

PHYSICAL REHABILITATION OF ATHLETES

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Introduction: The problem of health and rehabilitation in sports is currently one of the main ones. In medicine, there is a constant search for new methods of treatment and rehabilitation. Sports medicine is no exception. In recent years, along with pharmacological therapy, surgical interventions, non-drug methods of treatment and rehabilitation have been widely used. In sports medicine, this is relevant, first of all, because of the possibility of doping control. In the modern In high-performance sports, the workload is constantly increasing in order to achieve results. The requirements for athletes and the functional state of their body are constantly growing, and the risk of injury is increasing. As a rule, standard rehabilitation schemes are used in the treatment of injuries of the musculoskeletal system in highly qualified athletes. In the course of treatment, analgesic, dehydration and other therapies are performed, surgical intervention is performed, medications are used, which allows to eliminate changes in the affected segment, to restore the initial level of general and special athletic performance and transfer the readaptation to the maximum in terms of power, intensity and duration of physical activity.

Keywords: Rehabilitation, sports medicine, non-drug treatment, athletes, physical activity.

The purpose of the work: to determine the need for the use of non-drug treatment methods in the schemes of physical rehabilitation of athletes.

The results of the investigation.

In complex rehabilitation programs at the stage of sports training, we have proposed the use of such non-drug measures as ozone therapy and psychological correction. Ozone therapy is one of the fairly new non-drug methods of treatment and recovery. The properties of ozone have an effect on the transport of oxygen into the tissues of the body and its accelerated release from red blood cells. The use of ozone therapy in athletes makes it possible to achieve recovery and increase overall physical performance, improve the course of recovery processes after maximum training and competitive loads due to the systemic effect of ozone on homeostasis: stimulation of oxygen transport function of blood, restoration of microcirculation and peripheral circulation, stimulation of hematopoiesis, optimization of metabolism of biological substrates of the body, etc. Ozone therapy is the most effective method of stimulating the antioxidant system and reducing the intensity of lipid peroxidation. Having a high reactivity. Ozone actively reacts with various biological objects, including cell structures, and has a systemic metabolic effect on tissues and cells. The content of lactate and pyruvate in the blood also decreases.

Ozone therapy is characterized by ease of use, high efficiency, good tolerability, and the practical absence of side effects.

Psychological rehabilitation is an important component in the system of physical rehabilitation. Psychological support helps to overcome negative reactions from the athlete's psyche that arise in connection with injury.

The psychological aspect of rehabilitation is no less important for many athletes than the physical one. In half of the cases, mental changes and mental factors are the main reason preventing an athlete from returning to sports activities. Depression, "going into illness", fear of physical exertion, the belief that returning to sports activities can harm the injured organ – all these psychological changes can negate all the efforts of a rehabilitation doctor, a physical therapy instructor.

The most important tasks of psychological support are to accelerate the process of adaptation to a life situation that has changed as a result of trauma. The solution of all tasks is possible only on the basis of an in-depth study of the entire range of mental changes in dynamics at all stages of the rehabilitation process, the nature of these changes, the analysis of the "internal picture" of the disease, including the dynamics of dominant experiences, the study of socio-psychological factors that determine the mental state of an athlete at different times from the onset of the disease. Any injury sustained by an athlete is not only a physical injury to one or another part of the body, but also a source of changes in his mental state. The nature and intensity of these changes largely depend on the location and severity of the injury, as well as on the characteristics of the nervous system and personality of the athlete. However, with significant individual differences in the manifestation of mental changes caused by injuries, all of them are objectively due to the effects of pain, violations of habitual the disruption of significant life plans , etc . Under the influence of these factors, athletes' well-being and mood often deteriorate, a state of depression, a feeling of anxiety for their health, the success of further training and the possibility of participating in competitions appear. For faster and more effective healing of injuries and elimination of their possible negative impact on the psyche, it is necessary to apply a number of psychological, psychoprophylactic and psychohygienic measures and influences.

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The object of our research was 38 highly qualified sports shifts who suffered knee injuries. The athletes were divided into two groups by random sampling. The first group (I) included 18 athletes, for whose rehabilitation a standard recovery scheme was used. In the second group (II)- (20 athletes), rehabilitation was carried out using ozone therapy and psychological support. The age

of the athletes involved is 18-26 years old. The results of the study showed that the rehabilitation

process with psychological support helped the injured athletes to recover and adapt faster. Most

athletes have a typical reaction to injury: denial of injury, anger at the realization of the reality of what is happening, avoidance of a real situation, depression, and, finally, acceptance and implementation of the rehabilitation process. However, the speed and ease of going through these stages depends on the psychological support of the rehabilitation process. Such psychological reactions as increased personal and reactive anxiety, a sense of fear, loss of confidence in one's abilities, and a sense of guilt before the trend. However, it is possible to solve the problem by a team only with qualified psychological support.

The use of ozone therapy in a complex of rehabilitation measures has significantly reduced the duration of treatment and full recovery of athletes. It ensured an earlier resumption of training and adaptation of the athlete's body to physical exertion. In addition, the use of ozone therapy in athletes allows for an increase in performance, acceleration of recovery processes after maximum training. Psychological measures in the rehabilitation system of athletes. competitive loads due to the systemic effect of ozone on homeostasis: stimulation of oxygen transport function of blood, restoration of microcirculation and peripheral circulation, stimulation of hematopoiesis, optimization of metabolism of biological substrates of the body, etc.

It is known that ozone therapy is combined with taking any pharmaceutical drugs, except anticoagulants, and with carrying out any physiotherapy. Due to the use of ozone

therapy, the dosage of group II athletes was reduced. Medicines: painkillers, sedative anti-inflammatory drugs, as ozone enhances their effect.

In this case, the effect of the combined use of ozone therapy with other types of treatment turned out to be greater than the arithmetic sum of the effects of each of these types of treatment.

Thus, the use of non-drug methods is a necessary aspect in the system of comprehensive rehabilitation of athletes. By using these methods, it is ensured:

1. Acceleration of normal psychological adaptation of an athlete to a changed life situation.
2. Easier passage of an injured athlete through all stages of physical rehabilitation.
3. The use of ozone therapy techniques in the treatment of injuries in athletes not only reduces the duration of treatment of traumatic injury, but also improves physical performance.

4. The use of this technique did not cause side effects.
5. The use of ozone therapy in combination with a set of standard restorative procedures allows you to affect not only the musculoskeletal system, but also the cardiovascular system, hematopoiesis, etc.; eliminates the effects of intermediate metabolic products.
6. Using various methods of ozone therapy, it is possible not only to reduce the dosage of pharmacological drugs for the recovery of athletes, but also to abandon the use of prohibited doping agents.
7. Formation of healthy psychological attitudes in athletes, overcoming neurotic reactions to their condition, adequate perception of rehabilitation measures.

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