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# FUNCTIONAL STATE CARDIOVASCULAR SYSTEM IN PATIENTS WITH CORONARY HEART DISEASE IN ELDERLY AGE

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**Abstract:**The problem of coronary heart disease (CHD) has acquired important medical and social significance in recent years. To understand the pathogenesis of coronary heart disease in the elderly, it is necessary to study circulatory regulation systems, in particular the sympathetic adrenal system (SAS). More informative and adequate is the simultaneous determination of the excretion of the precursor of catecholamine synthesis (KA) – dioxifylamine (DOPA) and its spectrum: dopamine (DA), norepinephrine (NA) and adrenaline (A). In the metabolism of biogenic amines, the reaction of their oxidative deamination, catalyzed by monoamine oxidase (MAO), is of key importance. The question of the relationship of KA with other hormones in coronary heart disease in modern cardiology remains insufficiently studied.

**Keywords**:old age, sympathoadrenal system, arterial hypertension, cardiovascular diseases.

Dynamic physical activity significantly changes the level of functioning of the cardiovascular, respiratory, nervous, endocrine and level of functioning of cardiovascular, respiratory, nervous, endocrine and other body systems of children and adolescents. other body systems of children and adolescents. Sympatho-adrenal system is the leading link in the mechanisms of adaptation of the organism to the impact of environmental factors, taking part in neuro-humoral regulation of all body functions. At the same time, reactions to dosed physical load are specific test samples reflecting the adaptive capabilities of the regulatory body systems [3]. The use of physical exercise as a functional test allows to reveal the degree of maturity of the system, reactivity and functional reserves of the sympatho-adrenal system, hence, adaptive mechanisms of regulation of the organism as a whole. Favourable reactions of the sympatho-adrenal system to the load are considered to be as follows those in which an increase in the excretion of adrenaline and noradrenaline is accompanied by a a multaneous increase in urinary excretion of their precursors. This proves that activation of the sympatho-adrenal system is accompanied by mobilisation of its reserve capabilities and creates good prerequisites for sustainable and creates good prerequisites for stable and long-term work. In a number of modern studies it is shown that increased sympathetic activity can accompany breathing disorders during sleep, night apnoea syndrome (Fung JW, Li TS). (Fung JW, Li TS, Choy DK et al.2012). This explains the numerous complications from the cardiovascular system in night apnoea syndrome: increased BP, heart rhythm disturbances, aggravation of angina pectoris and development of myocardial infarction, increase in the functional class of heart failure, etc.[1] Correlation has been established the degree of severity of nocturnal apnoea with the development of atrial fibrillation and reduction of heart rate variability rate variability at night, increased risk of sudden death in the early morning hours morning hours[7]. In long-livers who suffered from various age-related pathologies, no or single risk factors for cardiovascular diseases (smoking, alcohol consumption) and later, than for other age groups, accession of other factors (arterial hypertension, left ventricular hypertrophy, anaemic syndrome, hyperfibrinogenemia), worsening life prognosis. Patients in this age group were characterised by polymorbidity, later onset of the disease with fewer complications and some metabolic features that distinguished them from patients in other age groups. The results of the

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presented analysis allow us to consider longevity as a possible model for studying physiological aging[4,6].

Cardiovascular diseases today are considered to be the most common causes of human mortality. The risk of developing such diseases is associated with many factors, which will be discussed in today's article. According to estimates, 17.3 million people worldwide died from diseases of the cardiovascular system in 2008 (30% of all deaths), while 7.3 million died as a result of coronary heart disease and 6.2 million as a result of stroke [2,5,8]. The problem of mortality due to cardiovascular diseases mainly affects countries where the average income level prevails [3,6]. According to forecasts by 2030 Approximately 23.6 million people will die from CVD this year, mainly heart disease and stroke, which by that time will be the main causes of death in the population. Information about individual features in the functional activity of the sympathicoadrenal system in centenarians as a risk factor for cardiovascular diseases and methods of their prevention obtained from objects without visible pathology can be used as guidelines for therapeutic practices carried out on its contents. They are also applicable in the development of a diagnostic algorithm for the clinical examination of patients with functional activity of the sympathetic-adrenal system in centenarians as a risk factor for cardiovascular diseases. The characteristic of therapeutic approaches, presented on the basis of the values of objective criteria, can be used when choosing the most effective approach to CVD in centenarians, which will avoid possible complications.[8] The results obtained in the study of individual patterns in the functional activity of the sympathetic-adrenal system in centenarians, its influence as a risk factor for cardiovascular diseases and methods of their prevention. **Conclusion.** Thus, the verification of the diagnosis of hypertension can be reduced to a problem criteria for this syndrome. Based on the accepted hypothesis of MS as an independent nosological form, it is necessary to diagnose this disease in all cases when the patient has signs of any of the syndrome-forming diseases (hypertension, coronary heart disease, and/orbType 2 diabetes), in explicit or implicit form. Accordingly, the differential diagnosis of MS should be carried out between the listed diseases, as forms of MS, and the corresponding syndromes, as manifestations of certain other diseases (symptomatic hypertension, hereditary dyslipidemia, etc.), which will determine the ways of prevention and pathogenetically justified metabolic therapy

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