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**THE DEVELOPMENT OF REACTIVE ABILITIES OF THE NERVOUS-MUSCULAR DEVICE OF BOXERS****РАЗРАБОТКА РЕАКТИВНЫХ ВОЗМОЖНОСТЕЙ НЕРВНО-МЫШЕЧНОГО УСТРОЙСТВА БОКСОВ**

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**Abstract.** Each kind of sport is characterized by its specialized functional structure, which provides muscular activity of one or another direction. In the box, the reactive ability often manifests itself in various unexpected movements, which requires specific training of the muscles of the lower limbs. When you do exercises, it is necessary to emphasize the attention of those engaged in the instant repulsion from the support and the maximum high (or far) jumping out.

**Key words:** boxer training, explosive force, skipping rope, jumping.

**Introduction.** For improving explosive power in martial arts the most effective thing is dynamic muscle work, with a focus on overcoming the regime. The activities of the fighters in competitive match characterized by repeated exercise maximum effort explosive character to perform intense short-term work, which alternated with short intervals of intensive work at long range, and maintaining the spatial accuracy of movements in working efficiency.

Depending on the innate characteristics of the neuromuscular apparatus, the nature and preferential orientation of training, the boxers are formed one or another mechanism for performing shock movements, requiring a different manifestation of explosive abilities. A special form of the manifestation abilities of the muscles to the realization of the explosive effort is the *reactive ability* of the neuromuscular apparatus of the athlete. The most frequently reactive ability in Boxing manifested in a variety of unexpected moves that requires specific muscle training of the lower extremities. Special attention should be given to the instant beginning of the exercise.

**The results of the research.** The duration of exercise in improving explosive power is 5-15 seconds, and the number of repetitions from 6 to 12. To speed up the recovery process, in the pauses between exercises to apply the techniques of self massage and relaxation exercises of the muscles involved in train movement. Duration of rest breaks from 2 to 4 min.

At various stages of preparation used series of jumps, pushing off with both feet using a barrier height of 40-80 cm. Very effective and jumping on one foot through the gymnastic bench or low beam (height 30 cm), as well as overcoming the 40-50 metre segment by jumping on one leg.

It is also advisable to use multiscomments from foot to foot (8-12 times), registering the length of the covered area and the time of its passage. Installation for the athlete in the performance of this exercise - "maximum length for a minimum of time." The sharp stretching of the muscles is a strong stimulus with a high training effect, which contributes to the development of the explosive power of muscles and their reactive ability.

In the practice of Boxing tested various methods of applying shock method. Boxers should perform jumps in depth with a height of 70-80 cm in the hopping pit



or mats, with subsequent instant by jumping up (or forward) and strike hands. The optimal number of hops in a series of 8-13. Pause between jumps needs to be filled with relaxation exercises leg muscles and not last more than 15 seconds, and pauses of rest between the series is filled with walking and continue for 5-8 minutes. the Amount of hopping of the load in a single training session can be 30-60 sprayway. The prerequisite is a workout for the leg muscles before running the diving depth.

When performing exercises you need accent attention engaged on an instantaneous repulsion support and highest (or distant).

Many boxers say that the rope for them is the best training. Often, beginning athletes in training actively work on the paws and bag, and then go to sparring. First, for them, the rope seems like a waste of time. This is especially true in cases where the first coach does not force to work with this sporting projectile. As a result, the athlete begins to believe that working with a rope is a waste of time. But as soon as he decides to start copying the training process of a professional athlete, everything changes to the exact opposite. Most often, they use the rope during warm-up and hitching.

No training of a boxer can not do without jumping rope. This simple exercise develops endurance, strengthens the cardiovascular and respiratory systems, develops a springiness, helps to lose weight, trains the main muscle groups. Exercises of the shock method make extremely high demands on the muscles and ligaments of the lower extremities, therefore they should be used only after the preliminary power and speed-strength training of the leg muscles. Performing jumps, the athlete is forced to follow his feet. The more tricks you perform with this sports equipment, the faster the coordination and attentiveness develops. As a result, the foot can be controlled in the ring, which is extremely important for victory. Only the development of coordination contributes to the improvement of the legs during the fight.

Best exercises with a jump rope to start after warm-up all muscle groups. A series of jumps can be divided into the number of rounds as a competitive match, with a rest between rounds. Rounds start with easy jumps with low acceleration and bring them to "explosions" with lots of twists and turns. In the process of training it is recommended to change the weight of the jump rope, which promotes the development of speed and endurance.

In preparation for the competition added training to help develop the explosive power you need in battle. To do this, use interval training: a change of light jumps on the rest, with an acceleration in the blast, the explosions and leisure equal to 10, 20, 30 sec, it all depends on the training plan of the athlete.

### **Conclusions.**

The feasibility of using jump rope in trainings of boxers is proved by foreign and domestic athletes, such as Joe Frazier, Mike Tyson, Konstantin Tszyu, Gennady Golovkin and others.

Exercises shock method impose extremely high demands on the muscles and ligaments of the lower limbs, therefore they should only be used after the pre-power and speed-strength training of the leg muscles.

According to many professional athletes, the rope is one of the best ways to increase stamina. There are several explanations for this. To begin with, thanks to the



skipping rope, you can simulate a large number of exercises. You can perform sprint races, jump to different heights, squat, etc. The rope practically does not limit your movements with your body. At the same time, there is an excellent opportunity to quickly change the intensity of the training, its speed and rhythm. Skipping rope allows athletes to increase productivity. It is important to understand that this is a matter of a technical, not a physiological, plan. Working with a rope, you perform a large number of repetitive movements with a high rhythm. As a result, muscular memory, coordination and technique are improved. Most professional fighters have little interest in the quality of, say, a running program or strength training. In the market often wins the one who has more stamina and works better with his feet.

Jump rope is an essential tool for training athletes. Boxing training you need to start and finish the exercises with the jump rope. The beginning is work, directed warm-up, coordination and endurance. At the end of training are used relaxing exercises to relieve stress. Usually at the end jumping at a uniform pace, without tossing up and acceleration, with relaxation of the muscles of the shoulders and arms.

Jumps can be divided into two main groups: simple and speedy. Speed jumping – it's jumping with high intensity. All simple jumps you can perform at an accelerated pace. The most difficult to implement – double jump (two turns of the jump rope for one jump).

The number of double-speed jumps depends on the level of training of the athlete. It is recommended to combine high-speed jumping for relaxation. Intervals of jumps equal to: 30 sec double-accelerated jumps, 30 sec of jumping for relaxation.

In addition to working out specific boxing skills of coordination, explosive strength, ability to relax and improvisation, jumping rope significantly improves the functioning of the heart muscle and strengthens bone tissue. During jumping rope deltoids, triceps, trapezium, back muscles, buttocks, hips and calf muscles are "pumped". In all respects this projectile is useful to any athlete.

#### **Literature:**

1. Джероян Г.Ф., Худадов Н.А. Предсоревновательная подготовка боксера. - М.: Физкультура и спорт. 2001.

2. Киселёв В.А., Черемисинов В.Н. Физическая подготовка боксёра. //Учебное пособие// -М.: Дивизион. 2013. 160 с.

***Аннотация.** Для каждого вида спорта характерна своя специализированная функциональная структура, обеспечивающая мышечную деятельность той или иной направленности. В боксе часто реактивная способность проявляется при различных неожиданных перемещениях, что требует специфической тренировки мышц нижних конечностей. При выполнении упражнений необходимо акцентировать внимание занимающихся на мгновенном отталкивании от опоры и максимально высоком (или далеком) выпрыгивании. Ни одна тренировка боксёра не обходится без скакалки.*

***Ключевые слова:** тренировка боксёра, взрывная сила, скакалка, прыжки.*

#### **References:**

1. Geroyan G.F, Khudadov NA Pre-competition training of a boxer. - Moscow: Physical culture and sports. 2001.

2. Kiselev V.A, Cheremisinov V.N. Physical training boxer. // Textbook // - Moscow: Division. 2013. 160 p.

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