenical	AT, rational, personal – ori-entated, cognitive training, CBT	6-12 individual and 6-12 group sessions During 6 month

For MI patients this system includes personal – oriented, rational, and autogenic-training therapy, for cerebral stroke patients – hypnosug-

gestive, cognitive – behavioral therapy, cognitive and autogenic-training therapy.

Conclusion

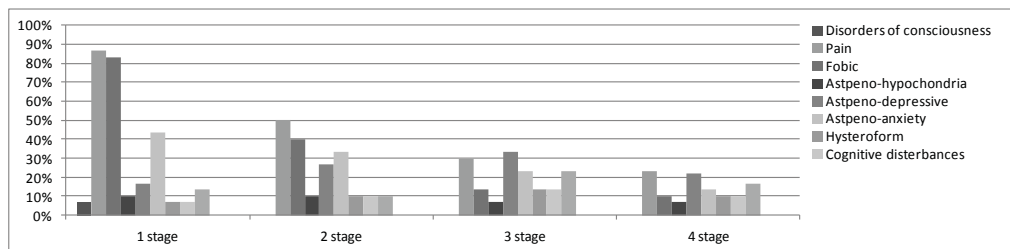
The main conclusion of our research is that among MI patients in acute period the pain syndrome is the main one, leads to severe psycho-emotional disorders. Against the background of cognitive function preservation phobic, anxiety and depressive symptoms prevail their intensity depends on the severity of pain. Subsequently, the primary psycho-emotional constituent element disappeared and anxiety-depressive disorders developed along with hypo- and anosognostical type of

personal condition perception.

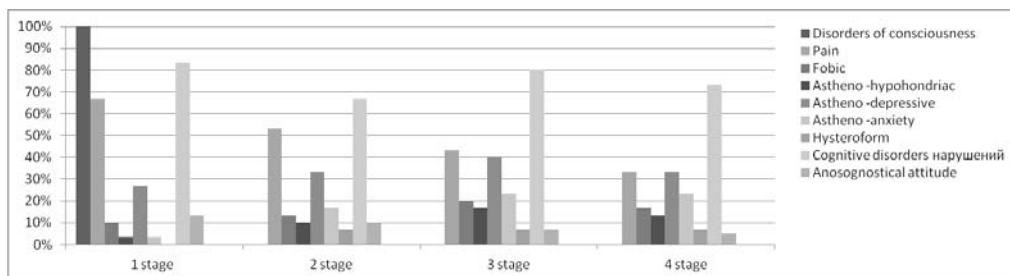
In CS patients, consciousness level disorders are the primary ones with cognitive and asthenic disorders with subsequent formation of psycho-emotional disorders, anxiety and depressive disorders with hypochondriac features against the background of persistent cognitive impairments.

The proposed system demonstrated a significant improvement in 80% of MI patients and 77% of CS patients, a partial improvement in 10% of MI patients and in 13% of CS patients.

Supplement № 1



Pic 1. Dynamic of leading depressive spectrum and associated disorders in patients with MI.



Pic 2. Dynamic of leading depressive spectrum and associated disorders in patients with CS.

REFERENCES.

1. Carney RM, Blumenthal JA, Freedland KE, et al. (2004) Depression and late mortality after myocardial infarction in the Enhancing Recovery in Coronary Heart Disease (ENRICH) study. *Psychosom Med.*, no 66(4), pp.466–474.
2. Dolzenko M.N. (2006) Depressive and anxiety disorders in cardiovascular diseases. *Practical angiology*, vol. 2, no 1, pp. 17–23.
3. Markus H., Pereira A., Cloud G. (2010) *Stroke medicine*. Oxford University Press, 567 p.
4. Lincoln N.B., Flannaghan T. (2003) Cognitive behavioral psychotherapy for depression following stroke. A randomized control trial. *Stroke*, no 34, pp. 111–115.
5. McGrady A, McGinnis R, Badenhop D, et al. (2009) Effects of depression and anxiety on adherence to cardiac rehabilitation. *J Cardio-pulm Rehabil Prev*, no 29, pp. 358–364.
6. Mishchenko T.S., Shestopalova L.F. (2009) Clinical scales and psycho-diagnostic tests in the diagnosis of cerebrovascular diseases. *News of medicine and pharmacy*, no 277, pp. 62–74.

7. Mast B. T., Lichtenberg P. (2004) Post-stroke and clinically-defined vascular depression in geriatric rehabilitation patients. *Am J Geriatr Psychiatry*, no 12(1), pp. 84–92.
8. Sowden G, Mastromauro CA, Januzzi JL, et al. (2010) Detection of depression in cardiac inpatients: feasibility and results of systematic screening. *Am Heart J.*, no 159, pp. 780–787.
9. Davidson KW, Burg MM, Kronish IM, et al. (2010) Association of anhedonia with recurrent major adverse cardiac events and mortality 1 year after acute coronary syndrome. *Arch Gen Psychiatry*, no 67, pp. 480–488.
10. Frenneaux MP. (2004) Autonomic changes in patients with heart failure and in post-myocardial infarction patients. *Heart*, no 90, pp. 1248–1255.
11. Gehi A, Musselman D, Otte C, et al. (2010) Depression and platelet activation in outpatients with stable coronary heart disease: findings from the Heart and Soul Study. *Psychiatry Res*, no 175, pp. 200–204.
12. Ming, L. (2008) Stroke: encouragement and disappointment in clinical trials. *Lancet Neurol*, vol. 7(1), p. 5–7.
13. Belova A.N. (2004) Scales and questionnaires in neurology and neurosurgery, M.
14. Mishchenko T.S., Shestopalova L.F, Treschinskaya M.A. (2008) Clinical scales and psychodiagnostic tests vascular brain diseases diagnostic, Kharkiv: Guidelines.

РЕЗЮМЕ

ВТОРИННА ДЕПРЕСІЯ У ХВОРИХ НА СЕРЦЕВО-СУДИННІ ТА ЦЕРЕБРОВАСКУЛЯРНІ ЗАХВОРЮВАННЯ

Б.В. Михайлов, В.Б. Михайлов

Харківська медична академія післядипломної освіти, м. Харків

Харківський національний медичний університет, м. Харків

На основі системного підходу в оцінці результатів комплексних клініко-психопатологічних, психодіагностичних досліджень осіб, що перенесли ІМ та МІ, було визначено особливості клінічної структури, закономірності формування, розвитку та перебігу соматогенної депресії та асоційованих розладів у даних хворих.

У хворих з ІМ в гострому періоді провідним є больовий синдром, що призводить до виражених психоемоційних розладів. На тлі збереження когнітивних функцій превалює фобічна, тривожно-депресивна симптоматика, вираженість якої безпосередньо залежить від вираженості больового синдрому. У подальшому первинний психоемоційний вітально зумовлений компонент зникає, формуються тривожно-депресивні порушення, гіпо- і анозогностичний типи сприйняття свого стану. У пацієнтів з МІ первинним є порушення

рівня свідомості з когнітивними і астеничними порушеннями з подальшим формуванням психоемоційних розладів, тривожно-депресивних порушень з елементами іпохондризації на тлі збереження когнітивних розладів.

Ключові слова: вторинна депресія, тривога, психотерапія, інфаркт міокарда, мозковий інсульт.

РЕЗЮМЕ

ВТОРИЧНАЯ ДЕПРЕССИЯ У БОЛЬНЫХ СЕРДЕЧНО-СОСУДИСТЫМИ И ЦЕРЕБРОВАСКУЛЯРНЫМИ ЗАБОЛЕВАНИЯМИ

Б.В. Михайлов, В.Б. Михайлов

Харьковская медицинская академия последипломного образования, г. Харьков

Харьковский национальный медицинский университет, г. Харьков

На основе системного подхода в оценке результатов комплексных клинико-психопатологических, психодиагностических исследований лиц, перенесших ИМ и МИ, были определены особенности клинической структуры, закономерности формирования, развития и течения соматогенной депрессии и ассоциированных расстройств у этих больных.

У больных с ИМ в остром периоде ведущим является болевой синдром, который приводит к выраженным психоэмоциональным расстройствам. На фоне сохранения когнитивных функций превалирует фобическая, тревожно-депрессивная симптоматика, выраженность которой напрямую зависит от выраженности болевого синдрома. В последующем первичный психоэмоциональный витально обусловленный компонент исчезает, формируются тревожно-депрессивные нарушения, гипо- и анозогностический тип восприятия своего состояния.

У пациентов с МИ первичным является нарушение уровня сознания с когнитивными и астеническими нарушениями с последующим формированием психоэмоциональных расстройств, тревожно-депрессивных нарушений с элементами ипохондризации на фоне сохраняющихся когнитивных расстройств.

Ключевые слова: вторичная депрессия, тревога, психотерапия, инфаркт миокарда, мозговой инсульт.

ВІДОМОСТІ ПРО АВТОРА

- Михайлов Борис Володимирович – завідувач кафедри психотерапії Харківської медичної академії післядипломної освіти – д.мед.н., професор
- E-mail: psychotherapy@med.edu.ua

Статья поступила в редакцию 30.12.2018.

У разі виникнення питань до автора статті, звертайтеся до редакції журналу ceomenshealth@gmail.com