RESULTS

Table (1): basic features of the Diabetic group:

Age (yrs)	40	6.00	17.00	11.48	2.85
F.B.S (mg/dl)	40	139.00	291.00	179.68	34.01
Creatinine (mg/dl)	40	0.40	0.80	0.65	0.10
T.G (mg/dl)	40	66.00	150.00	101.53	20.82
Cholesterol (mg/dl)	40	119.00	177.00	144.68	14.07
HbA1c	40	6.10	9.1	7.1025	0.81382
Microalbumin(mg/dl)	40	16.00	88.00	28.78	19.04
L-carnitine (µmol/l)	40	16.87	24.288	20.38	4.49
Diabetes duration (yrs)	40	0.3	16.2	5.17	3.98

Table (2): basic features of the control group:

	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Age (yrs)	20	6.00	16.00	10.65	2.98
F.B.S (mg/dl)	20	68.00	92.00	79.15	7.14
Creatinine (mg/dl)	20	0.40	0.70	0.60	0.097
T.G (mg/dl)	20	51.00	112.00	84.10	15.30
Cholesterol (mg/dl)	20	129.00	169.00	138.15	9.58
L-carnitine (µmol/l)	20	25.775	36.45	31.1	5.32

Table (3): comparison between cases & control groups as regards sex:

	Cases		**Control**		**Total**	
	No.	%	No.	%	No.	%
Female	24	60.0%	12	60.0%	36	60.0%
Male	16	40.0%	8	40.0%	24	40.0%
Total	40	100.0%	20	100.0%	60	100.0%

The table shows that there is no difference between male and female distribution in the study group in comparison with the control group.

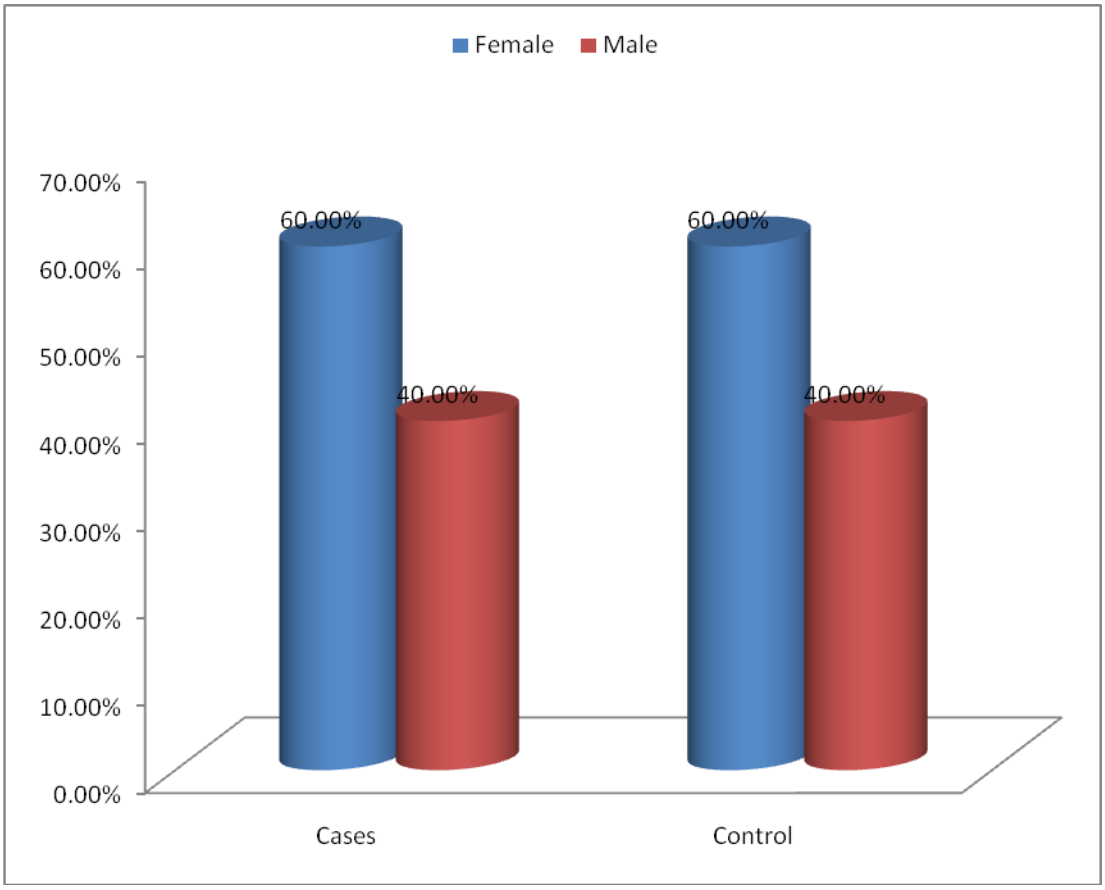

Fig. (1): Sex distribution among the studied groups.

Table (4): comparison between cases & control groups as regards age:

	N	Mean	Std. Deviation	t	p
Cases	40	11.48	2.85	1.04	>0.05
Control	20	10.65	2.98		

The table shows that there is no a statistically significant difference as regards age in the study group in comparison with the control group.

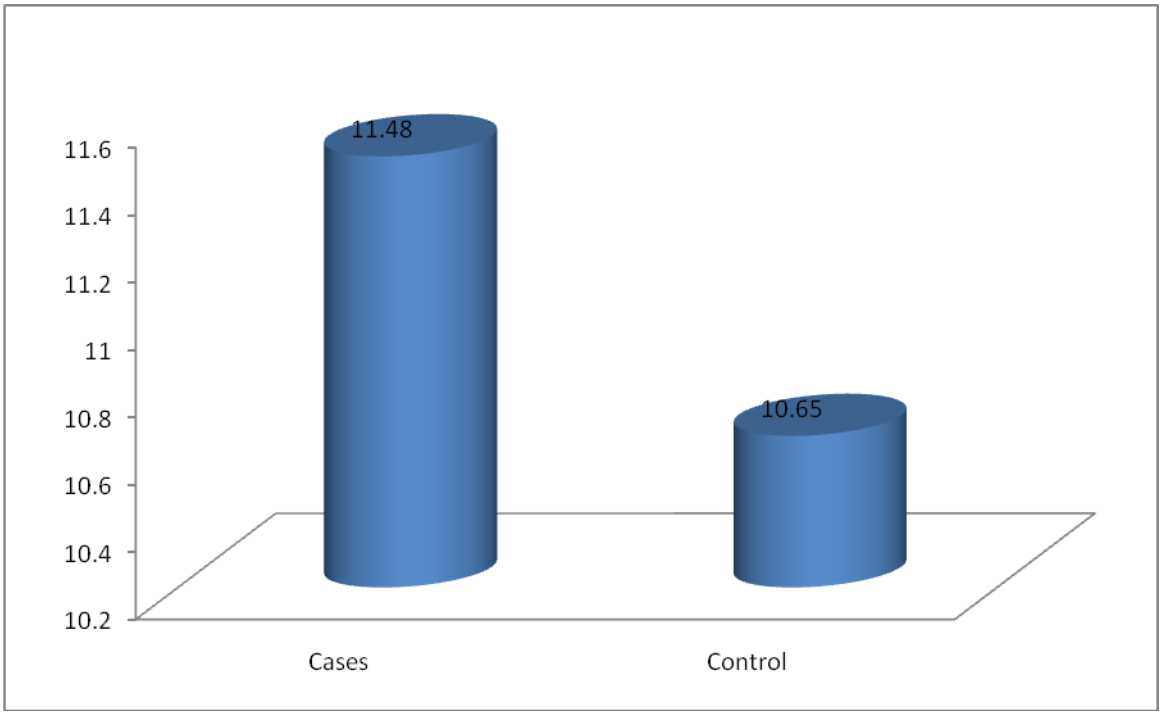

Fig. (2): Comparison between the studied groups as regard age.

Table (5): comparison between cases & control groups as regards lab. Finding:

		N	Mean	Std. Deviation	t	p
F.B.S	**Cases**	40	179.68	34.01	17.9	<0.001
	Control	20	79.15	7.14		
T.G	**Cases**	40	101.53	20.82	3.3	<0.05
	Control	20	84.10	15.30		
creatinine	**Cases**	40	0.65	0.10	1.6	>0.05
	Control	20	0.60	0.097		
Cholesterol	**Cases**	40	144.68	14.07	1.9	>0.05
	Control	20	138.15	9.58		

The table shows that there is no a statistically significant difference in the study group in comparison with the control group as regards laboratory finding of s.creatinine and cholesterol level, but there is a significant statistical difference between the study

group in comparison with the control group as regards laboratory finding of triglycerides and a highly significant statistical difference between two groups as regards fasting blood sugar

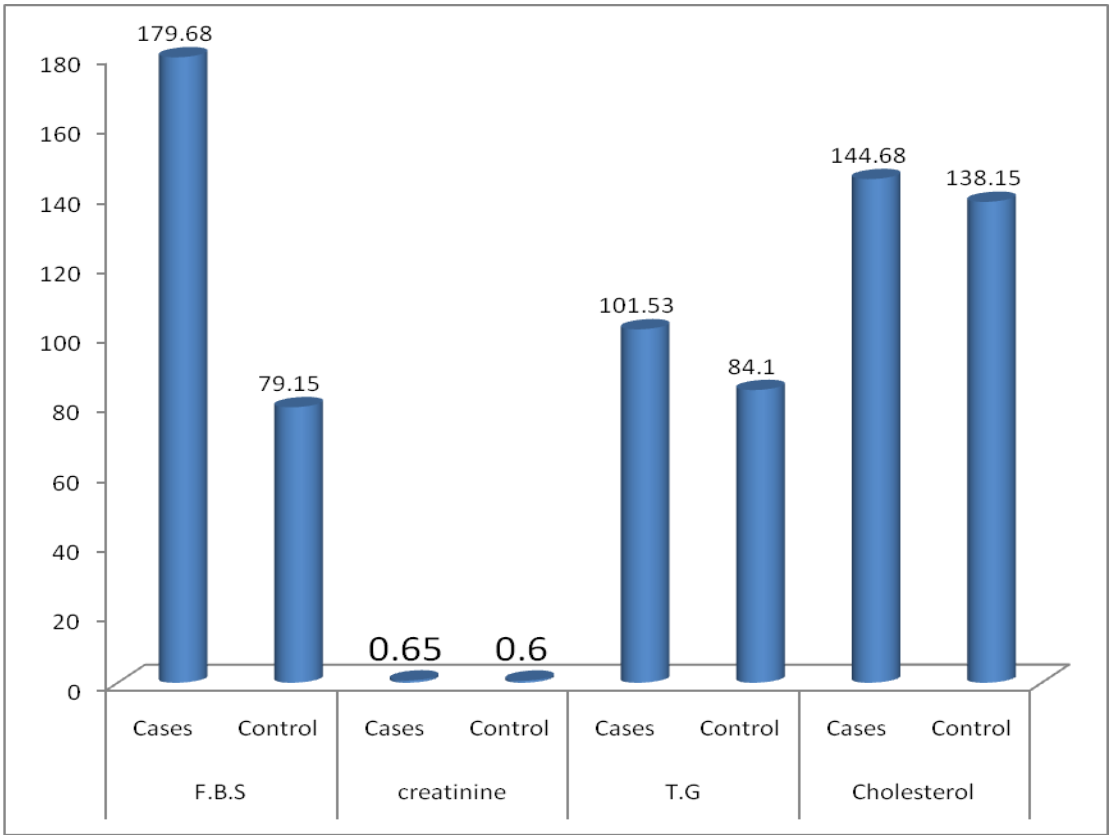

***Fig. (3)*:** Comparison between the studied groups as regard to lab. Finding.

Table (6): comparison between cases & control groups as regards L-Carnitine

	N	Mean	Std. Deviation	T	P
Cases	40	20.38	4.49	8.7	<0.001
Control	20	31.1	5.32		

The table shows that there is a highly significant statistical difference between the study group and control group as regards L-Carnitine.

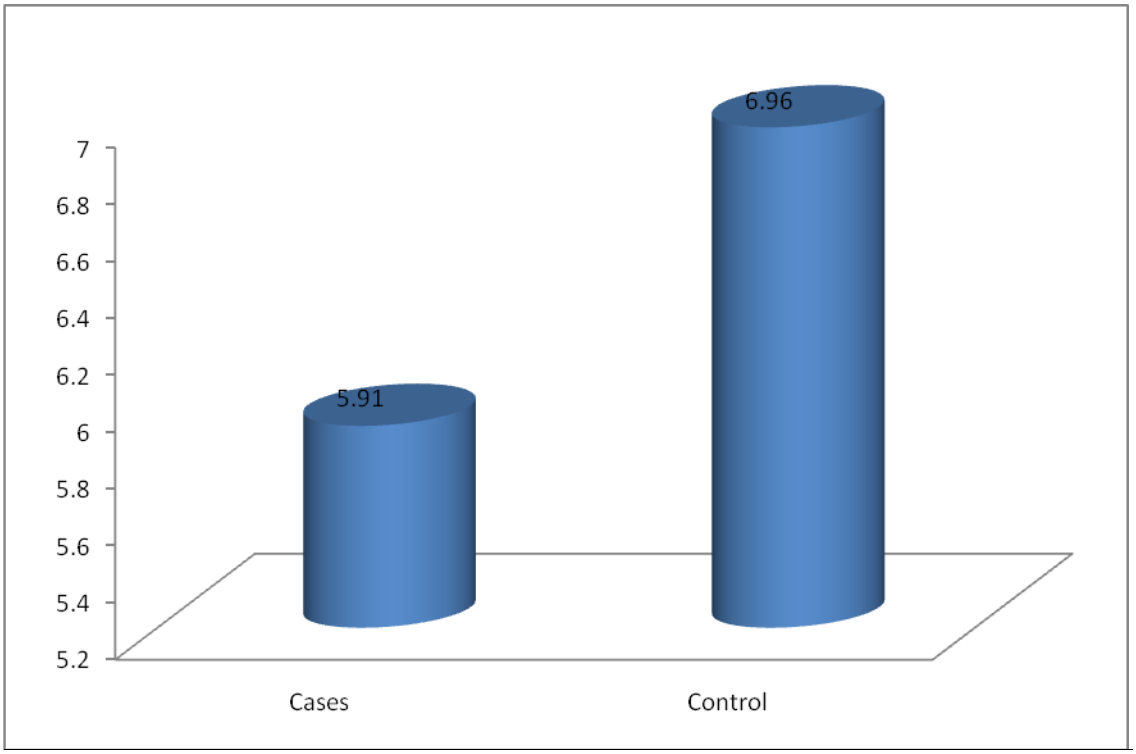

***Fig. (4)*:** Comparison between the studied groups as regard to L-Carnitine.

Table (7): correlation between L-Carnitine and age:

	L-Carnitine	
	r	p
Age	-0.336	>0.05

The table shows that the levels of L-Carnitine shows a negative correlation with age which is statistically insignificant.

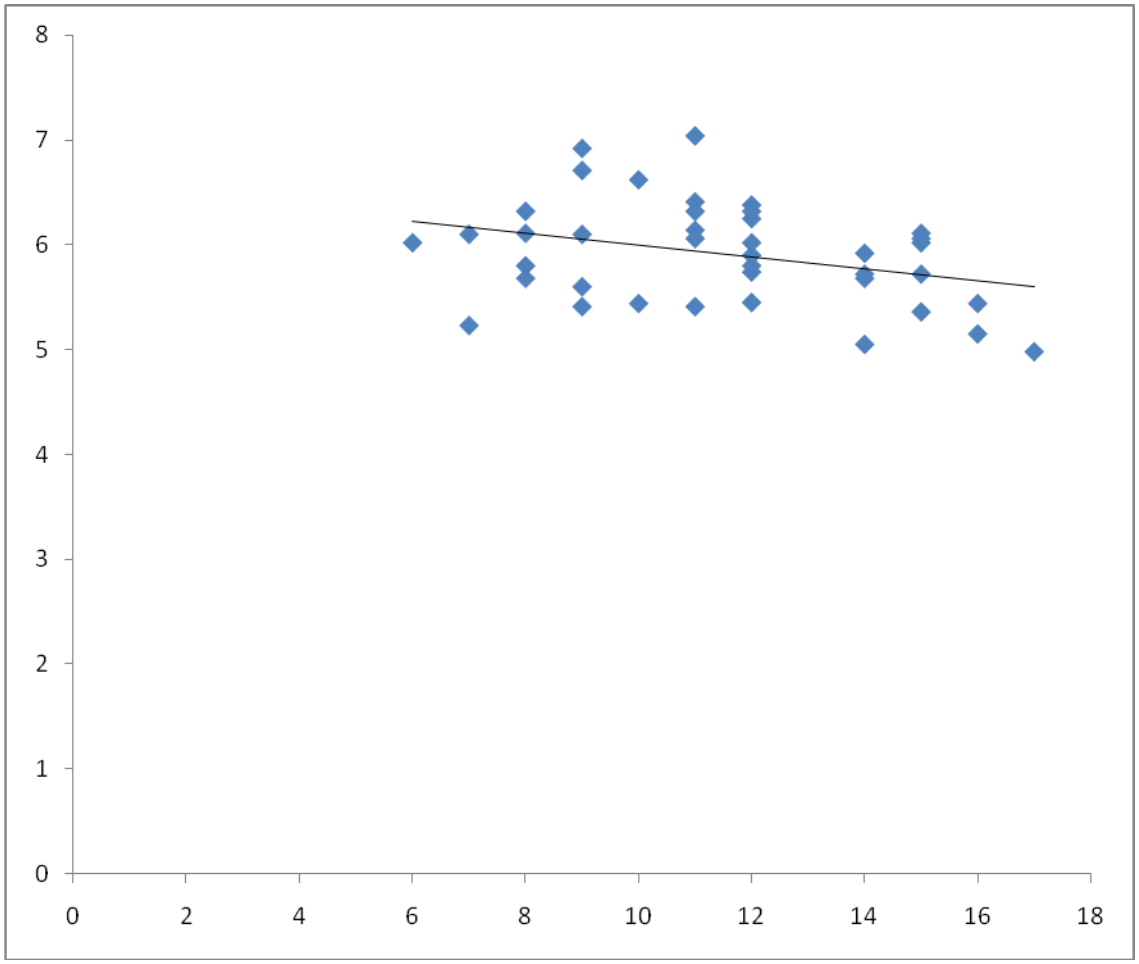

***Fig. (5)*:** Shows a statistically insignificant correlation between L-Carnitine levels and different ages in the studied groups.

Table (8): correlation between L-Carnitine and F.B.S:

	L-Carnitine	
	R	p
F.B.S	-0.169	>0.05

The table shows that the levels of L-Carnitine shows a negative correlation with F.B.S. which is statistically insignificant.

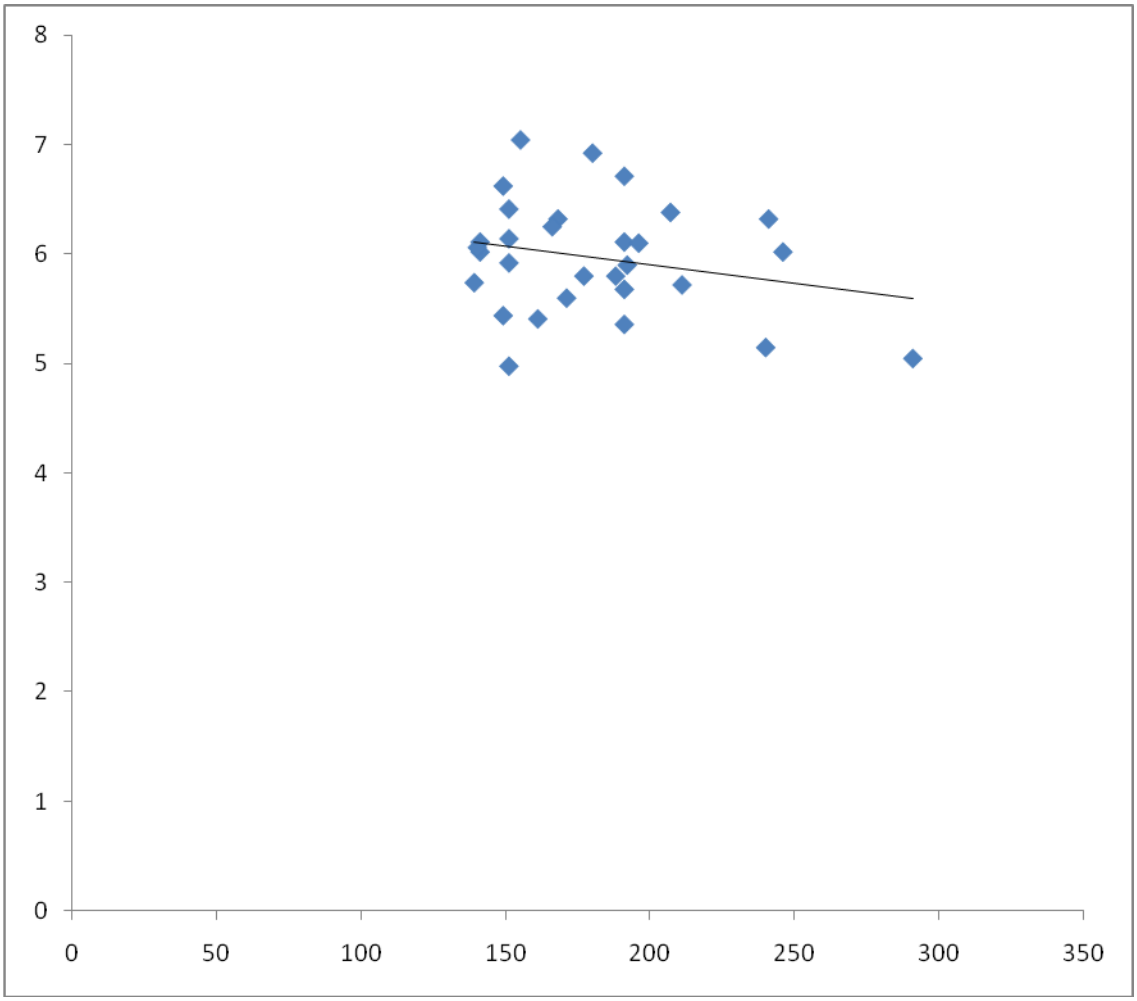

***Fig. (6)*:** Shows a statistically insignificant correlation between L-Carnitine levels and F.B.S. levels in the studied groups.

Table (9): correlation between L-Carnitine and Creatinine:

	L-Carnitine	
	r	p
Creatinine	-0.116	>0.05

The table shows that the level of L-Carnitine shows a negative correlation with S.Creatinine levels which is statistically insignificant.

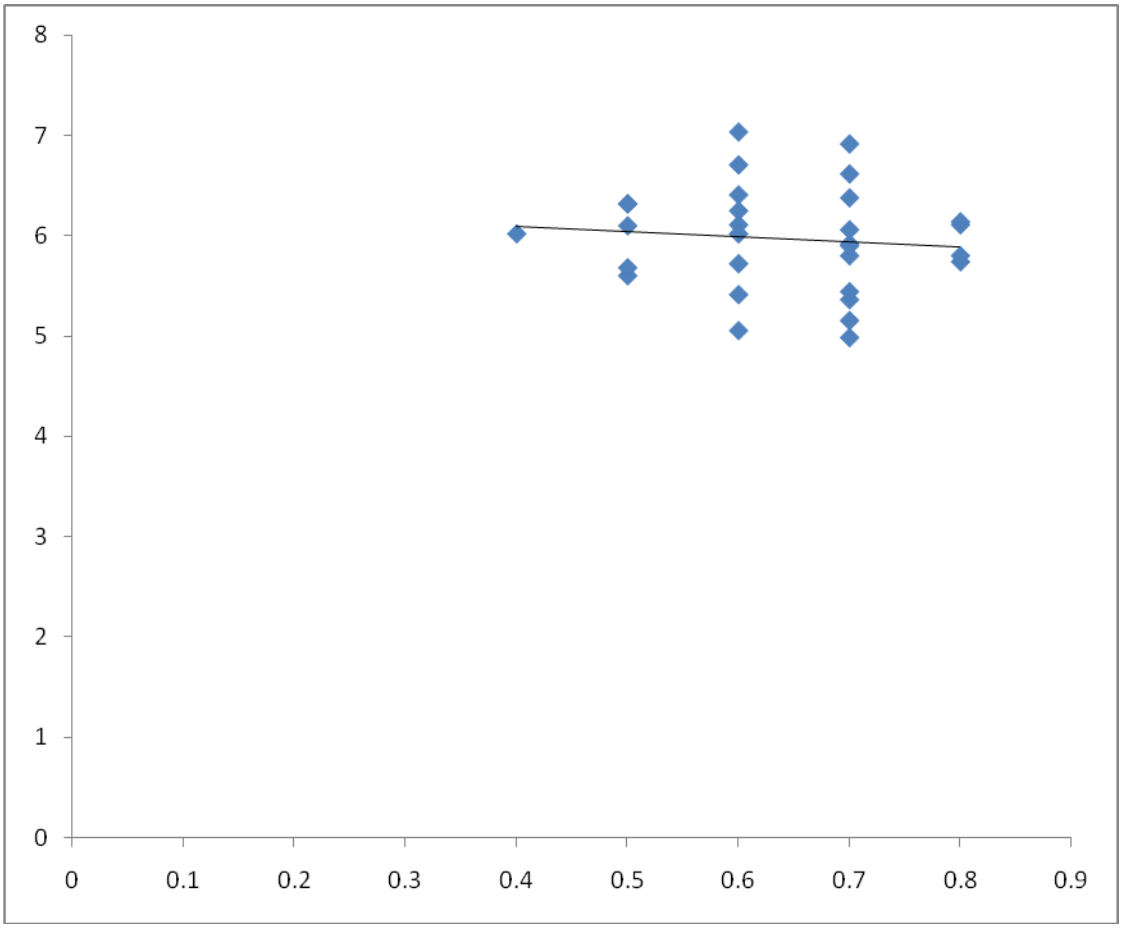

***Fig. (7)*:** Shows a statistically insignificant correlation between L-Carnitine levels and S.Creatinine levels in the studied groups.

Table (10): correlation between L-Carnitine and lipid profile:

	L-Carnitine	
	r	p
T.G	-0.077	>0.05
Cholesterol	-0.040	>0.05

The table shows that the level of L-Carnitine shows a negative correlation with lipid profile which is statistically insignificant.

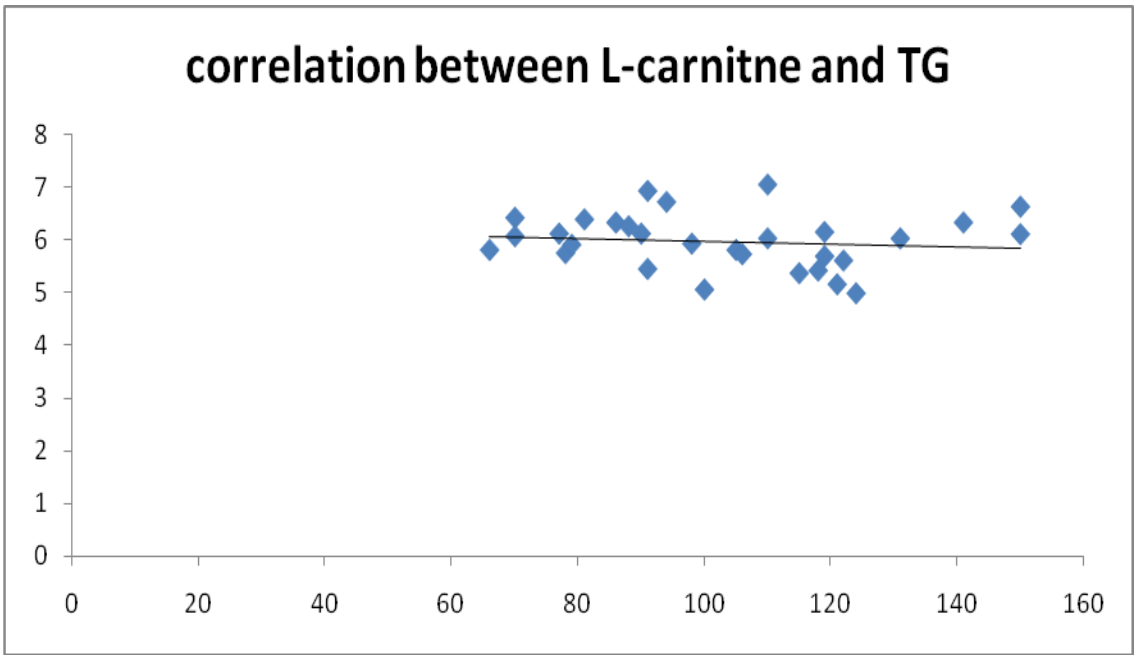

***Fig. (8)*:** Shows a statistically insignificant correlation between L-Carnitine levels and TG levels in the studied groups

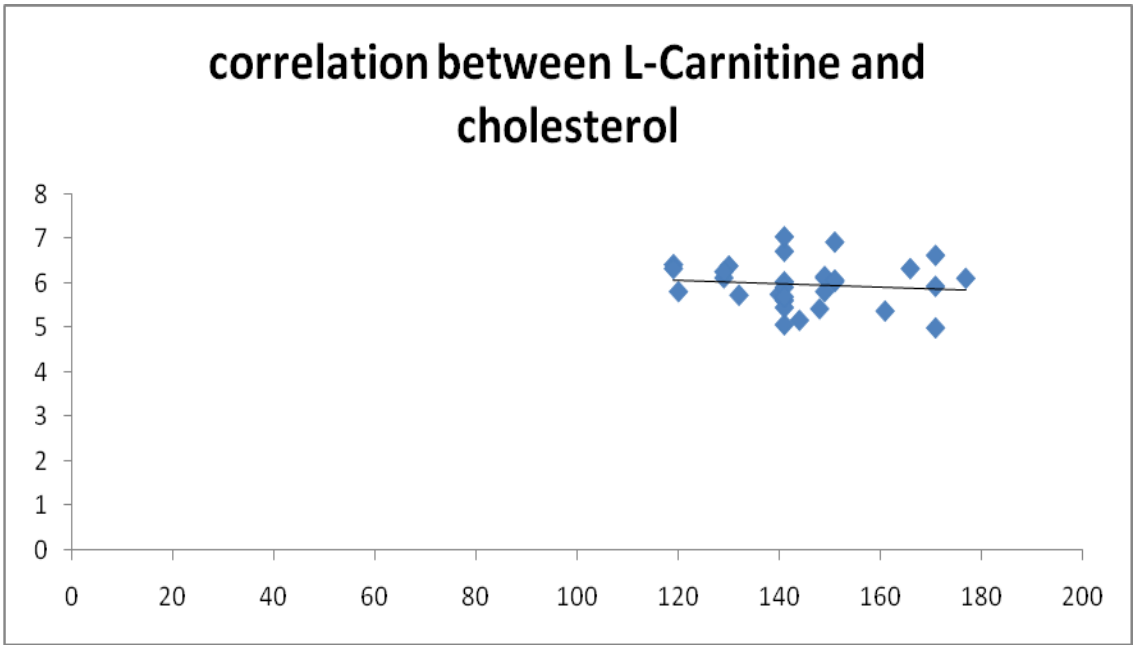

***Fig. (9)*:** Shows a statistically insignificant correlation between L-Carnitine levels and cholesterol levels in the studied groups

Table (11): correlation between L-Carnitine and HbA1c:

	L-Carnitine	
	r	p
HbA1c	-0.325	>0.05

The table shows that the level of L-Carnitine shows a negative correlation with HbA1c which is statistically insignificant.

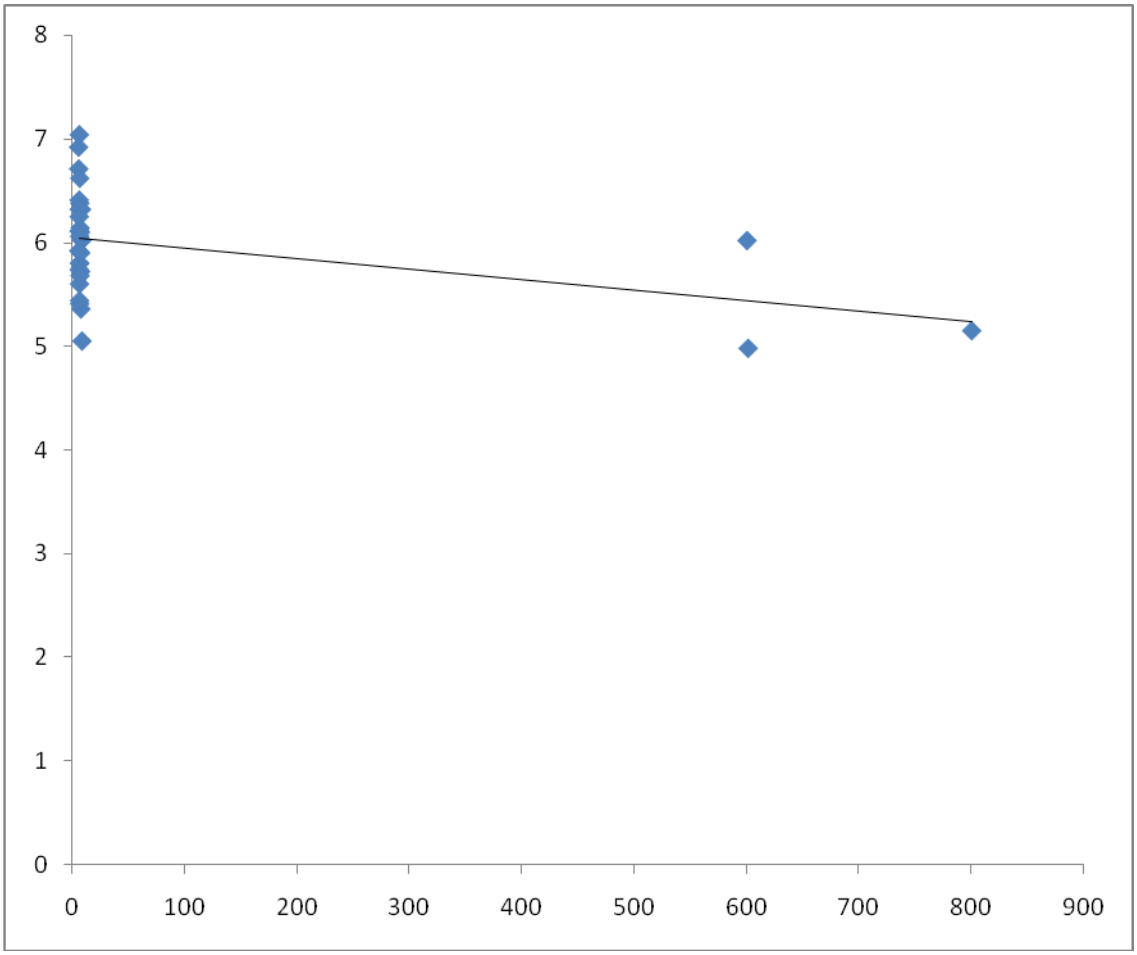

***Fig. (10)*:** Shows a statistically insignificant correlation between L-Carnitine levels and HbA1c in the studied groups.

Table (12): correlation between L-Carnitine and Microalbuminurea:

	L-Carnitine	
	r	p
Microalbumin	-0.305	>0.05

The table shows that the level of L-Carnitine shows a negative correlation with Microalbuminurea which is statistically insignificant.

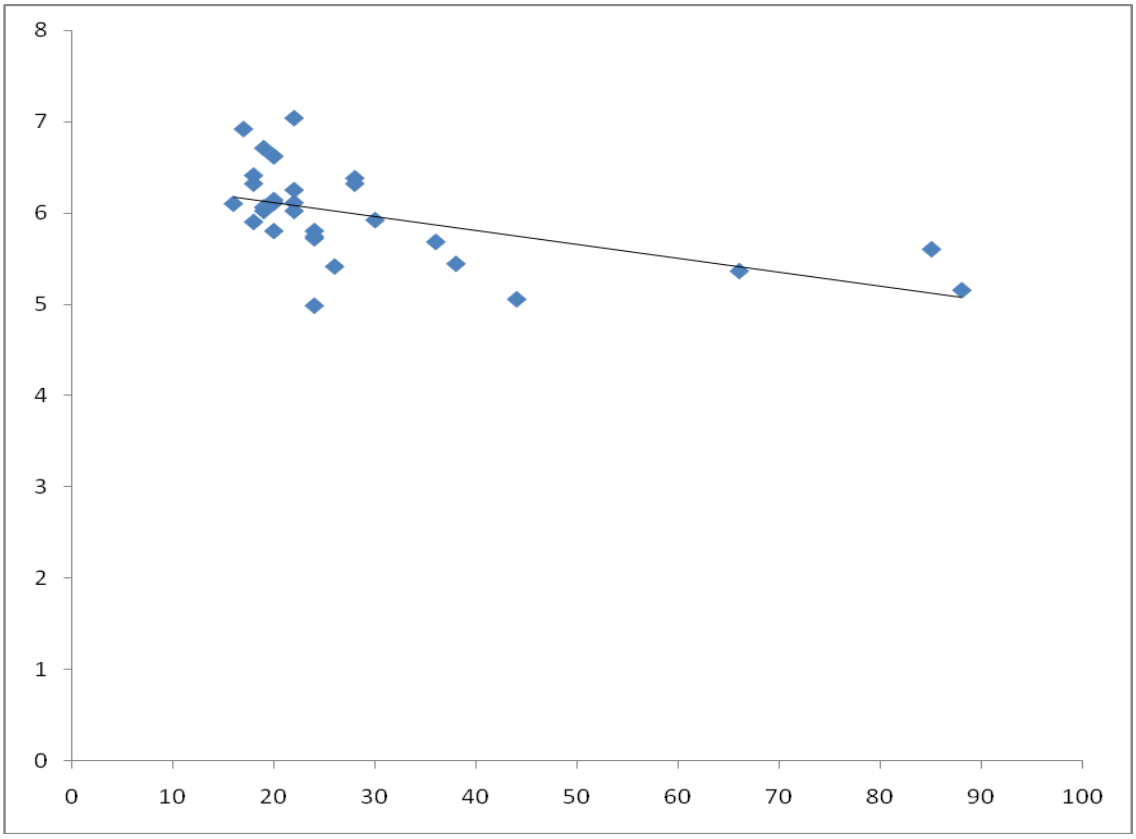

***Fig. (11)*:** Shows a statistically insignificant correlation between L-Carnitine levels and Microalbuminurea in the studied groups.

Table (13): correlation between L-carnitine and duration of DM:

	L-carnitine	
	R	P
Duration of DM	-0.35	<0.05

The table shows that the level of L-Carnitine shows a negative correlation with duration which is statistically significant.

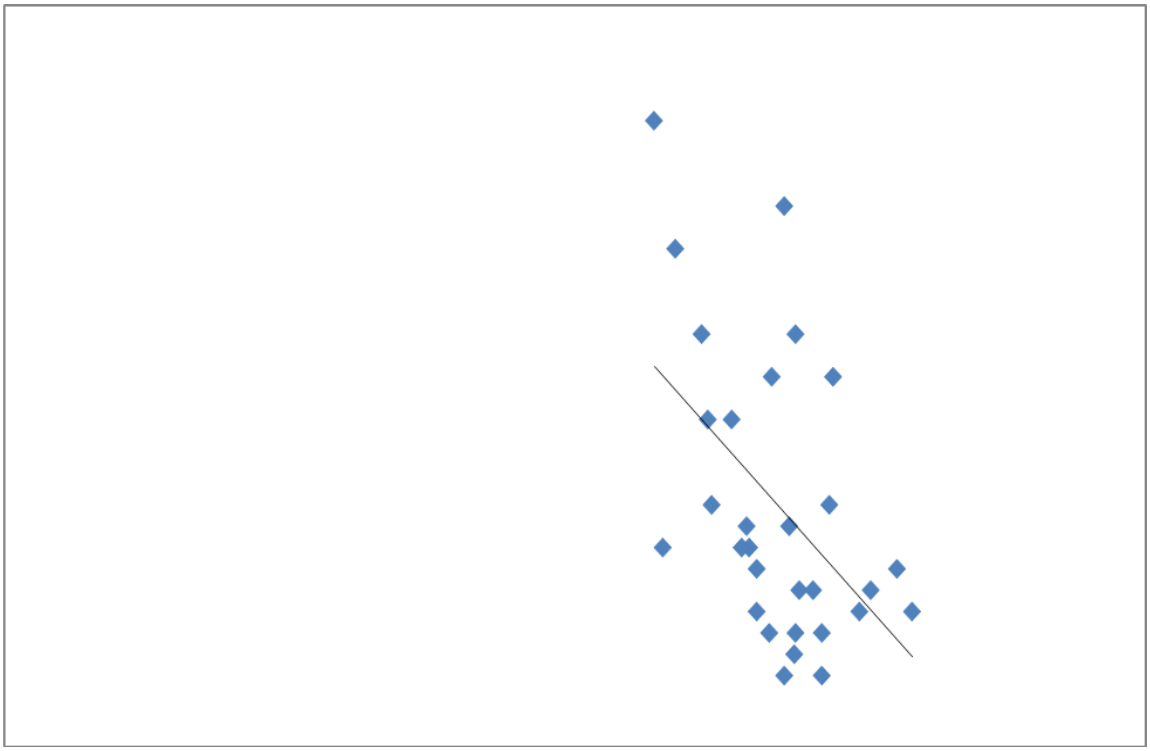

***Fig. (12)*:** Shows a statistically significant correlation between L-Carnitine levels and duration of diabetes in the studied group.

P>0.05 = non significant

P<0.05 = significant

P<0.001 = highly significant