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# **On the Application of Physical Rehabilitation Training Methods in Sports Training**

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Abstract: In the process of sports training, it is very easy for athletes to have corresponding injury problems in the process of sports training due to incorrect exercise mode or unreasonable exercise time control, long time, inadequate grasp of sports essentials, etc. Such as muscle, tendon strain, ligament sprain, knee joint injury and fracture. Taking reasonable rehabilitation training methods is the premise of effectively shortening the rehabilitation process. It is suggested that starting from the understanding of physical rehabilitation training methods, after fully mastering each physical rehabilitation training method, combined with specific sports injury problems, targeted rehabilitation training methods should be taken to ensure the rehabilitation effect. In the process, we can also combine physical training with rehabilitation training, medical rehabilitation and other contents to provide all-round safety protection for athletes, so as to ensure the guidance of sports safety from the aspects of effective prevention and reasonable rehabilitation, so as to minimize the possibility or influence of sports injury.

Keywords: Sports training; Physical rehabilitation training; Method; Application

## **Introduction:**

Physical rehabilitation training is a special sport with obvious functional value. Using training methods, combining athletes' physical health with physical training, and formulating physical rehabilitation training plans can ensure effective prevention of sports injuries or reduce the adverse effects of sports injuries. The process requires athletes to clarify the basic requirements of physical rehabilitation training, and to be able to start from their own sports characteristics, physical characteristics, cooperate with team doctors, sports coaches, etc., to formulate a reasonable training plan, and effectively implement the plan, and ultimately ensure the effect of physical rehabilitation training. Sports, training and physical and mental health are closely related. Sports and training are the key factors to maintain physical and mental health. Athletes are generally positive and sunny, and they also maintain an optimistic attitude in life. This has a strong athletic ability that cannot be ignored. In physical rehabilitation training, a good attitude and treatment of training problems are also the key to prevent sports injuries and reduce the impact of injuries. Therefore, it is recommended that athletes and physical fitness coaches, rehabilitation physicians, etc., can actively explore more physical rehabilitation training methods on this basis, and improve the effect of sports injury prevention and rehabilitation.

## 1. Physical rehabilitation training methods

### 1.1 Common sports injuries

Common sports injuries include muscle and tendon strain, ligament sprain, knee joint injury, shoulder joint injury and fracture. Among them, muscle and tendon strain, etc., generally occur under the condition of excessive stretching or misexpansion and contraction. Ligament sprain often occurs when the joint rotates incorrectly and the ligament tissue is pulled or torn. Knee joint injury is related to sports impact and joint wear. Shoulder joint injury is closely related to degenerative changes of shoulder tissue, overuse of shoulder joint or shoulder tissue injury; fractures are generally caused by collisions, confrontational sports, and sprains.

### 1.2 The Value of Physical Rehabilitation Training

With the combination of rehabilitation training and physical training, athletes can clearly define the situation and characteristics of the project. Effective rehabilitation as soon as possible can not only help athletes improve their physical fitness and restore their

physical function, but also prevent the deterioration of their own condition, and the effect of training will be affected <sup>[1]</sup>. Such as swimmers, in the long-term rowing training, it is easy to make its muscle strength imbalance. The pain in training is aggravated, the front and back muscles can not be used normally, and even seriously hinder the health and physical fitness of athletes. Changing the traditional treatment concept, adopting physical rehabilitation training methods, and conducting reasonable physical training and rehabilitation exercise guidance for athletes can help them gradually restore their physical functions, and on this basis, further through rehabilitation training methods, gradually restore exercise ability and related organizations, The function of joints.

## 2. Application of Physical Rehabilitation Training Methods in Sports Training

In sports training, the application of physical rehabilitation training methods should be from a scientific and reasonable point of view, from the perspective of clarifying the types of sports injuries and corresponding rehabilitation training methods and precautions, to further explore the combination of physical training and rehabilitation training, to fully ensure the prevention of sports injuries and effective rehabilitation.

### 2.1 Do a good job of knowledge promotion

The effective application of physical rehabilitation training methods should start from the perspective of knowledge promotion and popularization, use modern advanced information technology, organize physical rehabilitation training knowledge, summarize common sports injury problems and corresponding rehabilitation training methods, so as to facilitate athletes to find the correct rehabilitation training methods and carry out rehabilitation training on their own at the first time when sports injuries occur.

For example, for the problem of knee joint injury, the physical function related to the knee joint is weakened. In order to restore the physical function as soon as possible, rehabilitation training can be carried out. At this time to fully grasp, effective use of rehabilitation training methods is the most critical <sup>[2]</sup>. For example, the rehabilitation training is carried out in three steps. The first step is to apply ice to reduce swelling. Immediately after the injury, under the protection of hinge braces, the knee joint is partially loaded. At the same time, joint activity training, quadriceps isometric training and core strength training are carried out. Step 2: Restore muscle strength training on the affected side, continue mild resistance training and core strength training under the protection of hinge braces, and try to walk off crutches. Step 3: restorative training, returning to exercise, replacing hinge braces with elastic braces with protective ones, and carrying out restorative running training. Generally, the training is gradually strengthened in the order of fast walking-jogging-straight running-sprint. At the same time, under the guidance of rehabilitation doctors, Junior College doctors, physical fitness coaches, etc., try to participate in competitive sports rehabilitation exercise activities... Compile this kind of rehabilitation training knowledge into a book, use modern new media channels, etc., and publish it widely on various social platforms and self-media platforms, so that athletes can fully understand and master it, which can effectively deal with sports injuries.

#### 2.2 Strengthening sports damage prevention

From the perspective of the combination of physical training and rehabilitation training, strengthening the prevention of sports damage is also an important method to implement physical rehabilitation training. The emphasis on sports injury prevention is actually from the perspective of rehabilitation training port migration, recognizing the relationship between sports injury and athletes' physical decline and movement deformation, and then moving the concept of rehabilitation training to the front end, emphasizing the process monitoring of special training, monitoring and guiding the whole process of athletes' movement, and finally achieving the goal of prevention.

According to the characteristics of special sports and athletes' physical fitness and state, the whole sports training process can be monitored in real time, and the pain degree of athletes' movement amplitude and sports injury can be mastered, and reasonable suggestions can be given in time to correct and deal with it in time, which can effectively prevent sports injury or reduce the impact of sports injury.

### 2.3 Strengthen the tripartite exchange and combination

The three-party communication emphasizes the communication and cooperation among athletes, rehabilitation doctors and coaches. On the basis of regular sports injury rehabilitation training, it can predict and evaluate the possibility and even specific type of sports injury according to the actual situation of athletes and the characteristics of special sports training they participate in, and formulate targeted physical fitness rehabilitation training plan, and reach a consensus with athletes to urge them to actively implement the plan, improve the level of sports injury prevention and rehabilitation training <sup>[3]</sup>. Athletes, rehabilitation doctors and coaches, etc., give full play to their own role, such as athletes on their own performance in special sports self-assessment, and on the possible sports injury problems, etc., with coaches and rehabilitation training doctors to discuss, together Analyze the possibility of its occurrence, and take which physical rehabilitation training method is the most effective.

## 2.4 Personalized training plan

Personalized formulation of physical rehabilitation training plan is from the perspective of individual sports injury physical training, injury prevention and rehabilitation of athletes, according to the actual situation of different athletes, personalized formulation of physical rehabilitation training plan suitable for different athletes and sports injuries, to ensure that it can better reduce the probability of each athlete forming sports injury in special sports training <sup>[4]</sup>.

For example, starting from the different psychological qualities and exercise forms of athletes, personalized emotional regulation plans are formulated to effectively relieve the tension and psychology of athletes in special sports, or to use their interested methods for training and improve the fun of training. Rehabilitation training from the perspective of improving the psychological environment is also an effective method.

## **Conclusion:**

To sum up, physical training is based on improving physical fitness, emphasizing appropriate and appropriate exercise, and gradually improving individual physical fitness during training. Rehabilitation training itself can also be regarded as a kind of "exercise", which is a kind of training based on "physical rehabilitation". In fact, it has a close internal relationship with the improvement of physical fitness, but on the basis of regular physical training, it increases the "injury" condition. Therefore, it is also necessary to strictly control the movement amplitude, mode and movement time in the exercise of rehabilitation training to ensure that the rehabilitation training does play a role in restoring physical function. In physical rehabilitation training activities, it is necessary to strengthen the cooperation between athletes, team doctors, rehabilitation doctors and sports coaches to ensure the safety of athletes.

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