Correlation between psychosomatic aspects and arterial hypertension

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ABSTRACT

Psychosomatic disorders are caused or aggravated by psychological factors and generally their clinical expression is a functional one. The main cause of the onset of psychosomatic diseases is the genetic inheritance. Because of the genetic constellation, some organs of the body are very vulnerable, prone to disease. One of the major problems faced by researchers is the quantitative assessment of psycho-social factors and/or the separation of their role from that of other coronary risk factors with importance in generating and maintaining arterial hypertension. No theory can explain the genesis of hypertension, and social factors are admitted as having an etiological role, together with constitutional factors (age, sex, hereditary predisposition), obesity, metabolic deficits of sodium and some microelements. The psychosomatic approach of the cardiac disorders allows a better understanding of the complexity of the factors that modulate the cardiovascular risk, as well as the occurrence and severity of the manifestations. This can contribute to the optimization of the medical act and the improvement of the therapeutic strategy.

KEY WORDS:

Hypertension, psychosomatic aspects, symptoms.

INTRODUCTION

Mental disorders are considered as functional disorders of the brain that can be caused by the complex interaction of genetics with individual experience. Individual particularities (genetic, cognitive, affective, motivational, volitional, etc.) play a special role in the appearance and intensity of psychosomatic stress. These particularities are modeled by the family experience and professional life of the subject, including a series of somatic and especially psychological disorders (1). It has been shown that arterial hypertension is not a specific disease, but rather a systemic reaction due to a variety of causes. The main cause seems to be the emotional tension (psychological factors) acting through the vegetative nervous system on vasomotor innervation. This emotional state cannot be suppressed by the action of the word or a motor act. Repeated social stress can lead to exacerbation of the vascular response through mechanisms that involve excessive activation of the sympathetic nervous system, as well as endothelial dysfunction, even necrosis (2, 3).

The medical literature shows that psychosocial stress is extremely important and can be proved for the majority of hypertensive patients; these patients have stress reactions to stimuli in the environment that are much exaggerated comparing to normotensive persons (4). A correlation between hypertension and the psychological changes is proved, depending on the particularities and personality of the individual. In the psychiatric medical literature, the prevalence of psychiatric disorders on hypertensive precondition may have the following forms of expressing:

- **Asthenic syndrome** with early onset, even when the blood pressure levels are not very high. The patients have asthenia, headache, insomnia,

irascibility, emotional lability, decreased concentration power, exhaustion, vegetative disorders, etc. Sometimes depressive elements, attachment hypnosis, anxiety, as well as suicidal ideation, diminished ability to work, interpretive and obsessive elements may appear on a hypertensive background.

- **Depressive syndrome.** Patients in this category have constant and usually much higher blood pressure, some of the patients previously having a psychedelic condition. Depression manifests in varying degrees of intensity, from the simple crisis of crying and minor modifications of the disposition, to the profound form with ideas and self-political attempts (5).

Numerous studies have shown a higher prevalence of depression in patients with cardiovascular disease. One of the difficulties encountered by clinical psychologists in the psychotherapeutic approach to depression is its comorbidity with other psychiatric disorders such as: alcohol consumption, personality disorders, etc. as well as with somatic diseases. Significant depressive signs are observed in about 36% of all patients suffering from high blood pressure (6).

Depression is an independent factor that influences the mortality rate, the relative risk of cardiac mortality being increased in the case of major depression compared to minor depression. There is a correlation between the severity of depression and that of cardiovascular events (7). Depression has been shown to have direct pathophysiological effects, such as decreased heart rate variability and increased platelet adhesion (by increasing plasma platelet factor 4 and β -thromboglobulin), exerting negative effects on adherence to drug therapy regimens. The

cardiovascular impact of depression is explained by the intervention of several mechanisms: promotion of platelet dysfunction, inflammation (evidenced by increased levels of C-reactive protein, interleukin 6, fibrinogen) and autonomic dysfunction (manifested by reducing heart rate variability, suggesting diminished vagal activity and / or the growth of the sympathetic one).

Depression is often associated with other conditions in the psychiatric sphere (eg anxiety disorders) and / or certain behaviors (smoking, sedentary lifestyle, poor diet), which contribute to worsening the prognosis of hypertensive patients. It has been pointed out that anxiety quickly installed after a major cardiovascular event may indicate the onset of depression later. There is a proven association of high blood pressure with anxiety disorders (8). The psychosocial stressors associated with anxiety act through the hypothalamo-pituitary axis causing the growth of serum catecholamines (9). There is a two-way association of hypertension with anxiety: hypertensive frequent have anxiety, respectively the anxious persons are frequently hypertensives. It has recently been suggested that anxiety may be a predictive factor for the occurrence of subsequent cardiovascular events. A recent meta-analysis shows a 26% increase in the risk of heart events in patients who are anxious but without initial heart disease. Possible explanations for this may be: progression of atherosclerosis, reduced heart rate variability and increased risk of arrhythmias, especially ventricular ones (10). Studies show that the association of anxiety with future cardiovascular events is less strong than in the case of depression. Anxiety, panic attacks and depression are also associated with lower compliance with medication and lifestyle changes (11, 12).

Clinical psychologists have reported that in patients with hypertension there are a number of personality traits that make them more vulnerable to stressful situations and more prone to stress: special ambitions, the inability to express their aggressiveness freely, leaving themselves dominated by anger much faster than others (13). There is an ambivalence of the patient between the calm exterior plan and the inner one full of aggressiveness, hostility that tends towards an expression of his own authority; thus many hypertensive patients are neurotic or have compulsive tendencies. The hypertensive patient who knows the subjective sensations that accompanies the high blood pressure and the onset of a hypertensive burst, sometimes amplifies the severity of this somatic discomfort related to the burst (14, 15). Regarding the mechanism of the occurrence and development of mental disorders, secondary to this condition, the specialists talk about the life regime that the hypertensive is advised to follow and which can lead to a series of reactions. This situation involves a series of restrictions, especially related to physical exertion, but also to a series of activities with important anti-stress effects (hiking, sports, special physical activities, etc.). The affective effect of smoking cessation and restrictions on alcohol and coffee consumption is added (16). In addition to the psychosomatic symptoms such as tachycardia, there can appear: the increase of the blood pressure and a series of symptoms such as: headache, dizziness, anxiety, amnesia, disorientation and even depression. These isolated symptoms can be reversible or turn to psycho-pathological syndromes (such as hallucinatory paranoid syndrome or affective - emotional syndrome, dominated by anxiety and depression) that requires the intervention of the psychiatrist / psychologist (17, 18).

The disease represents a special aggression situation. There are three sources of information: literature, the experience of the physicians to whom he appealed and psychological research conducted expressly. for the body, with important psychological consequences. An important element that determines the behavior in the disease is the way in which the patient is informed about his

CONCLUSIONS

The psychosomatic approach of the cardiac disorders allows a better understanding of the complexity of the factors that modulate the cardiovascular risk, as well as the occurrence and severity of the manifestations. This can contribute to the optimization of the medical act and the improvement of the therapeutic strategy.

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