Archives of Cardiology and Cardiovascular Diseases
ISSN: 2638-4744
Volume 1, Issue 2, 2018, PP 20-27

Features of Depressive Disorders Comorbidity in Patients with Arterial Hypertension

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Abstract

In the course of the study, clinical differentiation of depressive disorders of patients with AH was carried out, based on differences in psychopathological manifestations and mechanisms of formation of mental disorders. The most justified was the division of depressive disorders (DD) by the mechanisms of DD formation and their dependence on somatic disease on 3 main groups [7, 9]: comorbid depressions forming without involvement of somatic pathology, nosogenic depressions as a reaction to the disease and somatogenic depressions, caused by the severity of somatic suffering.

Keywords: *Symptoms of depression, Hypertension Patients, Regional Study*

Introduction

There are various hypotheses of the relationship between cardiovascular and psychiatric disorders. From the point of view of behavioral psychology, hypertension is a maladaptation reaction initially associated with stress (within the framework of which, as we know, there can be anxious and depressive symptoms). Some neurochemical, neuroendocrine changes in depressive disorders may be a pathophysiological mechanism that causes an increased vulnerability of patients with depression to cardiovascular disease. In turn, patients with established AH show a tendency to secondary somatogenic depression caused by taking antihypertensive drugs [9] and the development of chronic cerebral ischemia, which is a very significant factor in the pathogenesis of depression due to the defeat of subcortical structures and basal ganglia [12]. In connection with the recognition of the fact of the disease, its duration, the severity of clinical manifestations, the features of the cardiac pain syndrome and the limitations imposed by somatic suffering, secondary (nosogenic) depression forms. It is proved that depressive and anxiety-depressive disorders participate in the formation of a clinical picture of cardiovascular diseases, in particular, in the development of cardialgias. The study of the comorbidity of the clinical picture of hypertension combined with anxiety and depression determines the scientific relevance of the study.

Methods

The material of the interactive clinical study was a group of patients selected by a specialized questionnaires -hospital scale of anxiety and depression (HADS), the scale of Ch.D. Spielberger - Yu.L. Khanin scale for reactive (situational) and personal anxiety, Beck Depression Inventory (BDI), Montgomery–Asberg Depression Rating Scale (MADRS), Hamilton Rating Scale for Depression (HRSD), Giessen Subjective Complaints List (GSCL) [2].

The inclusion criteria were a combination of high BP figures (140/90 mm Hg and above) with subclinical or clinically expressed anxiety and / or depression level according to clinical questionnaires and the presence of depressive syndrome at the time of the study.

Patients with obstructive examination of marked personality changes, mental retardation (F71-F79),

mental and behavioral disorders due to substance use (F10-F19), and severe medical pathology were excluded.

The sample of the study was 20 patients, of which 12 women and 8 men. The average age for the entire sample is 54.2 years (men - 57.1, women - 51.2 years).

The need for a thorough clinical examination of this category presupposed a clinical-psychopathological analysis, a somatic and paraclinical examination.

Results

As our study showed, 18 of 20 patients suffered from various cardiac diseases: 6 patients - stage II AH, 2 patients - stage III AH (WHO classification), unstable progressing angina was diagnosed in 2 cases, 2 patients had angina pectoris functional class II; angina pectoris FC III: 6 patients, vegetative – vascular dystonia (VVD) - 1 observation. Myocardial infarction (MI) was recorded in 6 out of 20 patients, 4 of them had one, 2 - two MI. Two patients had a previous stroke. In one observation, an increase in blood pressure and symptoms of depression were observed in the context of premenstrual syndrome.

In 11 out of 20 patients there was a hereditary mental illness incidents: in 5 cases - parents' alcoholism, 4 - affective disorders (depression), and in 3 cases there were completed suicides from the next of kin.

In 18 of 20 cases, there were genetic risk factors of the cardiovascular system, and in 16 cases - hypertensive disease or stroke of one of the parents, 2 cases– ischemic heart disease (IHD). History of alcohol abuse was observed in 4 cases, history of affective disorders in 8 cases.

There is a clear correlation of depression with anxiety disorders. In 19 out of 20 cases, the phenomena of depression show conjugation with anxiety disorders, in some cases with the formation of anxious-hypochondriacal depression.

In 9 cases, depression was complicated by symptoms of pathological anxiety in the structure of panic attacks. And among the latter, there is a significant predominance of small -syndromal, panic attacks, the symptoms of which include cardialgia, increased blood pressure, cardiac rhythm disturbances (tachycardia, extrasystole) and a poorly expressed sense of fear. Among other features of panic attacks should be noted their relationship with external factors, most often of them – psychogenic (stressogenic).

The severity of anxiety disorders depends on the severity of symptoms of a physical disease. If patients with AH have predominantly small panic attacks (4 cases), then patients with IHD, especially those with MI, have clinically complete forms of panic attacks - 5 cases.

In a number of patients, along with the main symptoms of depression, there were also a number of disorders that went beyond the boundaries of a purely affective pathology, which, in accordance with modern terminology, is designated as comorbid, like neurotic and psychopathic symptoms with pathological sensations in the form of various somatovegetative symptoms. In some cases, attention is focused on poor health, a variety of pathological sensations in the form of homonomic or heteronomic bodily sensations, various local or diffuse algias: "expansive" headache or dizziness (6 observations) pain, compression or tingling in the heart or chest area (12 observations), pain in the epigastric region (8 observations), a feeling of lack of air, an internal tremor or a feeling of heaviness behind the sternum (10 observations), which are accompanied by a sense of anxiety. In most cases, patients note the appearance of fear for their health (7 observations). For patients characterized by a combination of somatovegetative and vegetative-vascular pathological sensations with anxiety fixation on them (14 observations). At times, sensations become the most actual experiences of patients, however, their intensity fluctuates. In the intensity, the main role is played by situational moments.

In patients with the initial stage of hypertension, as a rule, anxious-hypochondriac (somatized) depressive states are formed: mild hypothyroidism phenomena (suppressed, depressive mood, decreased activity) are overlapping with expressed anxiety disorders and a functional disorder syndrome with a predominance of cardioneurosis symptoms, panic attacks and hypochondriac phobias. At the same time, the phenomena of hypothymia proper, represented by a mildly expressed apathy, a decrease in activity, an exaggerated pessimistic reassessment of the severity of somatic suffering, seem to recede into the background.

Depression cases also show inverted pathological circadian rhythm and increased severity of symptoms - a decrease in mood with an increase in anxious fears of

hypochondriacal content, associated with worsening of symptoms of IHD, panic attacks. In the cases under consideration, the clinical picture of hypertension is broadened by the addition of somatovegetative disorders: decreased appetite, weight loss, sleep disturbances with signs of early insomnia. In the minds of patients, there are dominating enduring anxious fears of a possible threat to life or disability, exaggerated by a pessimistic assessment of their own prospects in connection with the disease. In a number of cases, ideas of self-blame and self-deprecation are formed, thoughts of one's own uselessness.

In a number of cases, AH was formed against the backdrop of protracted (more than 2 years) depressions, against a background of a long psycho-traumatic situation, of mild and moderate severity. The characteristics of the affective syndrome include the prevalence of the somatovegetative symptom complex of depression, represented by a persistent decrease in appetite, a significant (more than 5%) weight loss, late insomnia and a pathological circadian rhythm. The cognitive component of the depressive syndrome is limited to a pessimistic attitude toward the state of health and persistent hypochondriac fixation on manifestations of bodily discomfort.

In the first stages (with border AH and preclinical stage of IHD [21], functional cardiovascular disorders (changes in cardiac strength and rhythm, transient elevations of arterial pressure, cardialgia) can develop in the structure of panic attacks with the vital fear of death and the rapid attachment of hypochondriacal phobias. If in the initial stages of hypertension the arterial pressure rises with objectively significant social stress factors (loss of a loved one, going beyond everyday conflicts in the family, at work), then, as the years progress, over the years, a tendency to increase blood pressure is revealed due to minor emotional or physical stress, as well as an unmotivated persistent increase in blood pressure. In this case, the symptoms of hypertension and ischemic heart disease (cardialgia, changes in rhythm and strength of heartbeats, increased blood pressure) reveal conjugation with anxious fears and phobias of hypochondriacal content (thanato-, cardiophobia).

Also quickly enough, after the manifestation of the cardiovascular disease, signs of hypochondriacal development are revealed, in the structure of which the dominant position is occupied by the phenomena of neurotic hypochondria. Along with the formation of an increased reflection on the function of the cardiovascular system, there is a gradual increase in the frequency and severity of somatization reactions, as well as an increase in the number of factors provoking functional cardiovascular disorders. Chronicity of the homogeneous and continuous course of this process reveals the conjugation with two significant clinical factors - clinically completed cardiovascular diseases (IHD, hypertension) and the formation of signs of hypochondriacal development.

Comorbid depression in which the manifestations of a physical illness were overlapping with affective disorders formed without the participation of somatic pathology - 6 cases: 2 - atypical depression with somatoform disorders, 1 case - dysthymia (protracted neurotic depression), 1 case - reactive depression (major depressive episode), 2 cases - depression associated with the reproductive cycle of a woman: 1 - in the premenstrual syndrome, 1 - after the ovariectomy.

The most common signs of positive affectivity for this group were: anxiety - groundless apprehension of danger, threatening catastrophe with a feeling of inner tension, vague anxiety, fearful expectation; pointless anxiety; and pathological circadian rhythm - mood swings during the day with a maximum of poor health in the early morning and some improvement in the state in the afternoon and evening. Of the signs of negative affectivity - depressive devitalization - the weakening or disappearance of the drive to life, somatochemical drives (sleep, appetite, libido). The diagnosis caused some difficulties due to comorbidity with somatic disease (asthenia, weight loss, sleep disturbances, dizziness, tremor, tachycardia, chest pain, dyspnea, dyspeptic disorders - bitterness, dry mouth, constipation), however, attention to the mismatch of complaints and physical conditions. Among the comorbid depressions in two cases there were atypical depressions that developed against the background of the personal deviations of the hysterical (hystric) - 1 observation and the dependent type (1 observation) with features of affective lability, anxiety, sensitivity in interpersonal relations. In one observation, the syndromes did not reach complete psychopathological completion ("subsyndromal depression"). In another case, the actual affective

disorders receded into the background, and the leading position in the clinical picture was occupied by the symptom complexes that go beyond the psychopathological disorders of the affective registries (somatized depression). Somatoform disorders were expressed a facade, simulating cardiovascular pathology, persistent idiopathic algies - headaches, neuralgia of different localization. The phenomena of somatization, mostly involve anxious fears for one's health and an exaggeration of the severity of a real-life somatic disease. These patients actively seek help, require more consultations, additional examinations, establish an "accurate" diagnosis, carefully register changes in physiological parameters (follow the pulse, measure blood pressure, etc.). In 2 cases there were manifestations of anxious-melancholy affect with a predominance of tearfulness or irritability, however, motor braking was absent: the patients expressed innumerable complaints loudly, with pressure.

Symptoms of Nosogenic Depressions (ND)

In most cases, against the already established diagnosis of AH and its complications, secondary, nosogenic depressions (10 observations) are formed - psychogenic depressive reactions to the constellation of psychogenic and situational factors associated with the semantic significance of the diagnosis, awareness of the danger of the disease, physical suffering, changes in the quality of life and limitations caused by somatic suffering. This is especially pronounced in patients with previous MI and stroke.

Among psychological and social influences, the patient's attitude to his own disease played a primary role. In this regard, the development of depression contributed to hypernosognosia - a high subjective significance of the experience of bodily disease (in 8 cases). The semantics of the diagnosis (the danger to life with which it is associated) was also of some importance. Of particular importance here were diseases that posed an immediate danger to life (myocardial infarction, stroke) (6 observations). Limitations imposed by somatic suffering on household activities and professional activities that reduce the quality of life were very significant for a number of patients, in particular, after MI (7 observations). Among clinical manifestations of the pathology of internal organs that participate in the formation of nosogenic reactions, it is necessary to point out the following characteristic of cardiovascular diseases (CVD): acute manifestations of vital functions disorders (myocardial ischemia) accompanied by vital fear and panic attacks or, for example, the appearance of previously absent extrasystoles perceived by the patient as a disaster (3 cases).

The clinical picture was determined by the syndrome of anxious or hypochondriacal depression. In the foreground, hypothyroidism with anxiety, heightened introspection, careful recording of the slightest signs of bodily unhappiness. The feeling of hopelessness is combined in these cases with asthenia, a decrease in physical activity, aches, other pathological bodily sensations, and conversion disorders. One of the obligate components of nosogenic depression is a content complex, including a pessimistic perception of the disease and a hypertrophied evaluation of its consequences, anxious fears and hypochondriacal phobias closely related to the actual somatic state. The ideas about the dangers of disordes in the internal organs, which manifest the painful process, about its unfavorable outcome, negative social consequences dominate. Depression also includes symptoms that are "common" for somatic and mental pathology - asthenia, weight loss, sleep disorders, dizziness, tremor, tachycardia, chest pain, dyspnea, dyspepsia (bitterness, dry mouth, constipation, flatulence, etc.). The feeling of bodily unhappiness is exacerbated by somatovegetative disorders: asthenia with decreased physical activity, aches and other somatization and conversion symptoms (weight loss, sleep disturbances, dizziness, tremor, tachycardia, chest pain, dyspnea, dyspepsia: bitterness, dryness mouth, constipation, flatulence). In the overwhelming majority of cases, long-term NDs were recorded, the duration of which exceeds 6 to 12 months. [9]. This is probably due to a chronic progressive course of somatic disease. Previous MI and hypertensive crises are associated with anxiety (4 observations), vital fear and panic attacks (6 cases).

In some patients (3 observations) a special depressive attitude is formed. The patients call themselves "a burden", they say that they "are already incapable of anything", "live only to survive" (2 observations), and one patient openly declared suicidal thoughts and intentions.

In a number of cases, at the moment of intensifying the symptoms of depression, anxious-phobic disorders and obsessions emerge, sensitive ideas of the relationship, fears of hypochondriacal content increase (cardiophobia - 5 observations, tanatophobia - 3 observations).

Among the factors contributing to the manifestation of such protracted ND, along with the manifestations of somatic pathology, it is necessary to point out the deformation of the personality structure, owing to the long-term ongoing somatic disease. In the latter case, a "soil" is formed that creates conditions for the arise of protracted ND - acquired reactive lability with excessive sensitivity to any threat to bodily well-being and accentuation of features of anxious suspiciousness, neuroticism, rigidity, with signs of violation of of bodily self-awareness (perception of the "image of the body").

The picture of prolonged ND [17, 18, 20, 22] gradually takes the form of endogenous-like depression. Vital disorders (melancholy, apathy, changes in the daily rhythm, pronounced sleep and appetite disorders) are formed, and the content of self-consciousness also changes: fears for one's own health are replaced by self-reproaches. Patients repent of the fact that their helplessness causes inconvenience to patient's relatives and medical personnel, that they are a "burden" for everyone (4 cases).

Symptoms of Somatogenic Depressions (SD)

There were 4 observations of somatogenic depression or "Organic, including symptomatic mental disorders" according to ICD-10 in our study. SD occurs against the background of the existing somatic disease (in this case, AH and IHD), are due to the severity of somatic pathology (in particular, after a previous myocardial infarction), and the severity of the depressive state is directly dependent on the severity of the somatic pathology). When analyzing the pathogenesis of mental disorders in this group of patients, the "soil" [15], on which depression develops should not be underestimated – e.g. cardiovascular pathology including unfavorable course of IHD (long duration, repeated heart attacks in the anamnesis, FC VI angina pectoris) , as well as concomitant somatic diseases.

This type of reaction to somatic troubles was described back in the years of the Second World War - reactions to severe wounds, concussion, etc. [4, 8, 15] and has similar clinical characteristics. To the fore, severe asthenic manifestations appear in the picture of depression: hyposthenic asthenia - increased daytime sleepiness with early and middle insomnia [3, 16], as well as cognitive impairment with memory loss for past events, limited opportunity for understanding happening around, memorizing new information, dispersed attention. Hypotymic disorders are persistent depression, apathy with passivity and sometimes indifferent attitude towards medical recommendations, signs of anxiety-dysphoric affect. In this case, the conjugation of the severity of affective disorders with the somatic state of the patient is revealed - the so-called psychosomatic parallelism - the deterioration of the physical status is accompanied by the aggravation of signs of hypothyroidism, and their significant reduction - with the functions of internal organs in the selection of adequate therapy. Melancholy is an indefinite, diffuse sensation, most often in the form of intolerable oppression in the chest or epigastrium with depression, despondency, hopelessness, despair, and intellectual and motor inhibition-difficulties in concentration, concentration, slowness, inertia, loss of spontaneous activity (including performing daily duties) and is more common in somatogenic depression.

Symptomatic depression is formed in close dependence on the dynamics of somatic pathology: manifestations of affective disorders manifest themselves with increasing severity and are reduced as the symptoms of CVD reverse. The clinical picture of somatogenic disorders often acquires the form of asthenic depression, which occurs with hyperesthesia, phenomena of irritable weakness, rapid exhaustion, weakness, tearfulness. In a number of cases, anxiety with outbursts of irritability predominates (captiousness, excessive demand), sometimes reaching a level of dysphoria. With the weighting of the somatic state in the clinical picture of depression, adynamy, lethargy, indifference to the surrounding grow.

The data from the integrative clinical evaluation obtained in this study indicate that depression in patients participating in the study is formed with the complicity of mental and somatic pathology. In turn, in the formation of somatic pathology (the development of IHD and AH), a significant role is played by psychogenic factors. Among the general laws of development and dynamics of depressive disorders

can be identified the following. At the initial stages, an objectively significant psychotraumatic situation and the peculiarities of patient response (against the background of an increased level of anxiety, panic attacks in the framework of neurotic reactions) lead to an increase in blood pressure. After the manifestation of the cardiovascular disease, signs of hypochondriacal development are revealed, in the structure of which the dominant position is occupied by the phenomena of neurotic hypochondria. Along with the formation of an increased reflection on the function of the cardiovascular system, the frequency and severity of the symptoms of hypertension is gradually increasing, as well as the number of factors provoking an increase in blood pressure The signs of AH are manifested in connection with minor emotional or physical stress, and also against the background of even minimal signs of somatic troubles. Chronicification of this process leads to the development of a clinically complete form of hypertension.

When analyzing the conditions for the onset of depressive disorders, it was found that in more than half of the cases (16 cases), the appearance of mental disorders was accompanied by exogenous factors. More often (14 of 16 observations), the onset of initial disorders was triggered by various psychogenies (including somatic disease).

In 4 cases, the onset of the disease occurred during exacerbations in patients with chronic somatic diseases.

In other cases, the initial initial disorders were gradually complicated by the appearance of new symptoms (14 cases). In particular, most often to the emerging disorders - vegetative lability - joined the symptoms of hypochondria, deepened psychopathic disorders.

Clinical qualification and distinction of initial disorders observed in the patients observed caused certain difficulties because the qualification of their symptomatological structure was carried out on the basis of a retrospective analysis of the initial period of the development of the disease. The study was able to identify only the most prominent manifestations of mental disorders. The results of the clinical and epidemiological study of patients make it possible to clarify the influence of clinical (somatic pathology), constitutional (personality disorders), and psychogenic factors on the process of depressive formation. The psychotraumatic effect of a physical illness is determined by the objective severity of the manifestations of the disease (severity of the course), the peculiarities of its treatment and outcome. It has been established that somatogenic and nosogenic depressions are significantly more likely to form in acute and severe somatic sufferings (myocardial infarction, acute disorders of cerebral circulation, negatively affecting the quality of life (decreased ability to work, high probability of disability.) Patients with AH have primary (arising independently from somatic diseases), nosogenic (as a reaction to disease and disability), and somatogenic (due to the severity of the disease and/or taking antihypertensive drugs) depression. In our sample, nosogenic depression prevailed: 10 observations (50%), 6 observations were comorbid depression (30%), and 4 observations were somatogenic depression (20%).

Discussion and Conclusion

Significant difficulties arise already at the stage of diagnosis. First of all, the traditional clinical manifestations of depression include disorders typical for somatic diseases (asthenia, weight loss, sleep disorders, dizziness, tremor, tachycardia, chest pain, dyspnea, dyspeptic disorders - bitterness, dry mouth, constipation, flatulence, etc.). According to Smulevich A.B. (2001, 2015), it is necessary to take into account at least three factors: the characteristics of psychopathological disorders, the history and hereditary burden, the nature of psychosomatic correlations (the relationship between severity, the dynamics of mental disorders and the corresponding indicators of a physical illness). Secondly, somatic practice is dominated by atypical, subclinical forms of depression, with pronounced somatovegetative manifestations. And, thirdly, the observed depressive disorders are classified in various ICD-10 chapters. In particular, affective pathology relate to nosogenic depressions. Relatively short-term nosogenic reactions with anxiety-phobic and depressive syndromes are classified as adaptation disorders (ICD-10). Light and short-term nosogenic depressions relate to the "unspecified depressive states", and the more severe and protracted states to "dysthymia" and "major depression". Nosogenic reactions in some acute forms of ischemic heart disease (myocardial infarction) are considered within posttraumatic stress disorder.

Depressive reactions in the structure of which anxiety disorders occur, phobias associated with fears of disease progression, severe deterioration, death or disability are described as anxiety-phobic disorders, and those with a predominance of hypochondriacal manifestations refer to non-delirial hypochondria [8, 10, 22 -24].

Thus, an important criterion of these disorders is the presence of disease-related changes in the social and professional activities of patients. The indefinite nosological boundaries in such cases are due to a multitude of transitional forms between endogenous and affective, organic and neurotic disorders.

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Citation: **Boris Fishman, Natalia Vege, Larisa Fomenko, Oksana Lole, Antonina Savoluk, Irina Prozorova, Anna Orechova, Yegor Rumyantsev**. *Features of Depressive Disorders Comorbidity in Patients with Arterial Hypertension. Archives of Cardiology and Cardiovascular Diseases. 2018; 1(2): 20-27.*