

# Effect of using some treating exercises for the calf muscle post-effort and its effect on the achievement of the triple jump for the second stage students

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## **Abstract**

*We Cannot reach high sports results depending on the increase in the volume and intensity of training only, and without concomitant operations of hospitalization to get rid of the fatigue caused by carrying the impact of training and the goal of developing motor levels of performance and achievement in various sports skills and to address the means to test that develop achievement in effectively Triple jump: One of these means is hospitalization exercises, as the rapid progress that has been made to achieve the high achievement in triple jump in the present time and the development of many and specialized researches as well as therapeutic and hospitalization methods to reduce pressure on the body as well as medical means to reduce injuries and keep the player. Therefore, the researchers conducted the post-tests and then applied the hospitalization exercises in a manner appropriate to the age group and the size of the injury, and then the post-tests were conducted in the same conditions as the tribal tests on the research sample.*

**Key words:** rehabilitation, injuries, physiology, yard and field

## **Introduction**

After the intertwining of physiology and other mathematical sciences (such as learning, mathematical training and physiology...etc.) which are considered to be among the modern scientific fields that express the extent of scientific interdependence between these sciences in order to develop levels of motor performance and achievement in various mathematical skills and to address the means for training that develop achievement in The effectiveness of triple jumping, and one of these means is hospitalization exercises. (Hassan, 2016) The problem of research has crystallized in the weakness of training methods and the fatigue resulting from the exercise, because the game has a difficult technique and requires a balanced neuromuscular compatibility and continuous training when most players and how to choose effective and effective training means affecting the achievement of achievement through training using the means of healing reduces stress Al body, the rapid progress that has happened to achieve high achievement in the

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triple jump at the present time and the development of many specialized research as well as therapeutic means and to reduce pressure on the body as well as medical means to reduce injuries and keep the athlete. The problem of hospitalization in modern sports training has become less important than carrying the training itself, which is the main method that the trainer uses to influence the athlete in order to increase the level of performance and achievements of sport, and high sports results cannot be reached depending on the increase in the size and intensity of training only, and without accompanying hospitalization operations to get rid of fatigue resulting from the effect of training load, and in many cases the athlete performs a training load despite the adequate disposal of fatigue resulting from the previous physical pregnancy, which causes the athlete to reach the stage of stress (the motor - nervous - muscular - bone) and also the athlete can be injured. In cases of weakened immunity and various diseases (Abu El-Ela, 1999)

### **Literature review**

It is a group of muscles that cover the tibia and fibula bones and are divided into three groups: the anterior, posterior, and lateral groups. As for the front muscle groups of the leg: They are the extensor muscles and include the muscles in the leg from the front between the tibia bone and the fibula. It consists of: 1- The anterior tibia muscle. 2- The extensor muscle of the long thumb. 3- The extensor muscle of the long fingers. 4- The third fibula muscle. And the posterior muscle group of the leg: It is the astringent muscles of the foot and the toe located behind the leg between the shin and fibula, and is divided into two groups of muscles, namely: 1- Group surface. 2. Group intaglio. And the lateral muscle group of the leg: - These are extensor muscles of the foot and heel that cover the lateral surface of the fibula bone and consist of two muscles: 1- Long fibula muscle. 2- Short fibular muscle. That the requirements for energy production during the recovery period after exercise are less than during the practice period, but oxygen consumption remains high even after stopping performance for a specific period of time, and this depends on the intensity of performance and its size. Oxygen inhalation plays a role during the training units, it was found that oxygen inhalation in proportion High during the effort helps to reduce the number of breathing times by (10-20). Working on inhaling quantities of oxygen increases the partial pressure in the arterial blood of its nature within a few seconds. Inhaling oxygen before starting performance has no positive effect and has no effective role in improving airway representation. For energy, if you use oxygen after completing the training, it can have a greater psychological impact than a functional one. As the outdoor exercises in the playground and field, in addition to weather factors and the spread of trees in the stadium, is a good environment for performing exercises and breathing oxygen. (Arthur, 1996) The triple jump is one of the activities that need muscular and nervous compatibility and strength for the body, especially the legs, and the training alone does not reach a good result without the therapeutic and hospitalization means as a result of muscle fatigue on the body in general and the legs in particular, which may cause injury and this activity is taught for the second stage according to the curriculum set in the college as a result of the weakness of achievement for students and from injury and pressure practical lessons considered the researcher to engage in this field place some exercises hospitalization It may be a positive solution to reduce injury and gain the students psychological comfort positively affect the completion of the effectiveness of the triple jump which gives exercises healing positive relief for being way therapeutic for students . (Hassan, 2016)

### **Methodology**

The researcher adopted Wen of the research methodology as being consistent with the experimental solution to the problem to be discussed and it is one of the important means of access to reliable knowledge. The research sample was chosen by the intentional method, and they are a group of students of the second stage /

College of Physical Education and Sports Science - University of Baghdad. Students of the second stage, aged (19-22) years of the season (2017-2018), the number of individuals in the sample reached (21) students, and injured students and athletes were excluded in the triple jump event, which numbered (9) students. Tools and devices were used: an electronic scale to measure weight, an electronic stopwatch, a video camera and measuring tape with a length of 2 m. Water areas. The search tests were: - Long jump test of stability. - A test runs of 30 m of the bird. - Test5 Records for every man. - test triple jump The researcher conducted the tribal tests on the sample, where the researcher used the method of one group Which is the division (Y) on (26/2/2018) in the second semester in the stadium of the College of Physical Education and Sports Science / University of Baghdad / Stadium Square and field Outer. In the lesson of athletics and application of the program after physical exertion, i.e. after the end of the lecture, which numbered (21) students, the following tests were carried out: the long jump test of stability. The triple jump test of stability and 30 m running test of the bird, Test5 Records for each man and Triple dart test. Then the healing program where the application prepared by the researcher when program a special each unit of training modules having regard to the possibilities and levels of public individuals appointed after the end of the lecture after physical effort with the team by supplement the existing and conducted researchers tests dimensionality on the same research group purposively day Monday ( 2 / 4 /2018) the same way as was done in the tribal tests, to end the period prescribed for the experience, which lasted 6 weeks, was keen researchers to create the conditions for all tests and tribal requirements when conducting posteriori tests in terms of time, place and means of testing .

**Results**

**Table (1) Values center arithmetic mean deviation standard**

T	Variables	measuring unit	the test	s-	P±
1	30meters	a second	Tribal	5.932	.539
			after me	6.889	.539
2	Bounce	meter	Tribal	1.862	.401
			after me	2.049	.232
3	5right wheels	meter	Tribal	6.150	.570
			after me	7.033	766
4	5logs left	meter	Tribal	5.517	.601
			after me	6.874	.893

**Table(2) Values center arithmetic mean deviation standard**

T	Variables	Q- F.	A-F	E	Values (T)	mistake percentage
1	30meters	-957	.240	.54	17.868	.000
2	Bounce	187	.452	.01	1.844	.500
3	5right wheels	-883	.472	.106	8.367	.000
4	5logs left	-1.358	.517	.116	11.736	.000

**(Degree of freedom = 19), at the level of error ≤ (0.05).**

According to the results shown in the statistical table, it shows that there are significant differences between the pre and posttest of the sample, which shows that the training program for students with a positive psychological effect, physiological, where many studies confirmed that water has a positive psychological

impact on the player, and that the students are urged to drink water for what the body loses During training (scientific lessons) where the human body loses about (7-8)% of its weight in races, drinking water during interstitial periods during athletic activity has a good effect on the level of performance, that is, a positive effect. Hospitalization and oxygen inhalation exercises led to the development of the sample in favor of the tests as (Dr. Muhammad Mahmoud Abdel-Zahir) increases the partial pressure in the arterial blood, which is beneficial to the working muscles, but after completing the inhalation of oxygen before performance begins It does not have a positive effect on a level and has no influential role in improving the aerial representation of energy. If there is an indication or evidence, it is very weak. As for using oxygen after completing the training, it is possible that the psychological effect is greater than the functional impact. (Mohamed, 2017) Given the presence of the swimming lesson within the curriculum and taking the first minutes of the lesson where he took (shower \_ and floating) inside the pool and moving the body inside the aqueous medium led to the rest of the muscles working in the body and served as a hospitalization method, as was confirmed , that training Within the aqueous medium, it provides psychological, physiological, social, and recreational aids, as it gives a feeling of comfort, happiness, and pleasure, and that water has a benefit to increase physical fitness. (Mahmoud, 2016) And that buoyancy is the pressure up and resulting from submerging the body in the water and the direction of buoyancy in the opposite direction of the force of gravity, whereby the body is allowed to move easily and smoothly from the land, which increases the ease of training, so running and on the ground with a violent focus while its performance walking and bouncing may cause injury if done on the ground with a violent focus While its performance inside the water works to absorb shocks as it reduces the weight of the pressure on the joints and preventing injury, and that changing the work of recovering water to the body is one of the most important hospitalization processes and there are some factors that increase its difficulty in the hot air where the body needs a period of (28-48) hours To replace the lost water while being expelled in hot weather and racing. (Abu El-Ela, 1999) This is what the researcher confirmed from drinking water continuously and intermittently during the practical lessons in a watery medium considered as a massage for the muscles as it helps in removing its tension as it restores its activity after it was weakened due to the effort (the lessons of the field), and that relaxing the legs leads to the elasticity of the muscle tissue and increases the blood circulation This improves the functional condition of the muscles, and this is reflected in the results after the use of hospitalized methods. It has indicated the significance of the tests before and after the use of these methods, and that following a specific training system and a specific program has a direct effect in reducing the tension of the seventh nerve, which decreased depending on diastolic blood pressure, on improving physical abilities. Physiological changes and this proved the post-test and statistical results. Studies have shown that the use of massage for the legs at the enumerators achieves muscle relaxation and an increase in the length of tissues with an increase in blood circulation. Muscle that got tired. (Muhammad, 1997) The preparation of the vital capacity disturbs the safety of the respiratory systems, so the researcher used the use of oxygen exercises, inhalation and relaxation, as well as improving physical characteristics, positively affecting physiological variables. (Larson, 1974) Therefore, the researcher used to use oxygen exercises, inhalation and relaxation, as well as improving physical characteristics, positively affecting physiological variables. (Ikhlas, 1991) In running in anaerobic work, especially in galleries in which the pulmonary ventilation and the body of the cardiac cycle during work is restored to its maximum limit ((short time - maximum intensity)) determines the work of the respiratory circulatory system and as a result of the influence of large forces and muscle fatigue the body, its ease and depth Breathing is not possible, as the hostility often works the number of times the non-deep

inhalation. The pulmonary ventilation is only increased. After the end of the work, in the first seconds you reach the rest rate. (Hashem, 2000)

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