Effect of hypoxia training on the efficiency of vital organizations and some biochemical variables of football players

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introduction

Sport Training leads to the events of many changes , whether physical changes from the development of the physical character -istics of the special type of practitioner or internal changes in physical activity that occurs as a result of sports training, which includes functional changes or chemical organs of the body, according to he type of training and these changes to the body organs changes Which occurs in the inside of the muscle cell to release the energy necessary for muscle work as the progress of the athlete's level of the individual depends on the positive of those chemical changes and in order to achieve adaptation to the organs and organs to meet the fatigue caused by training, and b Yen , the most important of these chemical changes that are affected by training is the concentration of lactic acid in t he muscles and blood as thetraining of anaerobic , whic h lasts for a period of (1-3) minutes working on the oxidation of sugar anaerob-ically which leads to the production of A lactic acid in the working muscles and the greater the duration of anaerobic work has in creased the accumulation of acid ratio of lactic muscle , which in turn leads to the slow pace of other chemical processes including (enzymes swans Thiel anaerobic, hormon es. . etc.) due to the acidic liquid increase inside and outside the cells Muscle and blood (PH of blood) from the normal situation because of the mitochondria 's ability to introduce ions to hydrogen liberated from the oxidation of sugar anaerobically to the respiratory chain, which affects the balance of pH in the blood towards the acidic and thus slows down and stops uncle for many of the chemical compounds, so it feels the

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player pain in the muscle and slow down its speed until it stops working completely when increasing amounts of accumulated lactic acid and hydrogen ion in the blood. (13:55)

But there are systems that help the body to restore the balance of the internal body environment, which are called biological organizations, which are chemicals that reduce the concentration of hydrogen in the case of increased, in the case of acidity and even in the case of the deficiency or the so-called basis by adding acid solution and salt to ion hydrogen, which makes it sour very weak does not affect the Altjansa stability of the muscle or blood which works to balance blood PH, And the mo st vital organizations of chemical (bicarbonate, Rponik acid, hemoglobin) . Since the game of football is a game of work is Where the anaerobic system (All Acidosis) high by this reference to it during the games there will be a build - up of lactic acid in large quantities to do so , the players carry this accumulation in muscle and blood and not the player stop working and fall ill fatigue early . It is here it coment the importance of research to increase the work of vital organizations and chemical variables by anaerobic training (lactic) to resist fatigue caused by the accumulation of lactic acid and thus maintain the speed of performance for as long as possible during the competition training. (12: 185)

- Research Problem

The responses of the body's internal organs are important goals that sports training seeks to bring about changes or modifications by altering or altering the external influences (external load) or exercises and exercises performed by the athlete constantly, which lead to the events of chemical and physiological changes in the body of the athlete. Increasing the efficiency of the athlete depends largely on the positive of those chemical changes that enable the player to face fatigue resulting from training or match for as long as possible.

Among these internal responses regulate the pH (H +) in the blood, which is expressed in a scale numerical a (PH), which is the blood acidic in the case of falling

natural state (7.40) In the case of rising blood is based cattle in both cases must regulate PH blood especially when conducting exercises anaerobic violent that lead to the accumulation ofLactic acid in the blood, which works to increase the H + in the blood and thus the blood is moving towards acid which significantly affect the work of enzymes metabolism of anaerobic as well as the proliferation of vehicles into the muscle cell which leads to the appearance of fatigue And slow rate of chemical reactions Of. (2: 76)

Here is the role of vital organizations significant in maintaining the balance of blood PH as long as possible as well as the work of many enzymes to get rid of the hydrogen ion reverse is in acidic state or basal, and thus can maintain the speed of chemical reactions yeh and the speed of the player as long as possible. (14: 459)

Through what has been y hate research problem is reflected in the following:

1. Organization of H + and fast blood is through vital organizations , and in view of the lack of studies in this area tried researcher going into this study to provide scientific facts for coaches and staff in the sports field on the work of those chemical organizations (basic) as a result of anaerobic training.

2. The presence of weakness in the character of the players carrying Lactic which leads to a decline in the level of performance (speed) during the performance, especially in the second half of the match the second half this Macdh Most of the trainers so sought the researcher to conduct this study to develop a recipe endurance players in order to maintain lac tic performance speed for as long as possible during the games by improving the effectiveness of the chemical work.

3. No Most trainers have sufficient information about the chemical changes that occur as a result of their training Anaerobic as evaluating their curriculum is limited to the physical aspect, note that the chemical variables are real and scientific training intensity as well as the training status of the player indicator so deliberately researcher

conducting this study to see positive over chemical changes due to Anaerobic exercises

- Research Objectives:

- The research aims to.

1.aaadad Anaerobic exercises (for Aktekah) within the trainin g load to develop the endurance of lactic football players components.

2. do not know the effect of training Anaerobic in the efficiency of some vital organizations and the biochemical variables football players.

3. Identify the effect of anaerobic training in the development of endurance of t he lactic football players.

- hypotheses:

- There are differences statistically significant differences between the two measures tribal And beyond In the level of some vital organizations we variables biochemical Research group for the dimensional measurement.

- There are differences statistically significant differences between the two measures tribal And beyond At the level of carrying Lactic research group for the dimensional measurement.

Search terms:

- Vital organizations Buffer system The term of vital organizations to describe the chemical reactions that reduce the concentration of hydrogen to the minimum changes, and is the key factor to maintain normal blood bio regulator is the PH scale of any part helps to prevent changes in PH that occurs in the body due to increased hydrogen ion concentration is known as acid - j of Acidosis and on the contrary, in the concentration of hydroge n shortages lead to the Algulw of Alkalosis, and can not succeed in the case of vital organizations to play their role in the equation of any defect occurs in the concentration of hydrogen will lead to a coma or death. (2) :. 4)

- Balance of acid - basal - (PH blood)

"The acid-base balance is one of the important mechanisms of internal regulation. This term refers to the regulation of hydrogen ion concentration in the solution, since any change, even if it is simple, PH) Produces deadly changes in events metabolic, so is the strict regulation

of the acidity in the cellular level necessary in order to survive, and can be defined phas a "negative Allogartem to the concentratio n of hydrogen ions. The more hydrogen ions increases decreased ph PH The solution became more acidic). (25: 1)

- Concentration of lactic acid in the blood before and after the effort Varied a lot of sources, as well as the manufacturer of chemicals (Ke tat) that reveal the concentration of lactic acid blo od from the rate of time to rest, as well as after physical exertion has pointed out (Abul - Ela Ahmed, 1997) to the acid ratio Lactic time to rest and without the exercise of any effort Workout of the average individual (8-12 mg / 100 ml of blood) , or about one mole.(3: 32) The (FOX, 1984) Joshua saw that lactic acid ratio (5-15 mg / 100 ml blood) already present in the body time to rest and without any activity (physical, and can go up while doing too heavy to reach 100 mg / ml blood in 1009).(9: 114)

- related studies:

1. Ahmed Silverline study (201 3) (4) Entitled:

" The effect of intake of sodi um bicarbonate dissolved in water in the acid concentration ratio of lactic in the fifth minute to rest after the maximum Aldhd players first - class football . "

The study aims to identify the effect of eating bicarbonate Alsodion dissolved in water with the effort taken by certain amounts at certain times and their impact on the compilation Lactic.

The researcher used the one-group experimental method on a sample of its people (7) football players at the age of 20 years and a training age of not less than 5 years.

One of the most important findings of the researcher that eating bicarbonate reduces the concentration of lactic acid in t he blood when measuring the height of the assembly time Lactic hospitalization.

The researcher recommended the use of melted water before Allbeckbonat matches at least one hour it reduces fatigue.

2. Baha Mohammad Taqi study (2014) (6) entitled

" The impact of the medium and long anaerobic effort

on lactic acid during different measurement periods of the football players."

- The study aims to identify the highest concentration of transmission of lactic acid from the muscles to the blood during the periods of time (3 minutes, 5 minutes, 7 minutes, 10 minutes) after the average physical effort of the handball players, the researcher used the descriptive method; the researcher conducted a study on a sample of Handball players are (6) players. One of the most important results
- The highest concentration measurement of lactic acid afte r the effort Anaerobic average was in the fifth minute.
- The highest concentration measurement of lactic acid after the effort was long Anaerobic in the seventh minute.

The researcher recommended the following:

- Study other variables with lactic acid during the same periods and find the relationship between them.
- Focus on the fifth and seventh minute to measure the lactic acid after anaerobic effort.

3 - Matthew and Andrew William Study Matthew Driller , Andrew Williams (2012) (21)"Yale Alth for the effect of sodium bicarbonate and sodium chloride on the value of hematocrit players bikes during the performance of high -intensity"

The study aimed to compare the effect of sodium bicarbonate, sodium chloride, and placebo during work on the bike. Three groups of each group (8) cycling players with an average age of 24 weighed about 77 kg. The average oxygen consumption was 59 ml/ kg the study of an improvement in the level of blood PH and the level of vital organizations as well as the degree of blood carrying lactic and the speed of disposal of the group , which dealt with sodium bicarbonate better than the group that dealt with sodium chloride and placebo placebo

4 - Florine and Tim Meyer Eiger study Tim meyer, Florian Egger (2011) (20) entitled "Effect of sodium bicarbonate during high intensity to withstand

performance during performance on the bike"

The aim of this study is to identify the effect of sodium bicarbonate on the development of endurance of cyclists during high performance. Two groups ; one dealt with placebo (Placebo) , a corresponding number group (10) players and other experimental number (11) players are taking capsules (300 mg) / per kg body weight - was measured blood lactate and blood gases as well. The most important results were: The level of blood parameters under study improved after taking sodium bicarbonate capsules compared to placebo, as well as an improvement in fatigue tolerance longer periods for cyclists

- Procedures Search:

- Research Methodology:

The researcher used the experimental method in a one-group approach as the appropriate method for solving the research problem and achieving its objectives.

- Sample Search:

Select the researcher sample th ey players exert rain club games sports Premier League (b) for the sports season 2014-2015 totaling 12 players Ttrauh aged (21-2 4) have been carried out some tests for members of the sample in terms of some variables to influence the results of the study , namely , (height, we ight, age Training, pulse before the effort, the concentration of lactic acid, enzyme LDH, bio - chemical organizations.

First exploratory experiment:

The researcher conducted the first exploratory experiment on Sunday 6 th / 4/2014 ninth hour gym rain Sports Club, on a sam ple of (5) players from outside the research community and in the presence of members of the research community and the aim of this experiment follows:

- Ensure the possibility of conducting laboratory tests for vital organizations, as well as ensuring that special devices detect these variables.
- The creation of the medical staff and Almsaa d as well as identifying the difficulties that may face the work of those cadres.
- Ensure the safety of the mobile device Tread mill).

Results reached

1. There was a possibility of conducting laboratory analyzes of vital organizations as well as the safety of their work.
2. The knowledge of the cadres of the mechanism of blood withdrawal and the distribution of blood samples taken from the players on blood saving tubes allocated for each analysis.

Second exploratory experiment.

After conducting personal interviews with experts and specialists in the science of sports training and physiological about the en durance test lactic validity (Kojnham and Vlawkins) as the results of those interviews , let the necessity of modifying the speed of the device to suit and the arrival of the player to fatigue during a period of time ranging from (2-2, 5) minutes which time production is necessary for muscular work of energy through the system lactic very high percentage compared to the puppet regimes (phosphate, antenna) and is done not by conducting an exploratory experience. Therefore , the researcher deliberately to conduct an exploratory experiment again on Saturday 12 th / 4/2014 nine am sports hall rain Sports Club on a samp le of the research community, as the test specifications were as follows:

1. Speed device, (14 km / h).
2. Angle of inclination of device, (11 degrees).
3. Performance time, (until player access to fatigue).

The pulse rate was measured after the voltage as well as blood PH players and the results of the second exploratory experiment is the following:

1-time performance was (until the arrival of the player to fatigue) between (1,50- 2,10 minutes)

2 was the pulse rate directly after the voltage ranges from (180 n / d - 186 n / d)

3. PH was blood after voltage (7.2) In light of these results has been modified test specifications as fast as it, as well as the results obtained from the second exploratory experiment on experts and specialists to determine the validity of the test to measure endurance recipe for lactic football players.

- The third exploratory experiment:

The researcher conducted the third exploratory

experiment on Saturday, Sunday , 19-20 / 4/2014 rain Stadium Sports Club at four pm and half on the research community and the aim of the experiment is the following:

1. Determine the maximu m time for each user exercise in the training curriculum.
2. Know the field difficulties that the researcher may encounter during the application of the program.
3. Know the recovery time and pulse return after exercise to (120 N / D - 130 N / D).
4. Know the time required to apply the curriculum syllabus.
5. The suitability of these exercises to the members of the research sample.

- Conducting tribal measurements

Measurements were made on tribal Tuesday , 21 / April and Wednesday 22 / April / 2014 to sample the basic number (12) Emerging Sports Club rain Dak ahlia Governorate.

Table (1)
Some sample measurements

	Variables and measurements	SMA	Standard deviation	Mediator	Torsion coefficient	The result
Anthropometric	Length (cm)	171.285	2.301	171	0.329	homogeneous
	Weight (kg)	69.528	1.659	70	0.123	homogeneous
	Age	20.178	0,818	20	0.363	
	Training Year (Year)	5.392	0.497	5	0.464	homogeneous
Biological organizations	BicarbonatesHco3 (mM EQ)	24.71	0.45		0.21	homogeneous
	Rponik acidH2co3 (mM EQ)	1.21	0.025		0.27	homogeneous
	Hemoglobin Hb (Mg)	15.15	0.36		0.20	homogeneous
Chemical and functional variables	Lactic acid by voltage (mg)	5.41	0.18		0.23	homogeneous
	Pulse before voltage	66 n / d	2		0.18	homogeneous
	Pulse after voltage	184 n / d	1		0.31	homogeneous
	Enzyme LD. H (Unit / liter)	254.99	24.28		0.12	homogeneous

Implementation of the main experience:

The researcher applied the main experiment in research

and the most important characteristics and controls of this procedure are as follows:

1. Anaerobic exercise program was applied to the sample for two months from Saturday 25 April 2014 to Thursday 26 June 2014 three times a week. The total number of units of the program was 24 units.

B - As for the components carry your training to develop the carrying lactic it was as follows:

- the intensity of training used ranged from about 80 to - 90% of the maximum capacity of the player because it is appropriate for the accumulation of lactic a cid intensity, it was determined the maximum intensity of the exercises used in the exploratory experience for each player.

- The size of the training: The size of the training was determined on the basis of the number of times the exercise in one group or on the basis of the time of exercise performance, and took care of the researcher in that intensity used for the training module.

- Convenience: The determination of resting intervals of house repetitions was based on the return of the pulse between 120-130 n / d so that they do not allow full Balaschwa player between iterations has been the pulse rate recording for each player from the carotid artery area at the bottom of the neck after the players trained on how to measure for 10 seconds and hits output (6) in order to extract the pulse rate during the minute, has the comfort between the duplicates positive comfort, either for the rest between the groups were between (3-5) minutes so that the player can perform exercises in the other group well.

- Conducting dimensional measurements

The distance measurements were carried out on Saturday 28 June and Sunday 29 June 2014 for the basic research sample at Al Matareya Sports Club Hall under the same conditions of tribal application.

Statistical Processes:

The researcher using (SPSS) program was also used to measure Allabaramitrih statisti cal differences due to the small sample size. The statistical tests used are: the average deviation Cookson Wilcoxon-Test).

-View results

Table (2)

It shows the central values were Arithmetic The deviation of the

normative value (and Cookson) calculated and tabular ariable bicarbonate (Hco 3 -) and carbonic acid (H 2 co 3) and hemoglobin Before and after the effort (before and after training)

		Variables	Average Arithmetic	Standard deviation	Value (f)	The value A tabular*	Values Z Calculated	Significance
Bicarbonate (Hco3)	Before training	Pre-voltage (mAe)	24.71	0.45	0	17	3.05	moral
		After voltage (mAe)	16.25	0.36				
	After training	Pre-voltage (mAe)	24.86	0.17	0	17	3.06	moral
		After voltage (mAe)	12.75	0.61				
Carbonic acid (H2co3)	Before training	Pre-voltage (mAe)	1.20	0.025	0	17	3.06	moral
		After voltage (mAe)	1.30	0.045				
	After training	Pre-voltage (mAe)	1.22	0.015	0	17	3.07	moral
		After voltage (mAe)	1.32	0.01				
Hemoglobin (Hb)	Before training	Before voltage (mg%)	15.15	0.36	0	17	2.98	moral
		After voltage (mg%)	14.68	0.41				
	After training	Before voltage (mg%)	15.85	0.39	0	17	3.05	moral
		After voltage (mg%)	13.83	0.22				

*** Sample size (12) and the level of significance (0.05)**

Table (3)
View the results of biochemical variables (lactic acid, PH Blood, enzyme LDH) Before and after the effort (before and after training)

		Variables	SMA	Standard deviation	Value (f)	Value of the tabular*	Values Z Calculated	Significance
Lactic acid	Before training	Pre-voltage (mg%)	5.52	0.18	0	17	3.05	moral
		After voltage (mg%)	90.74	2.75				
	After training	Before voltage (mg%)	5.86	0.27	0	17	3.05	moral
		After voltage (mg%)	119.04	4.26				
For a variable the blood PH	Before training	Before voltage	7.41	0.01	0	17	3.06	moral
		After the effort	7.20	0.01				
	After training	Before voltage	7.41	0.01	0	17	3.06	moral
		After the effort	7.09	0.03				
For the enzyme variable (LDH)	Before training	Pre-voltage (unit / l)	247.99	24.86	0	17	3.06	moral
		After voltage (unit / l)	461.75	13.94				
	After training	Pre-voltage (unit / l)	252.23	12.25	0	17	3.05	moral
		After voltage (unit / l)	520.13	16.29				

* Sample size (12) and the level of significance (0.05).

- Discuss the results

- For variable Bicarbonate - Hco3 (before and after training). Can be seen from the table (2) that there are significant differences between the two tests in favor of pre - test effort whether before and after the training. This is an indication that there is a decrease in the concentration Bicarbonate after the performance of the endurance test lactic , as it is called the level Bicarbonate blood reserve alkali, and the most important main

functions of the Bicarbonate is to maintain a balance of pH (the process of the PH) blood within the limits of natural , whether at a time rest or when doing any physical effort, and made this budget through the ability Hco_3^- to acquire the hydrogen ion liberated as a result of interactions that occur within the cell for the purpose of energy production by the decomp-osition of sugar anaerobically, which results in the accumulation of amounts of additional acid lactic in the blood during the performance Amos effort My distress, which alters the state of (the PH) blood toward the acidic, and here the work shows bicarbonates in relieving acid intensity caused by the accumulation of hydrogen ions liberated from those interactions, so the acquisition of the hydrogen ion here converts from strong acid to weak acid which is acid Rponik which is possible that part of it is transmitted to the lungs in order at about the $Co._2$ + the H_2o the or hand of vinegar inside blood cells red, and as bicarbonate transformed into another compound as a result of its association with the H^+, the concentration will be reduced in the blood and other body fluids, thus can be maintained acid balance (the PH) blood within the limits of the normal almost. (14 : 457)

The acid variable Rponik H_2CO_3 Before and after the effort (before and after training).

The table shows (2) there are significant differences between the two tests in favor of the test after the effort , whether before and after training . This shows that there is a very significant correlation between Bicarbonate acid Rponik E. y to drop one of the two compounds working to increase the other compound, so as seen from a decrease in the concentration of bicarbonate as a result of the acquisition or reduced to hydrogen ion and then turn it into acid Rponik so the increase Rponik blood is a good indicator that both variables are working to balance the PH of blood through the rising level of decline in these two single variables on the other account for the purpose of the budget, as well as that it is during

the physical effort and the result of the production of energy anaerobic way, the very large amounts of second or Oxide carbon is released into the muscle cell as well as hydrogen ions produced from the interactions of (12) for the decomposition of for sugar anaerobically, so the carbon dioxide with water link it is possible to produce quantities of additional of ULC acid Rponik it occurs when it moves Co. $_2$ of the cell to red foul(11 : 296)

As for variable Hemo c Lubin blood (Hb) Before and after the effort (before and after training). The table shows (2) there are significant differences between the two tests in favor of pre - test effort, whether before and after training . Which illustrate that there is a decrease in the concentration of Hemo c Lubin blood after the effort anaerobic lactic , attributed the researcher the reason for this decline to Alimo c Lubin in addition to the main function of which is the transfer of oxygen from the lungs to the working muscles of carbon dioxide and move in reverse, the other function of a process budget on acid - base father m (PH) Within normal limits as the dioxide carbon liberated in muscle cells and has also been referred to combine with the water component of carbonic acid , which alters PH Blood is simple, and that this process is done in the blood ball red after it consists H_2CO_3 In which ionized to turn back to Bicarbonate Hco_3^- Hydrogen ion H^+ And thus can maintain concentration Hco_3^- For the longest possible period soon pressed Dodd of nature Yeh, the hydrogen ion released from the ionisation process H_2CO_3 It is equated by acquiring mol Hb To hydrogen and thus turns into HHb It is a compound called Alimo c Lubin Stenotypist acid acid reduced hemoglobin . (10 : 503)

- Discussing the results of the hypothesis the second , for the variable acid , lactic before and after the effort (before and after training).

The table shows (3) there are significant differences between the two tests in favor of the test after the effort , whether by training . The researcher believes that the increased accumulation

of acid lactic in the blood after the effort because of the performance of singling out the sample to test endurance lactic strongly high, E. y to work and high intensity is able to increase acid lactic in the blood due to the decomposition of the sugar anaerobic carried out by the body to re - compound the process of ATP within the muscle cell with inadequate oxygen given to the working muscles, which leads to the inability of the mitochondria to introduce hydrogen ion to the liberal respiratory chain and thus binds acid pyruvic with hydrogen ion component of acid lactic . (25)

This is an indication that members of the sample resulted in high - intensity physical effort led to the accumulation of amounts of acid lactic .

- The variable PH of blood before and after the effort (before and after training).

Note When the results of the Netgear PH of blood in the table (3) shows us a reduction in the pH value.

The researcher believes that the reason for this is only Decrease is due to the accumulation of acid lactic in large quantities leads to the effect on the PH of blood towards the acid by increasing ions the H^+ liberated as a result of oxidation reactions of anaerobic for committees to Okoz, Affirming Resan Kahribt (1999) on the existence of a direct relationship between acid , lactic and PH blood Increasing the amount of lactate leads to lower PH of blood and thereby increasing acidic blood . (12 : 204)

This Macd by Jabbar Clement (2007) that the use of drills anaerobic which is characterized by intensity less than the maximum shortage of necessary oxygen occurs for the production of energy and thus energy production with insufficient oxygen and then the accumulation of mussels occur substance Lactic greater degree of disposal of the rate as a result becomes the blood acidic, spoke this case when exceeding the threshold Allaktekah (4 mmol) and thus decreases PH blood that can become dangerous when they are vital organizations incapable of blood formula and the lack of hardware capacity

and internal organs to get rid of acid lactic). (13 : 207)

The enzyme variable LDH Before and after the effort (before and after training).

Can be seen from the table (3) there are differences between the two tests in favor of the test after the training effort both before and after. This means that the concentration of the enzyme increased after physical effort lactic This increase is the result of the decomposition of sugar anaerobically process as it is known that any oxidation process takes place in the body there must be a set of factors that help speed up the special chemical reactions process that process and enzymes is one of the most important compositions protein that contributes to speed up chemical reactions to ensure the liberalization of energy required speed .

- discuss the endurance test lactic before and after the training.

The table shows (3) there are significant differences between the two tests in favor of the post test . This means that there is a development in the efficiency of the players to resist the accumulation of acid , lactic long as possible .

The ground researcher The reason for the evolution of this trait is due to, among other things in the forefront of the exercises suffered by players during the 30 - dose training, which was to work with intensity less than the maximum type of which earn players the ability to resist fatigue caused by the accumulation of acid , lactic result of the exercises performed as well as for periods of rest is not sufficient to remove the acid accumulated this means that the players repeat the work the existence of quantities of acid , lactic as well as lower pH of blood any increase acidity as this impact and positively on the work of the internal organs of the body, particularly in the work of vital organizations working to delay declined Additional PH of blood rapidly by reducing the severity of acidity caused by acid , lactic and converted from strong acid to weak acid, which contributed to the delay low PH of blood and thus increase the effort of physical effort.

Confirms Jabbar Clement (2007) The improvement in the capacity of energy acid production system Lactic requires directing the training load, making the accumulation of acid rate of lactate in the muscles bigger and blood from the disposal of any rate to ensure that exceeded the threshold distinguishing Allaktekah , so as to create adaptations functional in the different organs of the body and make them able to carrying oxygen deficiency and its attendant high concentration ratio of acid , lactic and change the PH of blood. This leads to improve athletic ability to withstand such physiological and chemical conditions during the training, which makes the athlete engaged in competition with high efficiency because the training conditions have become more difficult than the conditions of competition. (13: 200)

Through the development in the work of vital organizations and the enzyme LDH this reflected evolution on the level of accumulation of acid , lactic , which was in large quantities as well as the pH value PH of blood which dropped to very large levels, and this is a good indicator of improved training status of the players as the athlete well the trainee can work the existence of large amounts of acid , lactic which reflects the efficiency of the internal organs of the body to resist this accumulation.

From the above mentioned note that increasing the time of effort lactic has been through a series of reactions in the body 's internal organs that have contributed to the development of such endurance lactic players. Recal ling Abul - Ela Ahmed (1997) that the training Anaerobic leads to increased muscle capacity to withstand the acid accumulated during operations Algelkzh anaerobic and that of the main causes of fatigue is the pH output, which enters the metabolism and muscular contractions but vital organizations such as bicarbonate and phosphate interact with him to reduce the acidity muscle fiber (3: 167)

Also it confirms Mohammed Cat (2000) to increase the work of vital organizations , whether in the muscles and blood allow to bear the large production of acid , lactic during exercise

sports and therefore these organizations are working to draw fluids and then at least PH blood quickly and fatigue directly occurs and increases dependence on Algelkzh anaerobic for a longer period and the end result is to maintain their speed for as long as possible . (16: 28)

Conclusions and recommendations:

First: Conclusions

Based on what it yielded results in the research sample procedures and limits can be reached the following conclusions:

1. Anaerobic training contributed to (lactic) in the development of the efficiency of vital organizations and variablesm biochemical through follows :

(A) increase the ability to get rid of the hydrogen ion as a result of the accumulation of acid liberated lactic and low concentration of HCO_3^- After voltage tests.

B - Increasing the efficiency of hemoglobin, a vital regulator by increasing hemoglobin correlation with hydrogen.

(C) improve the muscle 's ability to bear the pain caused by the accumulation of acid as well as by increasing the accumulation of acid lactic after voltage (after training).

2. Evolution recipe endurance lactic in the research sample by the exercises Anaerobic (Allaktekah) and this development came through follows :

(A) increase the muscle's ability to withstand the accumulation of large amounts for as long as possible and this means maintaining the speed of longer duration.

(B) the physiological development of various body organs reflected positively on physical changes (endurance lactic since workouts suffered players during the 30 training unit , which was the most difficult or similar to the conditions of competition.

Second: Recommendations

In the light of the conclusions reached by the researcher recommends follows :

1.The adoption of the exercises used in the study of pregnancy within the components of the training (intensity, size, comfort) when training recipe endurance lactic (bearing speed) of what has contributed to the development of variables, biochemical and physical.

2. The need to rely on the variables of biochemical when evaluating the m curricula for training to bear the speed (lactic) because they provide information about the training status of the players.
3. It is possible to conduct similar studies include other vital organizations (kidney, lung).
4. The need to conduct studies on other age groups to provide scientific facts about the possibility of the events of physiological changes in the training recipe endurance lactic taking in mind the formation of training loads including suit and the possibility of organs of the body and the physical capacity of those groups.

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