The Affect of one section practice with different intensities on Hemoglobin rate, Biliroubin & The liver anthems of young Iranian wrestlers

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ABSTRACT: Biliroubin is made of analysis of Hemoglobin and it can be a good index for identifying Hemolytic diseases. Also the increase of AST & ALT anthems can be as a reply Immunologic to liver cells and the commence of liver disordering would confine the Biliroubin rate of blood. The aim of this study is analyzing the affection of one section exercise on different Biliroubin of blood, direct Biliroubin, complete Biliroubin, and the indexes of liver function containing, online Alalin transferase, Aspartat Alalin transferase and Alkalin Fosfataz. In this study 36 wrestler with ages 18 to 20 years old we counter three groups: Light, Middle and heavy. The blood sample provided in fasting and then the testers run for 30 minutes with intensities 65-70, 75-80, 85-90 of maximum heart beat and after physical exercising, again renewed sampling blood via analyzing variance it depends on test of different pressures. It is for analyzing data by applying software SPSS-16. The results indicated that after one section exercise it decrease the Hemoglobin of blood but the difference between groups were not meaningful. Increase of Antheism ALT (p<0/05). Also it increase BT,BD, AST, ALP but the difference between groups were not meaningful. During the results of this study, three methods of exercising light, middle and heavy cause the increase of online Alalin transferase and the amount of Alkalin Fosfataz, direct biliroubin, complete biliroubin and Hemoglobin were without difference.

Keywords: Intensity of exercise, Hemoglobin, Bilirounin, liver atheisms

INTRODUCTION

Health and long age has been always in man’ attention and in this concern the role of sport is obvious. In different studies the role of exercising has been analyzed on the body systems and it has been proved its positive effect on Heart-aspiration, Nero- mussels and bone systems. Although liver is one of big and main limbs of body and it does important operations. But it paying attention to other limbs were less on researcher’s attention. In natural situation the liver and kidneys receive 22 and 27 percent of blood and almost half of blood. This is in resting and exercising chronologically almost 15 and 80 receive the circular blood via skeleton mussels. When exercising in turn the blood circular decrease 3 and 5 percent of mentioned amounts. This decrease of liver blood circular, decrease the Kori circular and it increase blood Lactate. The decrease of blood circular in liver and kidneys may lead to damaging symptoms that the fatigue observed due to hard operations is apart of it. In hurting liver cells in addition

To becoming yellow of Plasma and the skin which is via made Biliroubin, the rate of operation of atheism of Alanine Amino transfrase from (ALT), Aspartat amino transfrase (AST), Alkalin amino transfrase, (ALP), Gama glutamyl transfrase(GGT), would also increase. The amount of activities of these atheisms depends on Liver Nokroz signs, Miokard and skeleton mussels. Hard damages of liver cells (Paranshimi disease) can be from liver diseases Virus Hepatic, Alcohol consumption, Drug, Poison shock or metabolic disease and epoxy, in most of these subjects there are Nokroz cell Pranshimi. Biliroubin is made of Hemoglobin analyze which is defining blood Hemolytic diseases and different kinds of liver diseases.

At sporting time Intra Vascular hemolysis it increases in sportsmen which are called Foot strike hemolysis. It is hitting to veins during some sports like swimming via muscular contractions and in sport like Karate it is by hitting body is observable. From the other hand it may decrease the age of red cells and also it was reported by increasing sport hemolysis increase too. Waldron and colleagues(2002) analyzed the affect of Keratin Monohydrate and struggling exercise on liver stress serum in power lifting of Olympic and they
concluded after six weeks exercising the rate of Albumin Serum without difference, it increase the Atheisms of ALP, ALT, AST Serum Billiroubin and it decreases total Billiroubin (TB) and direct Biloroubin (DB) that the differences of ALT, ALP, AST from statistic point was not meaningful but the complete Billiroubin during six weeks has meaningful changes to meaningful rate. In Earnest and colleague's studies (1996) & Poortmans & Francuax (1999), it was has not seen any meaningful in Biliroubin Serum. It was observed about hepatitis patients also Chi – li- lin & colleagues (2004), the maximum affect of exercise on liver operation and the amount of exercise fatigue between high school students with chronic Hepatic B and they observed the changes rates in AST, ALT of total Billiroubin and Albumin were not meaningful; although the rate of AST, ALT in the group with Hepatic B virus with incomplete liver action after six weeks of exercising bellow had decrease and then after two weeks resting it had increase again, but the changes were not meaningful. There are three kinds of exercises depending on Oja pekka and Borms (2004). Each of the intensities of exercises which affect on different systems and limbs of body, That in this concern it has the most meaningful affect of exercising on Heart, Lungs, Bones, Blood and neuron system was upstanding. But it was paid less attention to the affect of exercising on liver. In this study it is analyzed the intensity of one section exercising on Hemoglobin rate, Billiroubin and liver atheisms of young wrestlers.

METHODS AND ARTICLES

This study has been done by applying semi empirical of the one section exercising on three empirical groups. The statistic society of study consists of 36 students that they were participating in wrestling Shahid Mokhtari club of Sabzvar province. They were selected randomly with ages 18 to 20 years old. People after receiving complete information about method, the affects and probable risks, disease record, consuming drug and nutrition they entered to the search and a week before any body acting they divided to three groups randomly: Light, Middle and heavy. Also it was demanded blood samples of people with controlled nutrition and they attend in exact bio chime in fasting position.

Exercising Protocol

Giving blood sample is at 7"00 to 8:00 mornings and body activity started at 9:00 to 9:30. Each of the exercising pressure was done at three continuous days. Before starting the test the testers would be acquainted with 400 meter and the method of counting heart beats from Carotid position.

Exercising with low intensity: The testers with 12 times repeating 400 meters from a 4800 meter destination for 30 minutes with intensity 65-70 with the maximum rate of heart beat they run with two minute repeating until two minutes and 10 seconds and with the time of resting. The average of participant's heart beats is 130-140 beating per minute.

Exercising with middle intensity: The testers run 12 times the distance 500 m of total distance 6000 m for 30 minutes by intensity 75-80 maximum heart beating each repeating two minutes to two minutes and ten seconds and a minute resting. The average heart beating for testers were 150 to 160 beats per minute.

Exercising with hard intensity: The testers run 12 times the distance 600 m of total distance 7200 m for 30 minutes by intensity 85-90 maximum heart beating each repeating two minutes to two minutes and ten seconds and a minute resting. The average heart beating for testers were 170 to 180 beats per minute. After operating each protocol by testers for getting the second blood sample they refer to libratory.

The methods of measuring factors

Hemoglobin

It was applied of Automat Hematology Analyzer for measuring the blood samples concerning to Hemogolobin and other points.

Indexes of liver operation

For measuring these indexes the sample of liver operation for departing Serum apart of Hema
tokerit first they are santrifujed by the speed of 3600-4000 rounds per minute then the Serum would be departed of sample by sampler and it pure to the cup of device (TECHNICON RA-1000) and the device analyze automatically by the structure.

Statistic methods

Regarding to being normal data it would be analyzed via Kelmogrof-Smirnof test by variance and the Tuki it compare the changes of different intensities. Analyzing the data was done by SPSS-16 software.(P<0/05)
Founds

The analysis indicate that between the exercise groups of light and heavy in the rate of Alalin amino transfrase Serum there is meaningful difference.

The aspiration activities of middle and hard intensity lead to increase of Alalin amino transfrase Serum just after the activities and in the light group of exercise lead to decrease of amino transfrase Serum. Also after 30 minutes regularly exercising with intensity 65-70 percent with maximum of heart beat Hemoglobin Total Biliroubin and Alalin Aminotransfrase increased and there was not meaningful difference between the groups. (P>0/05) In the group of exercise with intensity 75-80 and maximum heart beat the Alkaline Fosfatase has not
difference and it increase Hemoglobin, Total bilirubin, Direct bilirubin and Aspartat Aminotransferase but the difference between groups were not meaningful. (P>0/05) In the group of exercise with intensity 85-90 and maximum heart beat the Alkalin Fosfatase has not difference and it increase Hemoglobin, Total bilirubin, Direct bilirouin and Aspartat Aminotransferase but the difference between groups were not meaningful. (P>0/05)

**DISCUSSION**

The analysis indicate just after 30 minutes activity with light and middle intensities of running the blood Serum Hemoglobin in comparison with light and hard intensities decrease but in middle group it show increase but these changes were not meaningful from statistical point. In the groups of light and hard intensity regarding to Chiyali Line (2004), Leithauser (2003) and Suzuki (2005) and Ozlem, Y., Melek (2000) is coordinating that they believe the rate of Hemoglobin do not change after exercising or encounter light decrease.


These contrary results may be that just the intensity of activity and the time can not be efficient for Hemoglobin reaction and it should pay attention to other factors such: Age, Gender, Readiness, intensity, kind & time of activity and Continuously of activity. Diet, sportive or non sportive, the delayed replies and the conditions of experiment, between this search and other searches in age, being sportive or non sportive, intensity, kind and time of activity thee is difference between the surveys. It may justify these differences. Because it has been done lots of studies about Homilie and rate of Hemoglobin and in none of them the age, being sportive or non sportive, intensity, kind and time of activity were not equal.

Regarding to the statistic results of studies the rate of Bilirubin after 30 minute was decreased in light group of exercise but in the middle and heavy groups it has a little in crease that it concern to the intensity of exercising. Regarding to statistics the differences were not meaningful. (P>0/05)

Also the results were showing that the direct Bilirubin after 30 minutes in light and middle exercise was increased but in heavy group it does not show any change, that depending on the statistics the differences were not meaningful. (P>0/05) The increase of Direct Bilirubin in light group and middle after high activity by increase of Atheism Glokerotozil transferase and connecting free Bilirubin to Acid Glokeronik.

The conclusion the rate of Bilirubin Serum just after 30 minutes with intensities light and much increased that the difference between control group and exercise group it was not meaningful. Therefore it may be the factor of intensity may be increase one of increase factors.


Also the results indicate after 30 minutes exercising Atheism Aspartic Aminotransferase increase in light and middles groups and in hard intensity it decrease Atheism Aspartic Aminotransferase that this decrease was not meaningful. (P>0/05)

The results of this study in hard intensity group were coordinating with results of studies: Masoud Nikbakht & Colleagues (2012), Luoja & Ranko (1993), Tompson & Colleagues (2001), Valdron & colleagues (2002), Lorena & colleagues (2006).

But there are some studies which believes after exercising increase these Atheisms(Light & middle groups of the survey) That it point to studies such: Shadmehre Mirdar & Colleagues (2010), Saberi Kakhabi (2008), Perist & colleagues (1982), Chiyali Line & colleague (2004).

The conflicts in results are coming from physiological differences of people Age, Health, Time kind and intensity of exercise and continuity of exercise concerning to nutrition. The amount of this Atheism was more in light and middle groups, that it needs more study and it may concern to the period of exercising and its intensity, thought the searches in this concern were limited and it can not talk in this concern confidently.

Also the results of study indicate that Atheism Alanin Aminotrasfrase after 30 minutes exercise had decrease in light groups and in middle and hard groups it increased hat regarding to the statistics the difference was meaningful.(P<0/05) Regarding to the relation between this Anaheim in exercise groups with middle intensity and more than light group, it express the probability of relation between the intensity of exercising with exercising.

The results of this study concerning middle groups of intensity, it is coordinating with: Shadmehre Mirdar & Colleagues (2010), Saberi Kakhabi (2008), Popowa & Borawcowal (2006).
Thus during the results of this study the rates of Atheisms do not change or decrease via exercising. That it can point to : Masoud Nikbakht & Colleagues (2012), Chiyali line & colleagues (2004) and Valdron & colleagues (2002). In the previous studies in last week the activities with 80-90 intensities and 90 percent of supplying Oxygen, by one section exercising has meaningful difference and runin fast on tread mill in rate of 70-85 percent of heart beat, eight weeks of exercising on men with liver disease it increase on patients with liver disordering and none Alcoholic. It is expressively concerning to diseases factors and drugs (Like: Acetaminophen and X-Stacy, period duration, the growth of Skeleton and modifications of mussel and Hypoxia.

It has no difference regarding to the results and statistic analysis of Atheism Alkaline Fosfatase with the exercising and the intensity has no difference and in light group it decrease xut in the group of Heavy it has a little increase and there is no change in Atheism. (P<0/05)

The results in the group with hard exercising are confronting with Waldron & Colleagues (2002) but in the groups with light and middle exercising and regarding to searches: Saberi Kakhaki (2008), Perist & Colleagues (1982), Keridor & colleagues (2003), and the contradictory results were by Age, Gender, Readiness, intensity, kind & time of activity and Atheism Alkaline Fosfatase It has a hard relation with age and the Alcoholic drinks and narcotics.

Table 4. The meaningful changes of Bilirubin increase / decrease of liver Atheisms after exercising comparing with before exercising.

<table>
<thead>
<tr>
<th>Alanin Amino Transfrase</th>
<th>Alkaline Fosfatase</th>
<th>Aspartat Amino Transfrase</th>
<th>Direct Bilirubin</th>
<th>Total Bilirubin</th>
<th>Exercise group</th>
</tr>
</thead>
<tbody>
<tr>
<td>↓</td>
<td>↓</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>light</td>
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<td>Middle</td>
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<td>↓</td>
<td>...</td>
<td>↑</td>
<td>Sever</td>
</tr>
</tbody>
</table>

**CONCLUSION**

As the meaningful increase of Bilirubin rate, Atheism of Aspartat Aminotransferase, Atheism Alkaline Fosfatase and Atheism Alkaline Fosfatase were the symbols of liver stress. It may the decrease of blood circular and the Ischemia on exercising cause this increasing. At last it can be concluded by body operation with light intensity, middle and high which increase the liver operation indexes it may be the pressure on liver and by increasing the exercise it may hurt the liver. (Except Antheism of Aspartat Aminotransfrase which need more expert searches) Also it is suggested to people for benefiting exercises, do the exercises with the following intensities, and how much is needed for coming back to the indexes and also it has a position of searching on long term syndromes.

**Appreciating and Thanks**

In this concern it would honor and appreciate all ones who try in all different stages of this study.

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