Pressotherapy as a factor of performance improvement academic rowers

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Pressotherapy has a significant positive effect on the functional state of the body of academic rowers. First of all, this method affects the cardiovascular system, improving its functioning and increasing tone. In addition, pressotherapy helps to increase the strength of the back muscles, which is especially important for rowers. No less significant is the improvement of athletes' subjective well-being after pressure therapy sessions, which has a positive effect on their general condition and mood.

Relevance. Modern high-performance sports place high demands on the functional state of athletes' bodies. In this regard, an urgent task of sports science and practice is the search for effective methods of recovery and improvement of physical fitness of athletes. One of the promising directions in this field is the use of various physiotherapeutic methods, among which a special place is occupied by pressotherapy [1]. Rowing is one of the most physically demanding sports, placing high demands on the functioning of the cardiovascular and muscular systems. Rowers perform a large amount of training work, including both aerobic and anaerobic exercise, which necessitates the search for effective means of recovery and increased physical fitness.

The purpose of the study: is to study the effect of pressure therapy on the physiological parameters of academic rowers. The study involved 15 rowing athletes (15 men) aged 18 to 20 years, with sports qualifications ranging from 1st class to Master of sports. All participants underwent a series of measurements before and after the pressotherapy session. The session lasted 40 minutes and included alternating pressure on the upper and lower extremities from 50 to 60 mmHg.

Before and after pressure therapy, the following parameters were measured in athletes: resting heart rate (HR), blood pressure (BP), standing and wrist dynamometry, vital capacity (VL).

The data obtained were processed using descriptive and nonparametric statistical methods. The results are presented as the arithmetic mean and standard deviation (M $\pm\sigma$). The level of statistical significance was assumed at p<0.05.

The results of the study and their discussion.

The results obtained indicate a pronounced tonic effect of pressotherapy on the body of rowing athletes, which is manifested in improving the functional state of the cardiovascular system, increasing the strength capabilities of the muscles of the back and upper extremities.

The improvement of peripheral blood circulation and increased oxygen delivery to working muscles, observed after sessions of pressotherapy, create favorable conditions for increasing the effectiveness of the training process and accelerating recovery after intense physical exertion [1]. In addition, increasing muscle tone and improving their trophism under the influence of pressotherapy can help reduce the risk of injury and increase the strength capabilities of athletes.

Thus, the results of the study show that the inclusion of pressotherapy sessions in the rowing training program can be an effective means of optimizing their functional state, increasing physical performance and speeding up recovery processes.

Conclusion. The results obtained indicate that pressotherapy has a pronounced tonic effect on the body of rowing athletes, mainly affecting the functioning of the cardiovascular system and the strength capabilities of the back muscles. Improved blood circulation, increased vascular and muscle tone, observed after sessions of pressotherapy, create favorable conditions for improving the effectiveness of the training process and improving athletic performance in rowing. The inclusion of pressotherapy in the complex of rehabilitation measures can be an effective tool for optimizing the physical fitness of rowers and injury prevention

References

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