In the case of the goalkeepers the optimum efficiency (35-40%) was reached only by first 4 ranked (35,63%), close to the minimum places 1-8 (34.90%) and 32.67% of all teams.

With these guidelines achieved, efficiency limits should be reconsidered for throws 9m and 7m shots downward by 5% as in any category not reached the minimal requirement, respectively to be monitored the efficiency shots for wings and goalkeepers, where only the first 4 ranked fulfilled the minimum benchmark. For 6m shots to be increased by 5% the minimum level because in all categories the upper margins were exceeded.

The difference in the game is made by the individual actions or carried out in small groups and the speed of decision is essential in achieving efficiency and performance, so that the actions of training should be to: focus on improving technique and tactics individual; capacity to solve the relation 1-1 in attack and defense; compliance with established tactical plan; improving collaboration in small groups (2-2, 3-3) (Táborský, 2011, pp. 9-10).

At the shots where not reached the minimum level it is recommended that in training be used more often game situations to be resolved and where to focus on increasing the efficiency of shots. In addition it has to work in conditions of fatigue and participation in friendly competitions where they have a way similar to the official ones (a numbers of 5-8 games in 15 days). Compliance with these requirements should be quantified in the following competitions, and this necessitates a subsequent reassessment to see whether the situations were solved.

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Neuromuscular Exploration in Student Basketball Training

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Abstract

IntroductionThe neuromuscular training is of present interest in the complex training of the students at "Carol Davila" University of Medicine and Pharmacy and also in achieving performance. Starting from the aspects of neuromuscular training, sports performance can make significant progress in terms of: explosive muscle strength, muscle strength, speed, agility and also neuromuscular control that creates the premises of a high-precision sports technique. Applying the method of myotonometry in the field of sports science and physical education has led to favorable results, which has led us to use it in designing and conducting the physical training programs of the representative basketball team of "Carol Davila" University of Medicine and Pharmacy, hoping to achieve superior performance.

Content
Myoton is a non-invasive device that measures functional muscular status. The operating principle is based on the application of a low intensity mechanical pulse that triggers a muscle response, taken over by a computer and recorded as an acceleration sample. The shape of the acceleration, velocity and amplitude curves is important for it enables information on elasticity and tonus to be obtained, starting from mechanical oscillations produced by the mechanical stimulus in muscle tissue.

Conclusions
As a result of the experiment, we reached the following conclusions:
1. Physical training is very important for the performance in sports. It conditions the ability to support the effort both in training and in competitions, this being something we wanted to highlight. The junior basketball team, which was a participant in the experiment, being at the top of the standings, justifies the validity of our intervention.
2. The data provided by the driving tests is no longer enough to intervene on the level of physical training, the use of modern investigative technology becoming more and more important in approaching the training of athletes and thus becoming areal support for the coach's decisions, which, in return, must have more and more confidence in this easy support of his work.
3. By resorting to these investigations, and to the data provided by the myotonometer, a lot of cases were recorded with high levels of risk and in the attention range.

Keywords: basketball, students, neuromuscular investigations

Introduction

The neuromuscular training is of present interest in the complex training of the students at UMF "Carol Davila" and also in achieving performance.

Starting from the aspects of neuromuscular training, sports performance can make significant progress in terms of: explosive muscle strength, muscle strength, speed, agility and also neuromuscular control that creates the premises of a high-precision sports technique.The design and implementation of neuromuscular training programs for the basketball team of the University of Medicine is based on complex investigations starting with the first year of study.

Physical training - the technical and tactical training support is also one of the basic components of the sport's training in basketball and the search for new ways of optimizing it is permanent. For these reasons, we considered it necesary to identify possibilities for improving the methodology of selecting specific contents, focusing on the added information provided by the neuromuscular determinations offered by the myotonometer.

Applying the method of myotonometry in the field of sports science and physical education has led to favorable results, which has led us to use it in designing and conducting the physical training programs of the representative basketball team of UMF "Carol Davila", hoping to achieve superior performance.

The purpose of the research

The purpose of this research is to improve the explosive force and the elasticity of the lower muscles in the subjects in the experimental group through training programs that include strictly oriented training structures.

For samples involving the directions of improving of the explosive force and the elasticity of the lower muscles, we considered it necessary to use a high-performance investigation apparatus to provide us with a higher degree of accuracy regarding the muscular groups on which the intervention should be oriented , in order to obtain conclusive progressions which can lead to the optimization of its physical training.

Research hypotheses
Identifying the state of some neuromuscular parameters that can direct and accurately guide the content of physical training programs. Including in the training programs structured exercises based on the evaluation of the muscular function, which contribute to the improvement of the physical education of the basketball students.

Objectives and tasks
The present research pursues:
- to improve the performance of basketball students by prioritizing the physical training factor;
-to increase the capacity of the potential to support the technical and tactical actions focusing primarily on the explosive force in the muscles involved;
- to improve the elasticity of the lower muscles.

In order to achieve these objectives, it was proposed to solve the following tasks:
- bibliographic documentation to identify the opportunities offered by the modern technology of muscle function investigation;
- selecting muscle groups for investigation;

- testing subjects with the help of the myotonometer;
- restructuring work schedules following the results of neuromuscular determinations;
- applying training programs;
- establishing the level of motor development after the application of the new programs;
- data processing and interpretation.

Applied methods and research techniques

a. Specialist and interdisciplinary literature study
b. Method of observation
c. The statistical and the mathematical methods
d. The graphic methods
e. The experimental method

Content and results of the investigation of the muscle tone through myotonology

Myoton is a non-invasive device that measures functional muscular status. The operating principle is based on the application of a low intensity mechanical pulse that triggers a muscle response, taken over by a computer and recorded as an acceleration sample. The shape of the acceleration, velocity and amplitude curves is important for it enables information on elasticity and tonus to be obtained, starting from mechanical oscillations produced by the mechanical stimulus in muscle tissue. The analysis of the measured parameters was achieved through the agonist / antagonist symmetry index, the influence of which is expressed by the generated articular stability, necessary for the development of the technical performances imposed by the basketball game.

Following the results of the femoral biceps investigations, we find that 41.6% of the cases for relaxed muscular tone and 50% in the contraction cases are in the attention range, while 8.3% exceeding it. Muscle elasticity recorded 25% of the cases of risk and 33% of the relaxation cases and 25% of the contraction ones exceed the attention range, whereas only one case is in that limit. Stiffness has during relaxation 41.6% of the cases in the attention range, while during contraction 33% of them are placed in the red zone and 16,6% in the attention range. For the rectus femoris muscle, the tonus has 16.6% of the cases during relaxation and 25% during contraction in the attention range, none of them being in the abnormalities zone. Muscular elasticity recorded during relaxation 41.6% cases of risk and 33% in the attention range, while during contraction 33% of them exceed the attention range. Stiffness has during relaxation 8.3% of the cases in the attention range and 16.6% cases of risk, while during contraction 8.3% of them go into the red zone and 41.6% of them are in the attention range. According to the average values, during relaxation, elasticity has both muscular groups in the attention range, the rectus femoris muscle getting close to the upper line of the interval. During contraction, both muscle groups have stiffness in their attention range. In terms of both contraction and relaxation, training programs should include structures for improving exercises without a long workout.For the gastrocnemius medial muscle, the tonus has during relaxation 25% of the cases in the attention range and 33% of them at risk, and during contraction 33% of them in the attention range and 58.3% at risk. Elasticity recorded 50% of the cases during relaxation at risk, and during contraction 91.6% exceed the attention range and this requires immediate assistance. Stiffness has during relaxation 41.6% of the cases in the attention range and 8.3% of them at risk, and during contraction 25% of them are in the red zone and 33.6% in the attention range. For the gastrocnemius medial muscle, the tonus has during relaxation 41.6% of the cases in the attention range and 16.6% at risk, and during contraction 25% in the attention range and 33.3% at risk. Elasticity recorded during relaxation 41.6% of the cases at risk and 8.3% in the attention range, and during contraction 66.6% of them at risk ad 16,6% in the attention range. Stiffness has during relaxation 58.3% of the cases in the attention range, none of them at risk, while during contraction 33% of them are in the red zone and 58.3% in the attention range.For the anterior tibial muscle, the muscle tone recorded during relaxation 50% of the cases in the attention range and 8.3% at risk, and during contraction 66.6% in the attention range and 16.6% at risk. Elasticity recorded 83.3% of the cases at risk and 16.6% in the attention range during relaxation, while during contraction 50% exceed the attention range and only 16.6% are in it, whereas stiffness recorded during relaxation 33.3% of the cases in the attention range and the same percent at risk, while during contraction 8.3% in the red zone and 25% in the attention range. According to tonus and stiffness, the subjects are placed in the area of attention, while in terms of elasticity there is an asymmetry marked at the level of the anterior tibial muscle with the decrease of the elasticity in this muscular group, which requires a muscle training based on isometric stretching. In the calves muscles, you can observe during both relaxation and contraction the existence of symmetry indexes for the three parameters situated in the risk zone, with values greater than 10%, prevalent in the gastrocnemius muscles. Thus, for these investigated muscles, in relaxation, only the stiffness of the gastrocnemius medial muscle is within the permissible limits; In the attention range exist the stiffness of the gastrocnemius lateral muscle and the tone of the gastrocnemius medial muscle and also the anterior tibial muscle; The other records have values over the range of attention. During contraction, the average values of stiffness bring the gastrocnemius medial muscle to the area of risk and lower the anterior tibial muscle to the permissible limit,

and the gastrocnemius lateral muscle remains in the limit of attention. The contraction tone keeps the gastrocnemius medial muscle in the risk area and the gastrocnemius lateral and anterior tibial muscle in the permissible limit. According to elasticity, during contraction, muscle groups remain in the risk area with an almost double increase in the values of the gastrocnemius lateral muscle. According to relaxation and contraction, at the level of the calf, the musculature doesn't have elasticity, with a high risk of injury. We note that at the level of the muscles of the calf there is this tendency, namely positioning most of the subjects in the abnormal area of symmetry differences.

Even though at the level of the calf the values of the symmetry index are still being recorded, in the areas of risk, there are significant increases in arithmetic means, which support the validity of the work programs proposed by us, and require us to continue the training in this direction. Compared to the initial results in the gastrocnemius lateral muscle, we find that there is no significant improvement in the muscle tone during relaxation, while in contraction, cases of risk decrease by 41.7%. Muscle elasticity, both in relaxation and in contraction records the same number of cases in the risk area, but it should be noted that the value of the symmetry index has decreased considerably, the progress being in fact a significant one compared to the initial testing. However, stiffness has recorded a significant progress in values both in relaxation and shrinking with only 1 case being placed in the risk area. For the gastrocnemius medial muscle, the tonus, both in relaxation and constriction, does not record any cases of risk. Elasticity, in both contraction and relaxation has recorded some values in the final which are below those in the initial test, the progress being of great significance. Stiffness during relaxation has considerably improved its values and during contraction only the attention range includes less significant cases; in the risk area the improvement is of only 8%. For the anterior tibial muscle, for tonus during relaxation the number of cases in the attention range stagnates and the risk cases are eliminated. During contraction, however, only one case remains in the focus area. Regarding elasticity during relaxation, the number of cases at risk decreases by 33% and only 1 case which is in the risk zone was recorded during contraction, whereas the percentage of cases in the attention range has dropped by 23%. The stiffness during relaxation records an increase in the number of cases due to the decrease of those in the risk area, with the percentage still being higher than 50%.

Conclusions

As a result of the experiment, we can get to the following conclusions:

1.Physical training is very important for the performance in sports. It conditions the ability to support the effort both in training and in competitions, this being something we wanted to highlight. The junior basketball team, which was a participant in the experiment, being at the top of the standings, justifies the validity of our intervention.

2.The data provided by the driving tests is no longer enough to intervene on the level of physical training, the use of modern investigative technology becoming more and more important in approaching the training of athletes and thus becoming areal support for the coach's decisions, which, in return, must have more and more confidence in this easy support of his work.

3. By resorting to these investigations, and to the data provided by the myotonometer, a lot of cases were recorded with high levels of risk and in the attention range.

4. Among the muscle groups chosen for the investigation and being directly involved in the improvement of the results of the probing and long jump, the ones at the level of the calf had, in the initial testing, the most cases in the risk area, with very high values for the gastrocnemius lateral muscle, for example: 35.1 elasticity during contraction, compared to the 10 limit allowed for the cases, and the anterior tibial muscle, his elasticity but during relaxation this time, with a value of 20.93.

5. The assessment of muscle tone at rest and during contraction provided conclusive data on the state of muscular fatigue corroborated with the evolution of elasticity, and the stiffness provided data on the state of muscle contraction in the contraction-relaxation relationship, which led us to the first hypothesis of our research "The identification of the state of some neuromuscular parameters can direct the content of physical training programs."

6. The improvement of physical training programs has shown immediate effects, although on some muscles the intervention of the independent variable has to be continued due to the high values recorded in the initial testing, for example the gastrocnemius lateral muscle's elasticity during both contraction and relaxation, or the anterior tibial muscle's elasticity during relaxation, requiring the implementation of a post-effort recovery program.

7. Regarding the mean values of the performances of the investigated subjects, we observe an increase in the motrical tests induced by the new programs applied to the experimental group.

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Selection Adaptation – A Conditioning Factor in Obtaining Performance in Wrestling

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Abstract

Selection is the uninterrupted process of screening, selection and sorting of young people according to well-defined criteria and their guidance towards the practice of a certain branch or sporting evidence in which they can best value their qualities to achieve performance.

The selection process is a complex and continuous system of appreciation of the full level of training of the fighters and of the propulsion of those with the potential to progress on the upward path of training in order to achieve more and more valuable performances. The selection is closely related to the training process (through its objectives and content). Selection as a methodical process should not be reduced to the initial selection.

In wrestling, a factor of paramount importance is the proper selection of the most endowed youngsters for practicing this type of sport.

The selection is all the more advantageous as the final objectives of the training are better known. It is vital for the coaches to know the development trends of wrestling in the world, to know the level of the technique and tactics of fighting, and also the psycho-motor skills of the best-performing athletes.

In view of the above, selection for practicing wrestling is an elaborate process that seeks to detect athletes with innate availability to guide them to combat wards.

Based on these considerations, it is our job to find out whether the adaptation of the selection on the selection age, the period of practice required to obtain it, can positively influence the achievement of the great performance.

Conclusions. At present, the optimal age of selection wrestling, is around 7-9 years. The current development of children's development and the complex demands of fighting sports call for the adaptation of selection as a conditioning factor for achieving sports performance.

With regard to the average age that favours the achievement of the great performance in battles, it is 25 and 27 years, the value obtained in this respect being statistically confirmed. At the same time, the first medals were won around the age of 20.

Keywords: methodology, specific means, the greco roman wrestling, selections, initiation

1. Introduction. Fights were included in the 1904 Summer Olympics in St. Louis, Missouri (US), but were not scheduled at Olympic Games (O.G.) Since 1912, because since 1920, from O.G. From Antwerp, to miss the Olympic program.

Romania participated for the first time in the Olympic Fighting Competition in 1936 in Berlin, and since 1952, starting with O.G. in Helsinki, was present with athletes at all O.G. editions, and at the 1960 edition in Rome, athlete Dumitru Pârvulescu at the category 52 kg won the first gold medal, Ion Cernea won the first silver medal, while