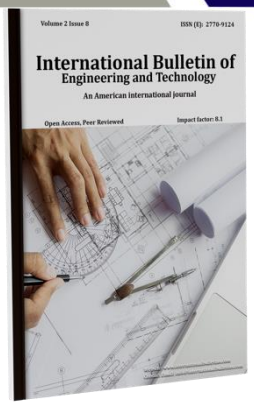

THE İMPORTANCE OF ENDURANCE İN HANDBALL

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Anatasia

Handball running is a long-term endurance sport in which handball players cover a distance of approximately 4-5 km and perform high-impact activities. The game of handball requires good motor skills. Aerobic endurance is the most important factor influencing endurance performance in handball. During a handball match, it can be delayed by having good aerobic endurance to recover quickly and at the same time reduce fatigue after violent activities. Good aerobic endurance of a handball player indicates that his ability to use oxygen is high. Studies have shown that aerobic performance is one of the most important criteria for determining the performance of handball players.

Keywords: Aerobics, Anaerobics, Endurance, Handball, Performance.

Enter

Endurance, which plays an important role in handball performance, ensures that the sport can perform its demands for unusually long periods of time without fatigue. In years past it was thought that endurance training was always done before the season, now it is scientifically known that endurance training should be learned during the season. A handball player must have technical, tactical, physical, mental and psychological characteristics to be successful in the performance of the game. Although a handball player's technique, tactical understanding, strength, speed and quickness are at a high level, if he gets tired early and recovers late, he may not be able to use his important skills for handball.

In other words, resilience defines time limits in large-scale studies. Fatigue is one of the main factors that limit and affect an athlete's performance. If an athlete does not get tired during work and can continue to work even when tired, this is an indication of endurance. A person's support, basic motor characteristics, skills that can effectively perform movement, the ability to economically use functional abilities, this includes the current psychological state and so many factors.

Therefore, a handball player should improve his aerobic endurance and raise it to a certain level in order to use his abilities during training. Due to the width of the handball field, the duration of training and competitions, and the fact that it is a contact sport, athletes of all positions must have good endurance and high motor skills.

This shows that handball is played on a large field and due to the responsibilities imposed on the athletes, it is reflected in the differences between places in terms of physical and physiological needs. For example, it is observed that wing and attacking handball players run more than midfielders, on the contrary, they make more runs. On the contrary, it is observed that those who play in the middle position engage in more moderate intensity, while in the exercise of low intensity there is no difference between the positions.

Recently, the study of endurance has become one of the physiological theories for many researchers working in the field of sports science. The fact that athletes have tasks such as dribbling, passing and getting the upper hand on the opponent requires players to be faster and more athletic. Many coaches and athletes, when they see an athlete at the front of a major run or marathon race in the final meters towards the end of the race, think that it is due to a lack of speed. In fact, on the contrary, research proves to us that the athlete lacks endurance.
As we can see here, endurance performance in handball depends on many factors. But the most important of them is aerobic endurance. A handball player has good aerobic endurance and high ability to use oxygen. Aerobic endurance is the basis for performance in handball. Therefore, it is clear that aerobic endurance is more important than anaerobic endurance for the game of handball, because each movement in handball lasts 3-4 seconds. Therefore, in addition to general aerobic endurance, handball-specific endurance is necessary for handball. Because endurance in the game of handball is not a long time, but a repeated structure.

Endurance

Endurance is resistance to fatigue under long-term loading. In other words, endurance is the athlete's ability to withstand physical and physiological fatigue. Endurance is the result of the body working in different ways under a range of demands and loads. This process is manifested, on the one hand, in the ability to withstand long-term loads against fatigue, and on the other hand, in the ability of the body to quickly recover after loads.

As a result, resilience is both a tool and a personality trait. This feature is determined in connection with the cardiovascular system, respiratory system, nervous system and psychological factors. Therefore, resilience is the body's ability to resist. Thus fatigue sets in, the activity performed becomes more difficult as time passes in similar intensity, and eventually it becomes impossible.

Continuous exercise lasting longer than three minutes fully develops the aerobic energy system over time, and endurance is a conditioning trait that occurs entirely based on the body's aerobic energy production.

As a result of endurance work, the following characteristics develop in the body:

- • Thus, the recovery period is reduced.
- • Significant improvements are observed in the body's vital capacity.
- • Thus, the cardiovascular system is strengthened.
- • Then the number of active capillaries increases.
- • Thus, the body's energy capacity increases.
- • With these, the relations of those we have listed with each other will improve.

Endurance classification is general endurance

This is a must-have endurance trait in all sports and an athlete. The general endurance capacity of the nervous system and the cardiovascular system and the functional comfort provided by the development of this strength are expressed in general endurance. General endurance allows athletes to achieve positive levels of vigorous work rates so that they can overcome fatigue during competition and recover more quickly for future studies and competitions.

Special Endurance

Specific endurance is a combined endurance that, according to the nature of the sports field, creates the technical tactical manuals necessary for that field. Specific resilience includes skills and behaviors that are completely game-specific. In addition, the studies carried out should be selected as targeted. In addition, studies used during the competition season should always be conducted in October, when the conditions for competition are formed.

Aerobic Endurance

Aerobic endurance is a person's ability to sustain low-intensity work for a long time, the energy expended for the work performed is balanced. In other words, it is designed entirely based on aerobic energy metabolism, as the time increases in three minutes of non-stop exercise. In a maximal effort study, this is the maximum amount of O2 a person can consume.

Anaerobic Endurance

Anaerobic endurance is the ability of the organism to enter a deficit of oxygen during a certain load. After a certain level of exhaustion, if the body now begins to use the anaerobic energy system rather than aerobic energy metabolism, its mode of operation is anaerobic.

In terms of duration

Short-Term Endurance This exercise occurs in 45 minutes and two seconds. Aerobic and anaerobic metabolism are interconnected. But anaerobic is more difficult (in the example of running 100 m)

Medium-Term Endurance This exercise lasts 2-8 minutes. Both anaerobic and aerobic energy metabolism are involved here. But there is a slow aerobic transition (in the example of running 1500 m)

Long-Term Endurance occurs during exercise for 8 minutes and beyond. There is full aerobic work. It is tested in three parts: work for up to 30 minutes. The main source of energy is glucose. The work is done in 30-90 minutes. The main source of energy is glucose and fat. The main source of energy is fat.

By types of muscles

Dynamic endurance sports include activities that are performed over a long period of time without fatigue. The November work of the muscular system depends on a constant exchange between stress and relaxation. On the other hand, static endurance involves endurance during exercise. In static endurance, the November system must hold the load for as long as possible without fatigue. This form of stress is mainly found in the field of weight training and is therefore often called endurance strength. Muscles are constantly alternating between stress and relaxation, preferably, muscles have a medium and long stress phase.

Methods of training endurance

If an athlete experiences fatigue during training and works to overcome it, their endurance will improve.

Continuous loading method

First of all, it is desirable to develop aerobic endurance with the method of continuous loading. This method is often used during the training season, because in this way, it is aimed at creating a good physical infrastructure and aerobic endurance base necessary for individual sports and sports games. Also, do not install it in this way, it is desirable that its severity does not change and remains constant during research.

If the training is to be carried out by the method of continuous loading, all studies should be carried out with continuous and continuous loads and they should be in an oxygen environment. In addition, endurance training at many sports venues lasts 30 minutes. In more advanced athletes, this period may be longer. They are muscles that work for a long time and continuously at the same speed. The most suitable training that can be practiced regardless of age and gender to develop endurance is form. Durability achieved through research can be maintained for a long time. The muscle distance varies between 5-8 km. The number of heart wars will be between 140-150.

Interval running method

Interval training is a regular alternation of fast running and slow jogging or walking, interval training consists of repetitions of distances from 200 meters to 3 kilometers.

• Short-term interval training method: 15-20 seconds. these studies are called deconstruction studies.

• Medium-term interval teaching method: 1-8 min. studies between the two should be strictly conducted.

• Long-term interval teaching method: 8-18 min. studies between the two should be strictly conducted.

A rule that should not be ignored in interval training: the training is stopped when the heart rate increases to 180-200, and then the training is resumed when it reaches 120-130.

Summary

As a result, it is argued that endurance is an important motor characteristic that affects performance in handball when related to this research. In addition, handball-specific endurance has been found to influence other motor characteristics that determine performance in handball, and these motor characteristics are also a determining factor in its development. Aerobic endurance is an important performance parameter that should be considered a priority for the development of other motor skills. Aerobic and anaerobic energy covers these systems, taking into account the energy exchange used in the game of handball, the duration of the game, the playing field and the short and medium heavy loads specific to handball. In this direction, not only aerobic endurance, but also anaerobic endurance should be developed in the game of handball.

In this direction, it is necessary to include especially aerobic exercises from the preparation period to the training period during the competition. In addition, aerobic endurance is an effective parameter in recovery and performance in handball.

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