The Effect of Obesity on the Presence of Sebaceous Cysts and Some Hematological Variables

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Abstract

Background High triglycerides may lead to other conditions such as hypothyroidism or liver and kidney disease. Certain medications, such as beta-blockers, birth control pills and steroids, can increase triglyceride levels. Other factors can affect triglyceride levels **Methodology** Biochemical tests included (serum cholesterol, triglyceride, LDL, RBS and HbA1c These tests were performed according to the working method of each analysis on the device Full automate and TUSO Hematological test included(WBC count RBC count Hb and PCV) These tests were conducted at CBC device .

Result illustrates a study of some biochemical variables for people with lipoma and comparing them with healthy peoples , where mean of the affected persons for cholesterol and triglyceride tests was 312, 296, respectively, compared with the control 116, 89, respectively, and the level of sugar and HbA1c in the affected persons was 11, 226 on Respectively compared to control 86, 3, respectively, and this explains that there is a direct relationship between the rise in fat and blood sugar with the emergence of lipoma

Conclusion We conclude that the most vulnerable people are those who suffer from high levels of triglycerides and cholesterol, as well as those with high blood sugar, as well as the genetic factor that plays a major role in causing this disease, as the genetic factor gave a large percentage of infection with this disease, as well as the quality of nutrition has a great role

Keyword: *obesity, some hematological variables.*

Introduction

A lipoma is a slow-growing lump of fat and is often located between the skin and the underlying muscle layer. A lipoma, which has a paste-like texture and is usually not soft, moves easily with a slight pressure of the finger. Lipomas are usually detected in middle age. Some people have more than one lipoma.[1,2] A lipoma is noncancerous and usually harmless. Treatment is generally not necessary, but if a lipoma is bothering you, hurting, or growing, it may need to be removed.[3,4] High levels of triglycerides are associated with atherosclerosis, which is the hardening of the arteries and their thickening, and thus atherosclerosis increases the risk of cardiovascular disease, a condition that can lead to heart attacks and strokes.[5,6,7] Often someone with high triglyceride levels has other health problems, which puts them at risk of developing atherosclerosis.[8,9,10] These conditions include obesity, uncontrollable type 2 diabetes, and metabolic syndrome. Metabolic syndrome is defined as a group of risk factors that include a large waist circumference, high blood pressure, and elevated levels of triglycerides and cholesterol.[11,12] High triglycerides may lead to other conditions such as hypothyroidism or liver and kidney disease. Certain medications, such as beta-blockers, birth control pills and steroids, can increase triglyceride levels. Other factors can affect triglyceride levels, including alcohol, diet, menstruation, exercise, and time of day.[13,14]

Methodology

Sample collection

40 samples were collected that were divided into 20 samples with lipoma and twenty blood samples for non-sufferers with this disease for comparison, and many

biochemical and blood tests were performed.

Biochemical test

Biochemical tests included (serum cholesterol, triglyceride, LDL, RBS and HbA1c)

These tests were performed according to the working method of each analysis on the device Full automate and TUSO. [15]

Hematological test

Hematological test included(WBC count RBC count Hb and PCV) These tests were conducted at CBC device .

Result and Discussion

Table (1) Study of some biochemical variables of patients with lipoma

Descriptive Statistics

Dependent Variable: con.mg/dl				
lipoma patientes and control	**biochemical tests**	**Mean**	**Std. Deviation**	**N**
lipoma patients	serum cholesterol	312.00	32.711	5
	serum triglyceride	297.40	83.653	5
	RBS	226.00	43.359	5
	HbA1c	11.00	1.000	5
	Total	211.60	131.638	20
control	serum cholesterol	116.00	20.736	5
	serum triglyceride	89.80	7.085	5
	RBS	86.60	3.782	5
	HbA1c	3.80	.837	5
	Total	74.05	44.416	20
Total	serum cholesterol	214.00	106.479	10
	serum triglyceride	193.60	122.899	10
	RBS	156.30	78.992	10
	HbA1c	7.40	3.893	10
	Total	142.83	119.392	40

Triglycerides can be elevated in arteriosclerosis or increased artery walls (atherosclerosis); High level of high blood sugar, its diseases and diseases, and high blood sugar level; A group of groups that includes very large intent names of body transcript for area, elevated blood volume, triglycerides, blood sugar and lipoma. Table 1 illustrates a study of some biochemical variables for people with lipoma and comparing them with healthy peoples , where mean of the affected persons for cholesterol and triglyceride tests was 312, 296, respectively, compared with the control 116, 89, respectively, and the level of sugar and HbA1c in the affected persons was 11, 226 on Respectively compared to control 86, 3, respectively, and this explains that there is a direct relationship between the rise in fat and blood sugar with the emergence of lipoma

Table (2) ANOVA table of some biochemical variables of patients with lipoma

Tests of Between-Subjects Effects					
Dependent Variable: con.mg/dl					
Source	**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Corrected Model	514149.775a	7	73449.968	56.262	.000
Intercept	815959.225	1	815959.225	625.017	.000
cases	189200.025	1	189200.025	144.925	.000
testes	261654.875	3	87218.292	66.808	.000
cases * testes	63294.875	3	21098.292	16.161	.000
Error	41776.000	32	1305.500		
Total	1371885.000	40			
Corrected Total	555925.775	39			
a. R Squared = .925 (Adjusted R Squared = .908)					

Table 2, analysis table of variance, shows that there are significant differences in the increase of both cholesterol and triglycerides in patients with lipoma compared to control, and there are significant differences in the increase in both the percentage of sugar and the HbA1c in lipoma patients compared with the control and this indicates that there is a significant correlation. Among these variants and disease

Table (3) Study of hematological variables of patients with lipoma

Descriptive Statistics				
Dependent Variable: con.mg/dl				
lipoma patients and control	**hematological test**	**Mean**	**Std. Deviation**	**N**
lipoma patients	WBC	6680.00	396.232	5
	RBC	5000000.00	353553.391	5
	Hb	14.00	1.000	5
	PCV	44.20	1.643	5
	Total	1251684.55	2226230.464	20

Cont... **Table (3) Study of hematological variables of patients with lipoma**

control	WBC	6840.00	181.659	5
	RBC	5000000.00	353553.391	5
	Hb	14.00	2.000	5
	PCV	42.60	5.505	5
	Total	1251724.15	2226207.149	20
Total	WBC	6760.00	302.581	10
	RBC	5000000.00	333333.333	10
	Hb	14.00	1.491	10
	PCV	43.40	3.921	10
	Total	1251704.35	2197492.199	40

Blood viscosity is the measure used to calculate the extent of resistance to blood flowing in arteries, capillaries, or blood vessels while performing its primary function of transporting food and oxygen to all tissues in the body, in addition to determining the strength of the bonding between its molecules, and it is indicated that viscosity depends on two basic factors, These are: the amount of proteins available in the blood plasma, and the number of red blood cells. If their percentage in the blood increases, a person will develop blood viscosity syndrome. Table 3 shows a study of some hematological variables for people with lipoma that WBC count was 6680 and 5 million of RBC respectively compared to control 684 and 5 million of RBC respectively, not for healthy people, meaning there is no significant difference between the healthy and the patients, and the percentage of PCV in the affected people was 14, 44 respectively compared to control 14, 42, meaning there was no significant difference between the healthy and the patients

Table(4) ANOVA table of hematological variables of patients with lipoma

Tests of Between-Subjects Effects

Dependent Variable: con.mg/dl					
Source	**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Corrected Model	187329905900000.000a	7	26761415120000.000	856.365	.000
Intercept	62670551190000.000	1	62670551190000.000	2005.456	.000
cases	15681.600	1	15681.600	.000	.999
testes	187329905800000.000	3	62443301930000.000	1998.184	.000
cases * testes	48324.800	3	16108.267	.000	1.000
Error	1000000760000.000	32	31250023750.000		
Total	251000457800000.000	40			
Corrected Total	188329906600000.000	39			
a. R Squared = .995 (Adjusted R Squared = .994)					

Table 4 shows an analysis of variance to study some blood variants, not lipoma patients, and compare them with healthy people. It was found that there were no significant differences in the white blood cell count and red blood cell count between patients and healthy people, as well as no significant differences in Hb and PCV between patients and healthy people.

Conclusion

We conclude that the most vulnerable people are those who suffer from high levels of triglycerides and cholesterol, as well as those with high blood sugar, as well as the genetic factor that plays a major role in causing this disease, as the genetic factor gave a large percentage of infection with this disease, as well as the quality of nutrition has a great role

Ethical Clearance: The Research Ethical Committee at scientific research by ethical approval of both MOH and MOHSER in Iraq

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