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PHYSIOLOGICAL REHABILITATION

Physical rehabilitation is the use for physical and therapeutic purposes of physical exercises and natural factors in the integrated process of restoring the health, physical condition and working capacity of patients and disabled people. It is an integral part of medical rehabilitation and is used in all its periods and stages. Physical rehabilitation is used in social and vocational rehabilitation. Its means are: therapeutic physical culture, therapeutic massage, physiotherapy, mechanotherapy, occupational therapy. The purpose of physical rehabilitation, the sequence of application of its forms and methods determined by the nature of the course of the disease, the general condition of the patient, the period and stage of rehabilitation, motor mode [1].

Injury is damage caused by external exposure, accompanied or not accompanied by a violation of the integrity of the tissues. Household, industrial, transport. There are no injuries.

Sports, for example, is characterized by a change in functions and, possibly, anatomical structures due to the influence of a physical factor resulting from sports and exceeding the physiological strength of tissues [1].

According to official figures, injuries account for 2-7% of the total. According to American data, the main leaders in sports injuries are sports such as: rugby, hockey, boxing, martial arts, football. Domestic statistics still uses data from the 60s of the last century. By analyzing this information, several other indicators are clearly traced.

From here, the leaders are – football, wrestling, basketball, and among the children – ice hockey, gymnastics, volleyball, figure skating. There is a classification of injuries by type (bruise, sprain, rupture, fracture, etc.), severity (mild, moderate, severe) and localization.

By the nature of the occurrence of injury, they can be acute – appearing suddenly due to a single strong impact, and chronic – caused by repeated exposure of the same factor to a certain area of the body.

Most often, chronic injuries occur as a result of overload due to repetitive movements of the same type. Typical examples are chronic elbow injuries in tennis players, the shoulder in swimmers, and the lower legs in runners [2].

Due to the enormous competition in sports at the present time, and in particular in the countries of Europe, the World, and the Olympic Games, there is an urgent need to look for new, and possibly creative and innovative approaches to training athletes of various sports, to accelerate the intensity and increase the volume of the educational process.

As a result, such physical exertion against the background of psycho-emotional overloads sometimes transcend a certain line of optimality and physiological adaptation and become excessive with all the negative consequences.

In connection with this provision, the most important component of physical rehabilitation is medical rehabilitation.

Medical rehabilitation is the restoration of lost health through the integrated use of various means aimed at maximizing the restoration of impaired physiological functions of the body, and if this cannot be achieved, the development of compensatory and substitution functions [2; 3; 4].

In sports medicine, medical rehabilitation plays an important role. Excessive physical exertion, a large amount of competitive activity, impaired resistance to the body, a large number of adverse environmental factors significantly reduced the adaptive capabilities of athletes.

Strong loads on the body that occur with athletes are a mechanism for the development of certain pathological processes. On this basis, the development and implementation of additional methods and means of rehabilitation will contribute to the prevention and adaptation of the body of those involved in sports to the load.

The main and ultimate goal of any rehabilitation is to restore the physical health of a person, as well as his personal status. Here, the need is an extensive and individual approach to each athlete, and especially to his personal characteristics, as well as taking into account individual injuries and somatic state, and especially taking into account the characteristics of the external environment [4].

Given these characteristics, with absolute certainty, we can say that high-quality and productive rehabilitation is achieved by combining various kinds of rehabilitation measures: medical, social and legal, physical, psychological, pedagogical, which in combination form a rehabilitation complex. Recently, it is preferable to use non-drug rehabilitation methods.

This application is especially relevant in sports medicine because of the possibility of doping control.

After analyzing modern literature, as well as domestic, we can conclude that the success of recovery in any sport, taking into account the individual characteristics of the injury, as well as the personal characteristics of athletes after injuries, is directly determined by the functional characteristics of athletes, individual resistance to injuries, and technical features the sport in question and their state of health.

References:

1. Mukhin V. M. Physical rehabilitation. Kiev : Olympic literature, 2000.
2. Реабилитация спортсменов: программы и методы восстановления. Режим доступа: <https://aif.ru/boostbook/reabilitatsija-sportsmenov.html>
3. Bashkirov V. F. Comprehensive rehabilitation of athletes after injuries of the musculoskeletal system. M. : Physical education and sport, 1984.
4. Voloboeva Yu. L. Medical rehabilitation of athletes. *Young scientist*. 2018. No. 46. P. 79-80.