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**FEATURES OF ARTERIAL BLOOD PRESSURE ADAPTATION TO PHYSICAL
EXERTION IN CHILDREN WITH CONNECTIVE TISSUE DYSPLASIA**

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Relevance. Undifferentiated connective tissue dysplasia (CTD) is widespread among children and adolescents and affects many body systems, particularly the cardiovascular system. In CTD, due to impaired elasticity and tone of the vascular wall, hemodynamic parameters are altered, including the regulation of arterial blood pressure. Under physical load, an adequate adaptive response is essential in healthy individuals, whereas in patients with CTD, impairment of these mechanisms may lead to various pathological conditions. Therefore, studying the features of arterial blood pressure adaptation to physical activity is of significant clinical interest.

Aim: to determine and evaluate the особенности of arterial blood pressure adaptation to physical exercise in children and adolescents with connective tissue dysplasia.

Materials and methods. The study included 60 children and adolescents aged 10–18 years. They were divided into two groups: Main group: 30 patients diagnosed with connective tissue dysplasia (CTD) Control group: 30 healthy peers

All participants underwent the following examinations: measurement of arterial blood pressure at rest standard physical load test (20 squats or bicycle ergometry) recording of arterial blood pressure and heart rate after exercise evaluation of parameters during the recovery period The obtained results were analyzed using statistical methods.

Results and their discussion. The study showed that in children with connective tissue dysplasia, changes in arterial blood pressure during physical activity significantly differed from those in the control group. In the main group, the following were observed: insufficient increase in systolic blood pressure or, conversely, its excessive rise, instability of diastolic blood pressure, prolonged recovery period of arterial blood pressure after exercise. In addition, some patients showed signs of autonomic dysfunction (dizziness, rapid fatigue), indicating reduced adaptive capacity of the cardiovascular system.

Conclusions. The study demonstrated that in children and adolescents with undifferentiated connective tissue dysplasia, the functional state of the cardiovascular system and the mechanisms of arterial blood pressure adaptation to physical exercise are significantly altered. In the main group, various pathological types of blood pressure responses were identified compared to physiological ones. These manifested as insufficient or excessive increase in systolic pressure, as well as instability of diastolic pressure.