

THE INFLUENCE OF OVERFATIGUE ON THE WORKING CAPABILITY OF THE ATHLETES

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Annotation: *The article considers the influence of overwork on the performance of an athlete. Fatigue is a condition in which there is a decrease in working capacity, a deterioration in well-being caused by a person's work activity, often of a temporary nature.*

Keywords: *Fatigue, physical activity, adaptation, training.*

Introduction: A number of factors can lead to fatigue. We often feel tired, but brush off the unpleasant sensations. We do not think about the fact that fatigue can lead to a number of dangerous diseases, not to mention the constant stress and feeling of depression, which significantly impairs the quality of life. General fatigue; (large muscle groups are involved) is associated with a violation of regulatory functions by the central nervous system, coordination of motor and regulatory functions. General fatigue is accompanied by a disorder of autonomic functions: an increase in heart rate that is inadequate to the load, a drop in pulse pressure, and a decrease in LV. Subjectively, it is felt as a sharp exhaustion, increased heartbeat, the inability to continue working. local fatigue; (load of individual muscle groups) is associated not so much with the central control apparatus, but with local structural elements of the

regulation of movements: terminals of motor nerves, neuromuscular synapses. In the presynaptic membrane, the amount of acetylcholine decreases, as a result of which the action potential of the postsynaptic membrane decreases. There is a partial blocking of the efferent signal transmitted to the muscle. The contractile function of the muscle worsens the quality of life.

Adaptation of the cardiovascular system and external respiration to loads depends on age, degree of training and on the power of the load being performed. In younger athletes (12–13 and 14–15 years old) or less trained, adaptation is manifested in an increase in heart rate and an increase in respiratory minute volume due to increased breathing, while in older athletes (16–17 years old) or in more trained (having sports discharges) - in an increase in pulse pressure and an increase in the minute volume of breathing due to its depth.

In younger or less trained athletes, myotonometric parameters and proprioceptive sensitivity decreased. In cortical neurodynamics, there was a decrease in the mobility of nervous processes with a predominance of inhibitory ones. In athletes of older age or with a higher degree of fitness, the values of tonometric indicators changed insignificantly, while the mobility of cortical nervous processes was balanced. The activity of the vegetative and somatic systems in connection with the performance of physical activity is in a certain agreement (relationship). In the forms of coordination of vegetative and somatic functions in young athletes and skiers, 4 main types of relationship between functions and 3 transitional variants were found. The revealed types of interrelations of functions are ways to improve the coordination of vegetative and somatic functions in terms of age and in terms of the development of fitness. The formation of the mechanism of interconnection is based on the coordination activity of the central nervous system, which is expressed in athletes aged 12-17 years of different sports readiness in the corresponding changes in neurodynamics.

The assessment of the load power by the time parameter cannot be accepted for young athletes. Therefore, when dosing a training load, it is necessary to use the

definition of its power according to the correspondence between the values of oxygen demand and debt.

Determining the type of relationship between functions in the performance of physical activity can be used as the basis for assessing fitness, selection of training loads and complexes in therapeutic gymnastics.

A positive effect on blood circulation is exerted by the use of exercises of moderate intensity, which positively affects the entire motor apparatus. A large total amount of physical activity (lasting up to 3 hours) with the use of maximum weights creates the preconditions for an overstrain of the cardiovascular system and is usually accompanied by a lengthening of the recovery period. The high efficiency of the training process is ensured by the use of muscle efforts within 80% of the maximum result in each weightlifting exercise.

An important indicator of the functional capabilities of a person when performing speed-strength exercises is the value of hemoglobin in the blood at rest. In weightlifters of high sports ranks at rest, a lower content of hemoglobin in the blood was found than in athletes of lower ranks. The mode of motor activity has a significant impact on this indicator. The greatest increase in the percentage of hemoglobin is observed during training sessions, in which 80% of the total load falls on special auxiliary exercises lasting up to 2 hours. With high speed-strength loads, it is necessary to take the trace elements of cobalt and iron - caomide and feramide in combination with goat's milk. A direct dependence of the amount of sugar in the blood of weightlifters on the volume and nature of the training load was found. blood sugar. Training loads with a predominance of classical exercises performed at high intensity for 2 hours or more cause a noticeable decrease in blood sugar levels. Training sessions with a predominance of special auxiliary exercises create the prerequisites for an increase in blood sugar.

With intensive speed-strength work in conditions of high external temperature, a sharp decrease in the level of chlorides in the blood is noted. It is greatest in the summer months after training sessions with the use of mainly classical weightlifting exercises. Predominant use of special auxiliary exercises under these conditions is

accompanied by a smaller decrease in the level of chlorides in the blood. To ensure the normal course of the process of muscle contraction, it is important to prevent the development of chloride deficiency in the blood and thereby eliminate the possible decrease in motor potential.

Under the influence of systematic physical exercises of a speed-strength nature, significant changes in the chemistry of muscle contraction occur. In particular, in weightlifters of various levels of preparedness, there are sharp fluctuations in the content of creatinine in the urine. The higher the degree of fitness of an athlete, the more creatinine is released after a muscle load. The intensity of creatinine release reaches a high level under conditions of great nervous and mental stress. The concentration of creatinine in the urine before sports competitions in weightlifters is higher than at rest under normal conditions of the training process.

When performing speed-strength loads, it is important to systematically obtain data on the dynamics of higher nervous activity, blood circulation, excretion of chlorides, creatinine, which will allow timely correction of the planned physical activity in order to create optimal conditions for the growth of motor potential. Under the influence of systematic training, athletes undergo significant changes in motor and vegetative functions, which are determined both at rest and in the recovery period after physical exertion.

The change in these functions in athletes at rest is in a certain dependence on gender, age, sport, level of sportsmanship, and especially on the state of training. With the growth of training, the improvement of motor and vegetative functions occurs and the establishment of certain relationships between them.

A good functional state of an athlete corresponds to certain changes in the somatic reflex sphere and the neuromuscular apparatus. There is a predominance of reflexes of medium liveliness, an increase in muscle tension, an increase in amplitude and a decrease in the asymmetry of tonometric indicators and a more perfect mastery of the relaxation function.

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