

## RESULTS

The results of the present study are summarised in tables (1 -21) and Figures (1-10)

**Table 1 :**

Comparison between cases of the studied groups and control group regarding total bilirubin (mg/dl).

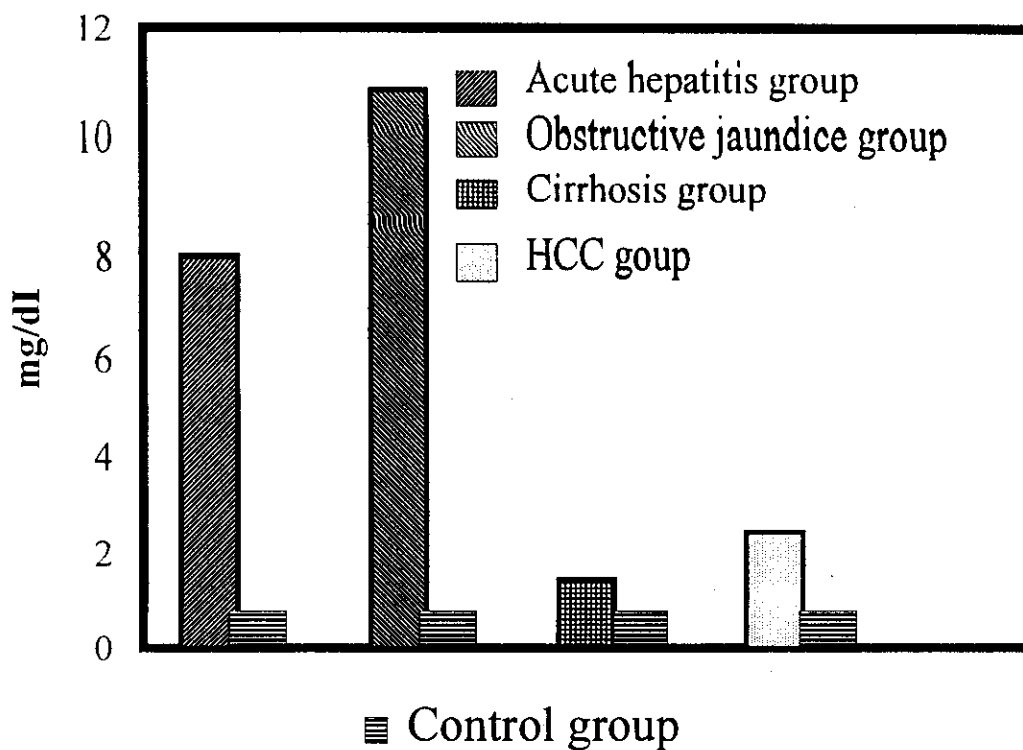
<i>T.Bilirubin</i>	<i>Range</i>	$\bar{X}$	$\pm SD$	<i>Test of signif. *control</i>	
				<i>t</i>	<i>p</i>
<i>Studied groups</i>	<i>(mg/dl)</i>	<i>(mg/dl)</i>	<i>(mg/dl)</i>		
Acute hepatitis group	4.2-14.6	8.02	$\pm 3.45$	8.122	< 0.001
Obstructive jaundice group	2.8-21	10.89	$\pm 5.95$	6.579	< 0.001
Cirrhosis group	0.9-1.5	1.45	$\pm 0.58$	5.002	< 0.001
Hepatocell. carc. group	0.4-8.2	2.45	$\pm 2.23$	3.342	< 0.01
Control group	0.4 -1	0.78	$\pm 0.15$	-	-

P < 0.05 is significant

### Analysis of the results

**Table (1), Figure (1) :**

Showed that there was significant increase of total bilirubin in all of the studied groups in comparison to normal control group .



**Figure (1)**

Comparison between cases of the studied groups and control group  
regarding total bilirubin mg/dl

**Table (2) :**

Comparison between cases of the studied groups and control group regarding direct bilirubin (mg/dl) :

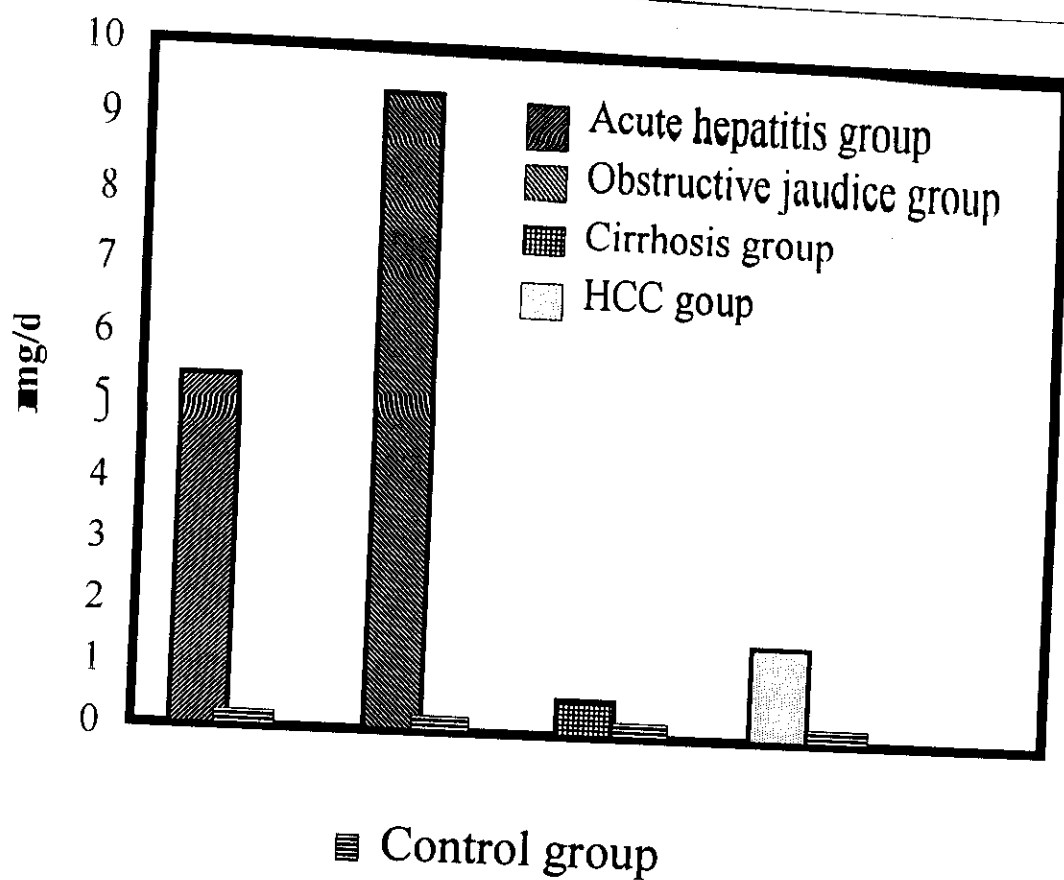
<i>D.Bilirubin</i> <i>Studied groups</i>	<i>Range</i> <i>(mg/dl)</i>	$\bar{X}$ <i>(mg/dl)</i>	$\pm SD$ <i>(mg/dl)</i>	<i>Test of signif. *control</i>	
				<i>t</i>	<i>P</i>
Acute hepatitis group	1.8 -10.8	5.39	$\pm 2.61$	7.744	< 0.001
Obstructive jaundice group	2-19.6	9.43	$\pm 5.57$	6.438	< 0.001
Cirrhosis group	0.3-0.8	0.58	$\pm 0.28$	6.353	< 0.001
Hepatocell. carc. group	0.3 - 5.8	1.55	$\pm 1.58$	11.034	< 0.001
Control group	0.1 - 0.3	0.17	$\pm 0.07$	-	-

P < 0.05 is significant

### Analysis of the results

**Table (2), Figure (2) :**

Showed that there was significant increase of direct bilirubin in all of the studied groups in comparison to control group .



**Figure (2)**

Comparison between cases of the studied groups and control group regarding direct bilirubin mg/dl

**Table (3) :**

Comparison between cases of the studied groups and control group regarding total protein (g/dl) :

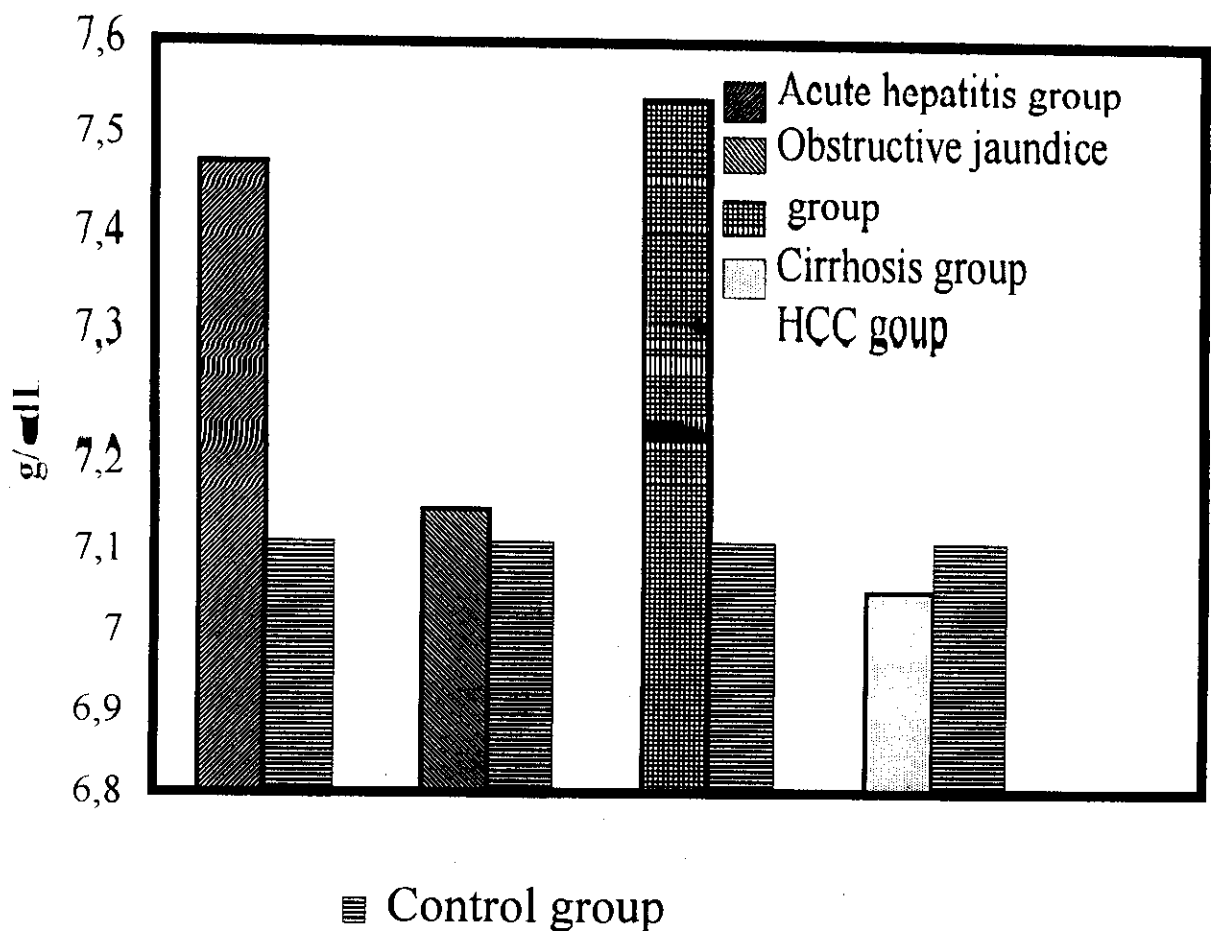
<i>T.protein</i>	<i>Range</i>	$\bar{X}$	$\pm SD$	<i>Test of signif. *control</i>	
				<i>t</i>	<i>p</i>
<i>Studied groups</i>	<i>(g/dl)</i>	<i>(g/dl)</i>	<i>(g/dl)</i>		
Acute hepatitis group	6-9.3	7.47	$\pm 0.93$	1.551	> 0.05
Obstructive jaundice group	6.3-8	7.15	$\pm 0.59$	0.097	> 0.05
Cirrhosis group	6.4-8	7.54	$\pm 0.94$	1.628	> 0.05
Hepatocell. carc. group	6.2-7.9	7.05	$\pm 0.46$	0.463	> 0.05
Control group	6.1-8.1	7.13	$\pm 0.62$	-	-

P < 0.05 is significant

### Analysis of the results

**Table (3), Figure (3) :**

Showed that there was no significant difference between studied groups and control group.



**Figure (3)**

Comparison between cases of the studied groups and control group regarding total protein g/dl

**Table (4) :**

Comparison between cases of the studied groups and control group regarding serum albumin (g/dl) :

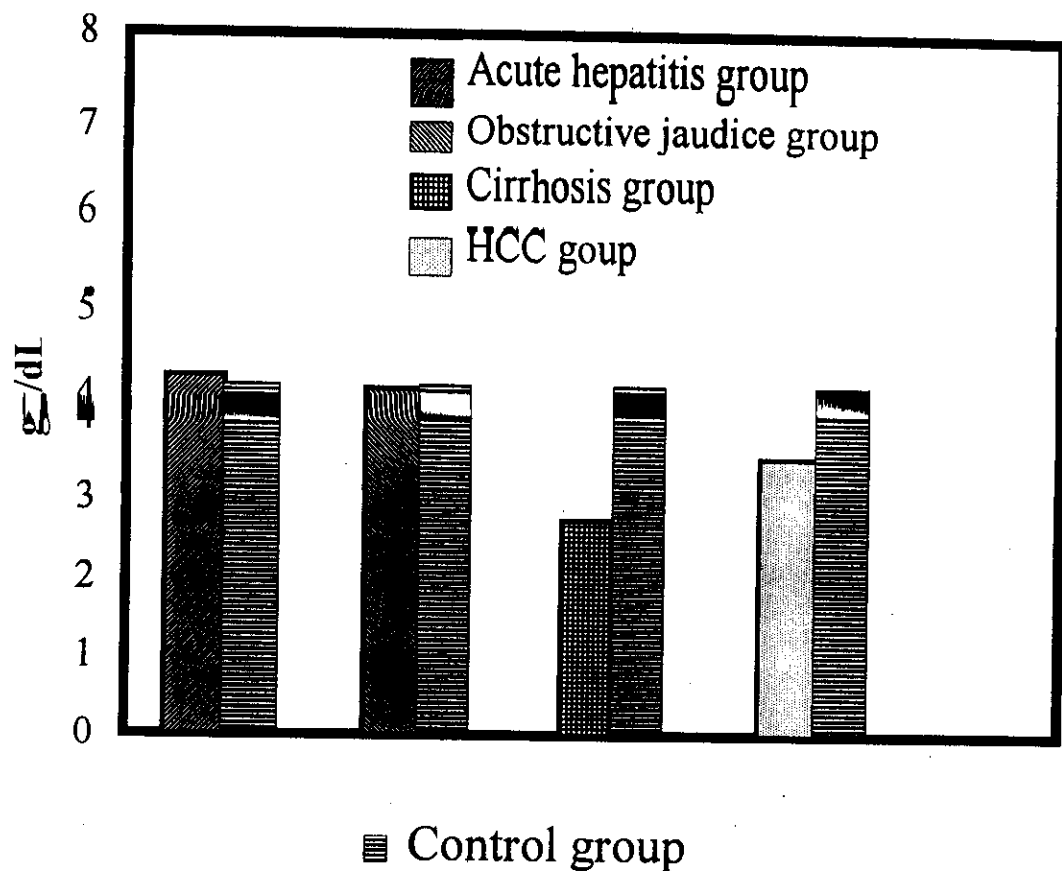
<i>S.albumin</i> <i>Studied groups</i>	<i>Range</i> <i>(g/dl)</i>	$\bar{X}$ <i>(g/dl)</i>	$\pm SD$ <i>(g/dl)</i>	<i>Test of signif. *control</i>	
				<i>t</i>	<i>p</i>
Acute hepatitis group	3.1 -5.1	4.26	$\pm 0.62$	0.713	> 0.05
Obstructive jaundice group	3.5-5	4.1	$\pm 0.46$	1.968	> 0.05
Cirrhosis group	1.9-3.9	2.75	$\pm 0.55$	10.878	< 0.001
Hepatocell. carc. group	2.5-4.5	3.56	$\pm 0.54$	5.572	< 0.001
Control group	3.9-5	4.39	$\pm 0.39$	-	-

P < 0.05 is significant

#### **Analysis of the results**

**Table (4), Figure (4) :**

Showed that there was no significant difference between both acute hepatitis group and obstructive jaundice group in comparison to control group, while there was significant decrease of serum albumin in both cirrhosis group and HCC group in comparison to control group .



**Figure (4)**

Comparison between cases of the studied groups and control group regarding serum albumin g/dl



**Table (5) :**

Comparison between cases of the studied groups and control group regarding serum globulin (g/dl) :

<i>S.globulin</i>	<i>Range</i>	$\bar{X}$	$\pm SD$	<i>Test of signif. *control</i>	
				<i>t</i>	<i>p</i>
<i>Studied groups</i>	<i>(g/dl)</i>	<i>(g/dl)</i>	<i>(g/dl)</i>		
Acute hepatitis group	2.1-4.7	3.21	$\pm 0.67$	2.268	$< 0.05$
Obstructive jaundice group	2.1-3.8	3.05	$\pm 0.59$	1.629	$> 0.05$
Cirrhosis group	2.3-5.9	4.79	$\pm 1.06$	7.794	$\leq 0.001$
Hepatocell. carc. group	2-4.5	3.49	$\pm 0.69$	3.909	$< 0.001$
Control group	2-3.7	2.74	$\pm 0.51$	-	-

$P < 0.05$  is significant

### Analysis of the results

**Table (5) :**

Showed that there was a significant increase of serum globulin in acute hepatitis group, cirrhotic group and HCC group in comparison to control group, while there was insignificant difference of serum globulin in obstructive jaundice group in comparison to control group.

**Table (6) :**

Comparison between cases of the studied groups and control group regarding A/G ratio :

<i>Studied group</i>	<i>A/G</i>	<i>Range</i>	$\bar{X}$	$\pm SD$	<i>Test of signif. *control</i>	
					<i>t</i>	<i>p</i>
Acute hepatitis group		0.9-2.24	1.38	$\pm 0.37$	2.293	< 0.01
Obstructive jaundice group		0.97-2.29	1.42	$\pm 0.43$	1.784	> 0.05
Cirrhosis group		0.36-1.7	0.63	$\pm 0.31$	10.011	< 0.001
Hepatocell. carc. group		0.56-2.25	1.09	$\pm 0.39$	4.754	< 0.001
Control group		1.08-2.29	1.66	$\pm 0.34$	-	-

P < 0.05 is significant

### Analysis of the results

**Table (6) :**

Showed that there was significant decrease in A/G ratio in acute hepatitis group, cirrhosis group, HCC group in comparison to control group, while there was no significant difference between obstructive jaundice group and control group.

**Table (7) :**

Comparison between cases of the studied groups and control group regarding AST (U/l) :

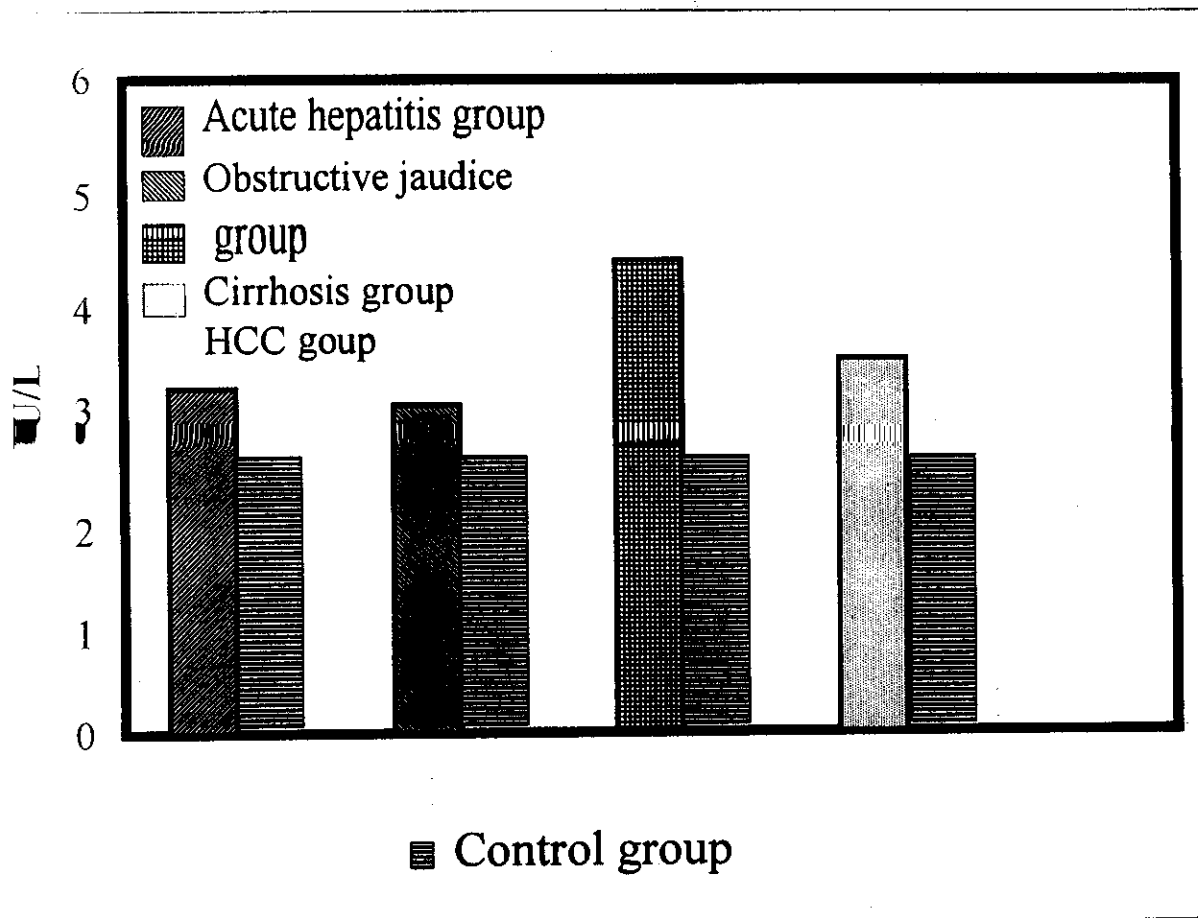
AST <i>Studied group</i>	Range (u/l)	$\bar{X}$ (u/l)	$\pm SD$ (u/l)	Test of signif. *control	
				t	p
Acute hepatitis group	61-401	210.07	$\pm 100.47$	7.002	< 0.001
Obstructive jaundice group	16-152	56.13	$\pm 44.33$	2.430	< 0.05
Cirrhosis group	31-77	51.05	$\pm 23.41$	4.131	< 0.001
Hepatocell. carc. group	25-72	44.75	$\pm 13.64$	4.621	< 0.001
Control group	16-45	27.9	$\pm 8.94$	-	-

P < 0.05 is significant

#### Analysis of the results

**Table (7), Figure (5) :**

Showed that there was significant increase of AST in all of the studied groups (acute hepatitis group, obstructive jaundice group, cirrhosis group, HCC group) in comparison to normal control group .



**Figure (5)**

Comparison between cases of the studied groups and control group  
regarding AST U/L

**Table (8) :**

Comparison between cases of the studied groups and control group regarding ALT (U/l) :

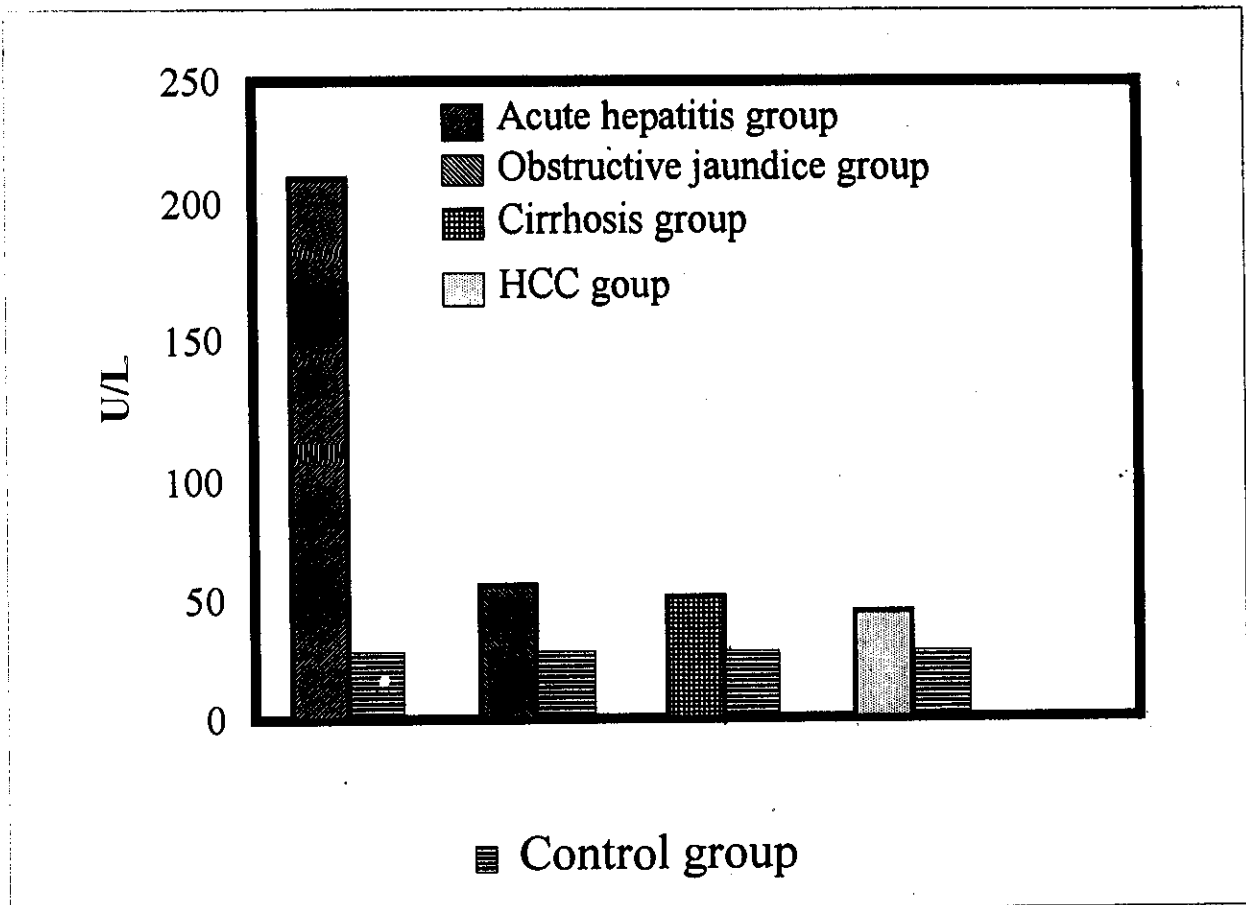
<i>ALT</i>	<i>Range</i>	$\bar{X}$	$\pm SD$	<i>Test of signif. *control</i>	
				<i>t</i>	<i>p</i>
<i>Studied group</i>	<i>(u/l)</i>	<i>(u/l)</i>	<i>(u/l)</i>		
Acute hepatitis group	69-490	229.2	$\pm 107.12$	7.322	< 0.001
Obstructive jaundice group	19-171	54.87	$\pm 40.52$	2.694	< 0.05
Cirrhosis group	37-71	46.65	$\pm 30.0$	2.953	< 0.01
Hepatocell. carc. group	18-116	39.85	$\pm 21.47$	2.688	< 0.05
Control group	16-33	26.45	$\pm 6.01$	-	-

P < 0.05 is significant

### **Analysis of the results**

**Table (8), Figure (6) :**

Showed that there was significant increase of ALT in all of the studied groups (acute hepatitis group, obstructive jaundice group, cirrhosis group, HCC group) in comparison to normal control group .



***Figure (6)***

Comparison between cases of the studied groups and control group  
regarding ALT/L

**Table (9) :**

Comparison between cases of the studied groups and control group regarding ALP (K.A.U) :

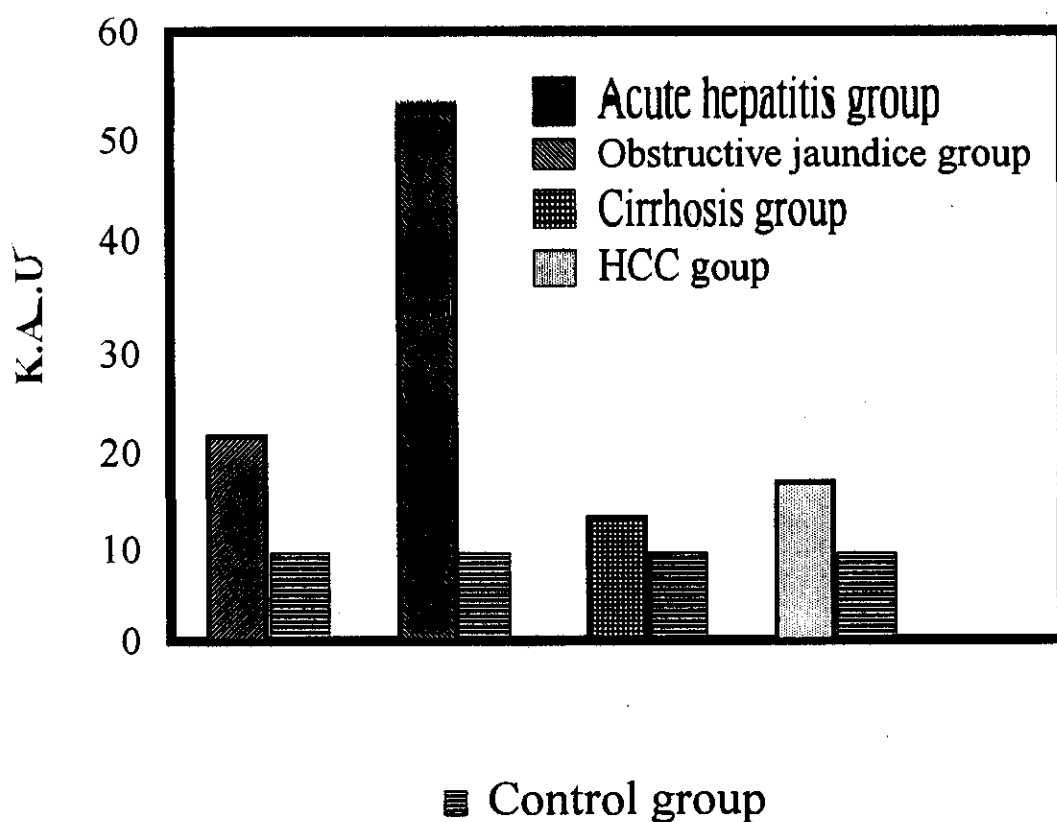
<i>ALP</i> <i>Studied group</i>	<i>Range</i> <i>(K.A.U)</i>	$\bar{X}$ <i>(K.A.U)</i>	$\pm SD$ <i>(K.A.U)</i>	<i>Test of signif. *control</i>	
				<i>t</i>	<i>p</i>
Acute hepatitis group	12-41	21.8	$\pm 9.26$	6.084	< 0.001
Obstructive jaundice group	28-88	53.27	$\pm 18.77$	9.505	< 0.001
Cirrhosis group	6-19	13.4	$\pm 3.72$	6.879	< 0.001
Hepatocell. carc. group	6-46	16.85	$\pm 10.26$	4.229	< 0.001
Control group	4-11	7.05	$\pm 1.79$	-	-

P < 0.05 is significant

#### **Analysis of the results**

**Table (9), Figure (7) :**

Showed that there was significant increase of ALP in all of the studied groups (acute hepatitis group, obstructive jaundice group, cirrhosis group, HCC group) in comparison to normal control group .



**Figure (7)**

Comparison between cases of the studied groups and control group regarding ALP (K.A.U)



**Table (10) :**

Comparison between cases of the studied groups and control group regarding GGT (U/L) :

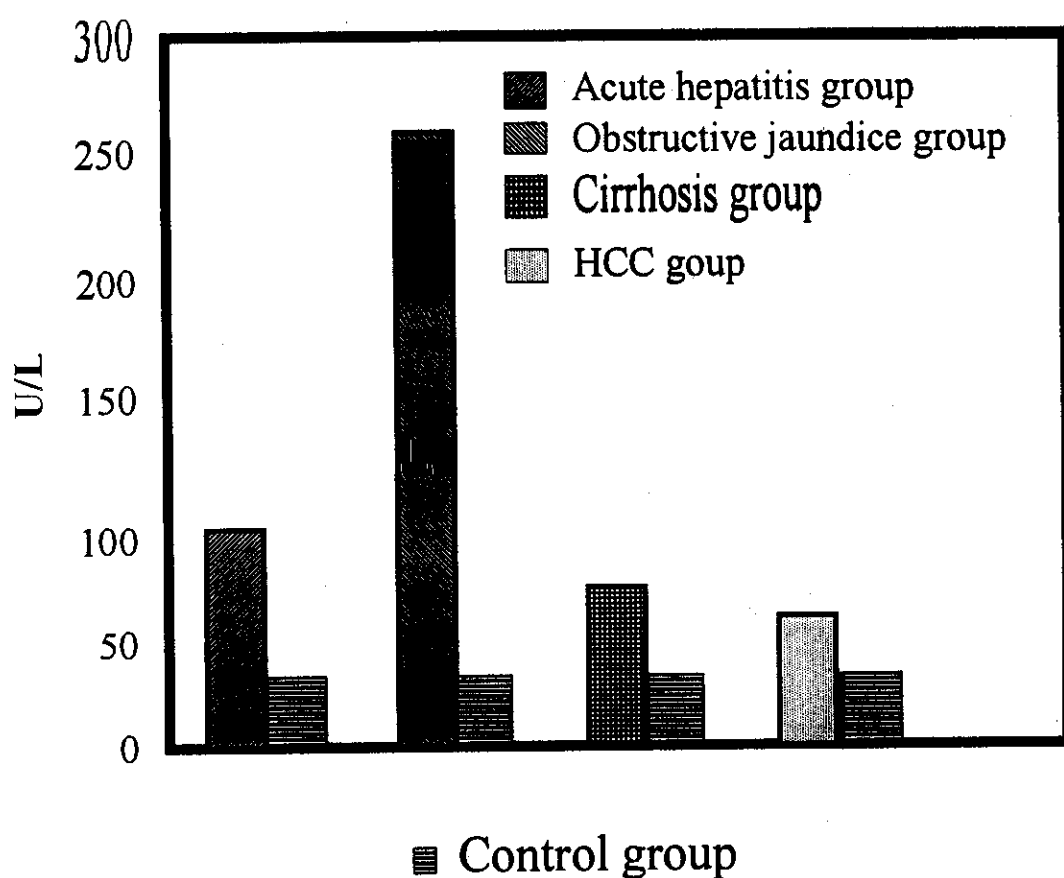
GGT <i>Studied group</i>	Range (U/L)	$\bar{X}$ (U/L)	$\pm SD$ (U/L)	Test of signif. *control	
				t	p
Acute hepatitis group	42-192	105.53	$\pm 41.69$	7.675	$< 0.001$
Obstructive jaundice group	87-610	260.07	$\pm 161.34$	5.718	$< 0.001$
Cirrhosis group	48-100	77.05	$\pm 44.20$	5.504	$< 0.001$
Hepatocell. carc. group	42-91	62.6	$\pm 14.33$	10.924	$< 0.001$
Control group	11-38	21.6	$\pm 8.74$	-	-

P < 0.05 is significant

#### Analysis of the results

**Table (10), Figure (8) :**

Showed that there was significant increase of GGT in all of the studied groups (acute hepatitis group, obstructive jaundice group, cirrhosis group, HCC group) in comparison to normal control group .



**Figure (8)**

Comparison between cases of the studied groups and control group  
regarding GGT (U/L)

**Table (11) :**

Comparison between cases of the studied groups and control group regarding cICAM-1 (ng/ml) :

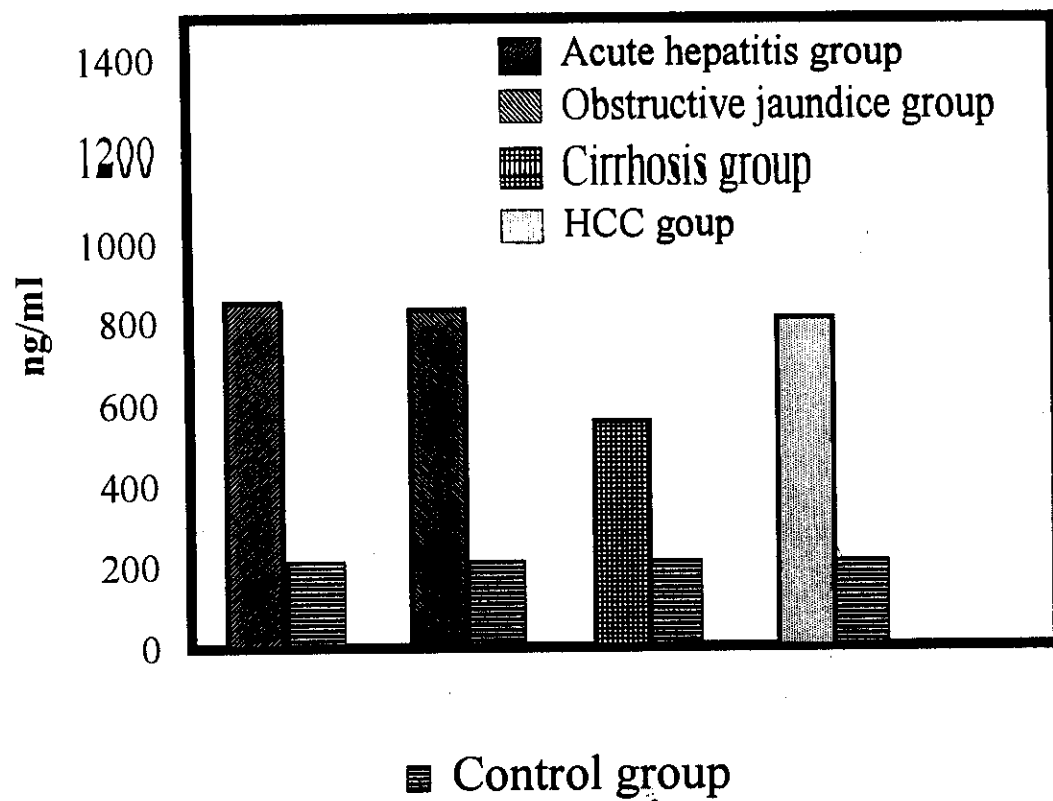
cICAM-1 Studied group	Range (ng/ml)	$\bar{X}$ (ng/ml)	$\pm SD$ (ng/ml)	Test of signif. *control	
				t	p
Acute hepatitis group	275-1295	853.87	$\pm 299.28$	7.895	< 0.001
Obstructive jaundice group	288-1289	835.13	$\pm 339.28$	6.773	< 0.001
Cirrhosis group	277-1068	560.55	$\pm 203.76$	6.871	< 0.001
Hepatocell. carc. group	289-1520	815.7	$\pm 287.51$	8.852	< 0.001
Control group	145-373	235.6	$\pm 56.75$	-	-

P < 0.05 is significant

### Analysis of the results

**Table (11), Figure (9) :**

Showed that there was highly significant increase of cICAM-1 in all of the studied groups (acute hepatitis group, obstructive jaundice group, cirrhosis group, HCC group) in comparison to normal control group .



**Figure (9)**

Comparison between cases of the studied groups and control group regarding cICAM-1 (ng/ml)

**Table (12) :**

Comparison between cases of the studied groups and control group regarding cICAM-1 (ng/ml) :

<i>cICAM-1</i> <i>Studied group</i>	<i>Range</i> (ng/ml)	$\bar{X}$ (ng/ml)	$\pm SD$ (ng/ml)	<i>Test of signif. *control</i>		
				<i>Between</i>	<i>t</i>	<i>p</i>
❶ Acute hepatitis group	275-1295	853.87	$\pm 299.28$	1 * 2	0.246	> 0.05
				1 * 3	3.269	< 0.01
❷ Obstructive jaundice group	288-1289	835.13	$\pm 339.28$	1 * 4	0.379	> 0.05
				1 * 5	7.895	< 0.001
❸ Cirrhosis group	277-1068	560.55	$\pm 203.76$	2 * 3	2.781	< 0.01
				2 * 4	0.179	> 0.05
❹ Hepatocell.carc. group	289-1520	815.7	$\pm 287.51$	2 * 5	6.773	< 0.001
				3 * 4	3.238	< 0.01
❺ Control group	145-373	235.6	$\pm 56.75$	3 * 5	6.871	< 0.001
				4 * 5	8.852	< 0.001

P < 0.05 is significant

**Table (12), Figure (10) :**

**Analysis of the results**

Study of the mean of cICAM-1 level between the four studied groups and each other had been done, and significance of the difference between them had been calculated :

There was no-significant diagnostic difference between the mean of cICAM-1 level in acute hepatitis group and obstructive jaundice group .

There was highly significant increase of the mean of cICAM-1 level in acute hepatitis group in comparison to cirrhosis group.

There was no-significant diagnostic difference between the mean of cICAM-1 level in acute hepatitis group and HCC group .

There was a significant increase of the mean of cICAM-1 value in obstructive jaundice group in comparison to cirrhosis group .

There was a significant increase of the mean of cICAM-1 value in HCC group in comparison to cirrhosis.

There was no significant difference between obstructive haundice group in comparison to HCC group.

**Table (13) :**

Correlation between the level of cICAM-1 and liver functions in acute hepatitis group .

<i>Variable</i>	<i>"r" value</i>	<i>P</i>	<i>significance</i>
T.Bilirubin (mg/dl)	- 0.13	> 0.05	not. significant
D.Bilirubin (mg/dl)	0	> 0.05	not. significant
T. Protein (g/dl)	0.41	> 0.05	not. significant
Albumin (g/dl)	0 .03	> 0.05	not. significant
Globulin (g/dl)	0.61	< 0.05	significant
A/G ratio	-0.50	> 0.05	not. significant
AST (U/L)	0.10	> 0.05	not. significant
ALT (U/L)	0.26	> 0.05	not. significant
ALP (K.A.U)	- 0.27	> 0.05	not. significant
GGT ( U/L)	0.17	> 0.05	not. significant
HBsAg	- 0.104	> 0.05	not. significant
HCV-Ab	- 0.249	> 0.05	not. significant

P < 0.05 is significant

### **Analysis of the results**

**Table (13) :**

Showed that there was no significant correlation between the level of cICAM-1 and serum bilirubin, total protein, albumin, AST, ALT , ALP, GGT, HBsAg, or HCVab. But there was a positive significant correlation between the level of cICAM-1 and serum globulin .

**Table (14) :**

Correlation between the level of cICAM-1 and liver functions in obstructive jaundice group.

<i>Variable</i>	<i>"r" value</i>	<i>P</i>	<i>significance</i>
T.Bilirubin (mg/dl)	0.36	> 0.05	not. significant
D.Bilirubin (mg/dl)	0.37	> 0.05	not. significant
T. Protein (g/dl)	0.14	> 0.05	not. significant
Albumin (g/dl)	0.38	> 0.05	not. significant
Globulin (g/dl)	- 0.15	> 0.05	not. significant
A/G ratio	0.25	> 0.05	not. significant
AST (U/L)	0.28	> 0.05	not. significant
ALT (U/L)	0.07	> 0.05	not. significant
ALP (K.A.U)	- 0.09	> 0.05	not. significant
GGT ( U/L)	0.17	> 0.05	not. significant

P < 0.05 is significant

### **Analysis of the results**

**Table (14) :**

Showed that there was no significant correlation between the mean value of cICAM-1 and different studied liver function parameters.



**Table (15) :**

Correlation between the level of cICAM-1 and liver functions in cirrhosis group.

<i>Variable</i>	<i>"r" value</i>	<i>P</i>	<i>significance</i>
T.Bilirubin (mg/dl)	0.29	> 0.05	not. significant
D.Bilirubin (mg/dl)	0.37	> 0.05	not. significant
T. Protein (g/dl)	0.09	> 0.05	not. significant
Albumin (g/dl)	0.05	> 0.05	not. significant
Globulin (g/dl)	0.04	> 0.05	not. significant
A/G ratio	0.03	> 0.05	not. significant
AST (U/L)	0.12	> 0.05	not. significant
ALT (U/L)	0.22	> 0.05	not. significant
ALP (K.A.U)	- 0.14	> 0.05	not. significant
GGT ( U/L)	0.27	> 0.05	not. significant

$P < 0.05$  is significant

### **Analysis of the results**

**Table (15) :**

Showed that there was no significant correlation between the mean value of cICAM-1 and different studied liver function parameters.

**Table (16) :**

**Correlation between the level of cICAM-1 and liver functions in HCC group.**

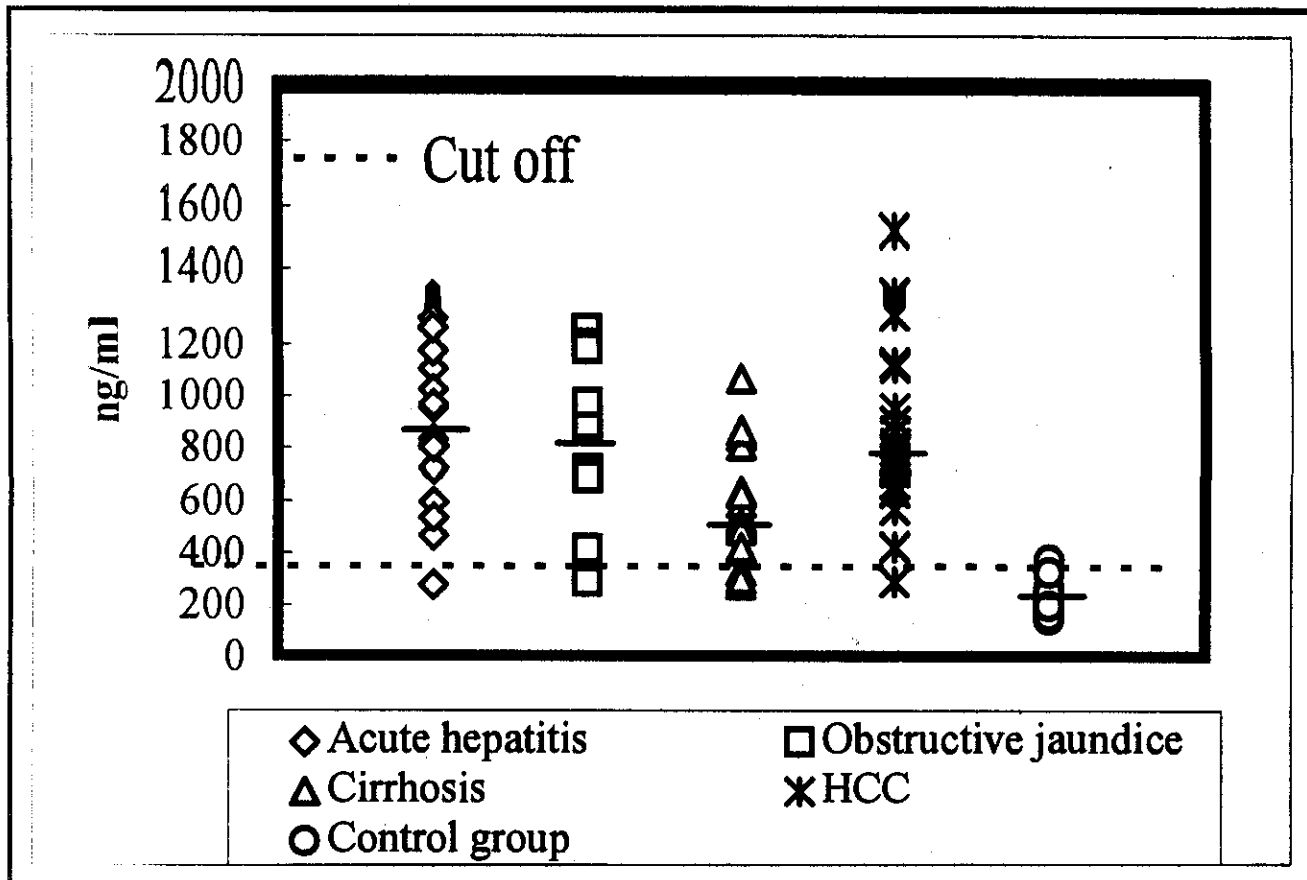
<i>Variable</i>	<i>"r" value</i>	<i>P</i>	<i>significance</i>
T.Bilirubin (mg/dl)	0.48	$\geq 0.05$	not. significant
D.Bilirubin (mg/dl)	0.42	$> 0.05$	not. significant
T. Protein (g/dl)	0.23	$> 0.05$	not. significant
Albumin (g/dl)	0.01	$> 0.05$	not. significant
Globulin (g/dl)	0.01	$> 0.05$	not. significant
A/G ratio	0.04	$> 0.05$	not. significant
AST (U/L)	0.44	$> 0.05$	not. significant
ALT (U/L)	0.35	$> 0.05$	not. significant
ALP (K.A.U)	0.04	$> 0.05$	not. significant
GGT ( U/L)	- 0.27	$> 0.05$	not. significant

$P < 0.05$  is significant

### **Analysis of the results**

**Table (16) :**

Showed that there was no significant correlation between the mean value of cICAM-1 and different studied liver function parameters.



**Figure (11)**

Scatterplot of individual values of serum cICAM-1 levels in the studied population.

A dotted line represent cut off value (cut off value = mean of control + 2 SD),  
horizontal bars indicate mean value.

**Table (17)**

Master sheet for cases of acute hepatitis. Number of cases (15). Number of variants(20).

No	Age (years)	Sex	T.Bilir. (mg/dl)	D.Bilir. (mg/dl)	T.prot. (g/dl)	Album. (g/dl)	Glob. (g/dl)	AG (U/L)	AST (U/L)	ALT (U/L)	ALP (K.A.U)	GGT (U/L)	HBsAg	HCVAb	cICAM-1 (ng/ml)
1	36	M	5.2	5	9.3	4.6	4.7	0.98	297	156	12	112	1	0	1105
2	22	F	6	4.4	8.8	5.1	3.7	1.38	109	260	15	89	1	0	1174
3	25	M	7.4	4.8	7.5	4.3	3.2	1.34	338	324	39	192	1	0	807
4	26	F	14.6	10.8	8.1	4.9	3.2	1.53	401	490	21	81	0	0	1295
5	18	M	5.1	4.4	6	3.1	2.9	1.07	197	110	27	110	1	0	952
6	37	F	6.3	3.9	7.4	4.1	3.3	1.24	130	167	19	77	0	1	596
7	22	M	4.8	3	7.2	4.3	2.9	1.48	61	69	13	90	1	0	721
8	25	M	10.6	7	7.9	4.6	3.3	1.39	268	207	16	42	0	0	465
9	35	F	6.7	3.9	8.2	4.9	3.3	1.48	192	260	21	182	1	1	830
10	24	M	5.9	4.1	7.5	4	3.5	1.14	302	350	16	160	1	0	1025
11	31	M	7.2	5	7.8	3.7	4.1	0.90	101	122	12	89	0	1	1259
12	32	M	12.7	8.7	6.8	4.7	2.1	2.24	116	195	41	81	1	1	801
13	26	F	14.1	10.2	7	4.6	2.4	1.92	277	255	31	101	1	1	275
14	19	M	4.2	1.8	6.2	3.9	2.3	1.70	143	191	18	72	1	0	535
15	41	M	9.5	3.9	6.4	3.1	3.3	0.94	219	282	26	105	1	0	968
Min.	18		4.2	1.8	6	3.1	2.1	0.90	61	69	12	42			275
Max.	41		14.6	10.8	9.3	5.1	4.7	2.24	401	490	41	192			1295
Mean	27.9		8.02	5.4	7.5	4.3	3.2	1.38	210.07	229.2	21.8	105.53			853.86
SD	13.42		3.45	2.61	0.92	0.61	0.66	0.37	100.47	107.12	9.25	41.69			299.27

**Table (18)**

Master sheet for cases of obstructive jaundice . Number of cases (15). Number of variants (20)

No	Age (years)	Sex	T.Bilir. (mg/dl)	D.Bilir. (mg/dl)	T.prot. (g/dl)	Album. (g/dl)	Glob. (g/dl)	A/G	AST (U/L)	ALT (U/L)	ALP (K.A.U)	GGT (U/L)	cICAM-1 (ng/ml)
16	42	F	7.7	6.4	6.4	3.5	2.9	1.21	23	52	58	87	715
17	35	F	3.2	2.6	7.1	3.8	3.3	1.15	49	63	66	111	1253
18	43	M	11.3	8.8	6.3	3.9	2.4	1.63	109	90	42	171	1197
19	42	F	14.3	12.1	7.9	4.5	3.4	1.32	127	71	44	350	689
20	51	M	6.5	5.9	7.2	4.1	3.1	1.32	108	90	29	517	886
21	36	M	8.9	6.9	6.3	3.5	2.8	1.25	46	42	51	210	288
22	42	F	14.04	12.9	7.8	4.2	3.6	1.17	36	52	77	205	972
23	35	F	3.6	2.9	7.2	3.9	3.3	1.18	30	45	81	97	411
24	51	M	16.4	14	8	4.6	3.4	1.35	152	60	68	244	1181
25	36	F	5.2	4.6	7.2	5.0	2.2	2.27	22	41	88	144	690
26	39	M	2.8	2	7.6	3.8	3.8	1.00	16	44	45	89	537
27	47	F	19.2	8.2	6.3	4.2	2.1	2.00	27	42	28	610	865
28	35	M	13.9	11.5	6.9	4.8	2.1	2.29	24	45	40	310	1181
29	39	F	15	13.1	7.3	3.6	3.7	0.97	41	47	40	344	373
30	40	F	21	19.6	7.7	4.1	3.6	1.14	32	39	42	412	1289
Min.	35		2.8	2	6.3	3.5	2.1	0.97	16	39	28	87	288
Max.	51		21	19.6	8	5	3.8	2.28	152	90	88	610	1289
Mean	40.47		10.89	9.43	7.14	4.1	3.04	1.41	56.13	54.86	53.26	260.07	835.13
SD	11.67		5.94	5.57	0.59	0.45	0.59	0.43	44.32	40.52	18.77	161.34	339.28

Table (19) :

Master sheet for cases of cirrhosis group . Number of cases (20). Number of variants (20).

No	Age (years)	Sex	T. Bilir. (mg/dl)	D. Bilir. (mg/dl)	T. prot. (g/dl)	Album. (g/dl)	Glob. (g/dl)	A/G	AST (U/L)	ALT (U/L)	A <sub>ALP</sub> (K-1 U)	GGT (U/L)	cICAM-1 (ng/ml)
31	47	M	1.1	0.8	8	2.4	5.6	0.43	44	42	6	74	517
32	48	M	0.9	0.6	7.9	2.5	5.4	0.46	48	40	4	61	534
33	52	F	1.7	1.3	7.7	2.8	4.9	0.57	50	36	5	71	414
34	49	M	1.5	0.6	8	2.1	5.9	0.36	64	60	0	100	845
35	56	M	1.4	0.5	7.8	2.7	5.1	0.53	62	55	2	64	522
36	46	M	1.3	0.4	8	2.8	5.2	0.54	44	46	4	76	499
37	42	F	1.3	0.4	7.1	2	5.1	0.39	52	36	11	95	550
38	49	F	3.5	1.1	8.6	2.5	6.1	0.41	80	64	9	63	807
39	61	M	2.5	1.1	8.8	2.5	5.5	0.46	56	71	7	86	594
40	55	M	1.3	0.5	8.3	3.5	4.8	0.73	34	39	18	85	329
41	60	M	1	0.4	7.8	3.2	4.6	0.70	34	41	16	62	639
42	58	M	1.1	0.3	6.4	1.9	4.5	0.42	47	42	14	77	277
43	54	M	1.6	0.7	7	1.9	5.1	0.37	72	50	10	48	408
44	51	F	1.2	0.4	6.9	2.8	4.1	0.68	51	42	6	65	512
45	55	M	1.5	0.5	7.2	3.1	4.1	0.76	31	36	12	78	867
46	59	M	1.5	0.7	7.6	3.4	4.2	0.81	41	37	14	92	487
47	62	F	1.2	0.4	6.2	3.9	2.3	1.70	42	50	18	64	419
48	52	F	1.3	0.3	6.3	3.2	3.1	1.03	47	40	19	91	1068
49	48	M	1.4	0.5	7.8	3	4.8	0.63	45	50	15	83	629
50	58	M	1.3	0.4	8	2.8	5.2	0.54	77	56	18	105	298
Min.	42		0.9	0.3	6.4	1.9	2.3	0.35	31	36	6	48	277
Max.	62		1.5	1.3	8	3.9	5.9	1.7	77	71	19	105	1068
Mean	53.1		1.45	0.58	7.53	2.75	4.78	0.62	51.05	46.65	13.4	77.05	560.55
SD	7.07		0.57	0.28	0.93	0.54	1.06	0.30	23.40	30	3.71	44.20	203.75

**Table (20) :**

Master sheet for cases of HCC group. Number of cases (20). Number of variants (20).

No	Age (years)	Sex	T.Bilir. (mg/dl)	D.Bilir. (mg/dl)	T.prod. (g/dl)	Album. (g/dl)	Glob. (g/dl)	A/G	AST (U/L)	ALT (U/L)	ALP (K.A.U)	GGT (U/L)	cICAM-1 (ng/ml)
51	60	F	2.10	1.3	6.4	3.6	2.8	1.29	51	30	28	67	633
52	63	M	5.00	3.2	7.2	3.1	4.1	0.76	53	116	24	82	954
53	60	M	0.60	0.4	6.9	2.8	4.1	0.68	40	22	6	44	567
54	60	F	0.40	0.3	7.5	3.8	3.7	1.03	40	36	13	91	421
55	60	F	2.10	1.5	7	2.5	4.5	0.56	51	30	36	68	638
56	63	F	1.50	1	7.9	3.7	4.2	0.88	44	50	9	44	1520
57	50	M	8.20	5.5	7.5	4	3.5	1.14	72	40	21	77	1309
58	66	M	1.80	1	6.8	3.3	3.5	0.94	60	37	18	44	666
59	65	M	1.00	0.6	7.2	4.2	3	1.40	32	23	8	56	715
60	66	M	1.50	1.1	7.3	3.9	3.4	1.15	25	20	15	67	742
61	52	M	1.70	1.3	6.5	4.5	2	2.25	26	18	14	64	758
62	61	M	1.10	0.9	7.8	4	3.8	1.05	53	45	21	72	758
63	58	M	3.10	2.5	7.2	3.8	3.4	1.12	44	41	13	87	721
63	54	M	1.00	0.5	6.3	4	2.3	1.74	32	23	8	49	867
65	56	M	7.80	5.8	7	3.9	3.1	1.26	45	60	46	60	905
66	66	M	2.20	1.2	7.1	2.7	4.4	0.61	67	55	16	52	1113
67	67	M	4.30	1.6	6.8	3.7	3.1	1.19	69	42	14	55	1150
68	687	F	1.10	0.4	7.3	2.9	4.4	0.66	33	32	10	70	289
69	69	F	1.60	0.6	6.2	3.2	3	1.07	41	47	8	73	790
70	70	M	0.80	0.3	7	3.6	3.4	1.06	26	30	9	42	818
Mfn.	50		0.4	0.3	6.2	2.5	2	0.55	25	18	6	42	289
Max.	70		8.3	5.8	7.9	4.5	4.5	2.25	72	116	46	91	1520
Mean	62.15		2.44	1.55	7.04	3.56	3.48	1.09	44.75	39.85	16.85	62.6	815.7
SD.	5.53		2.22	1.58	0.46	0.54	0.68	0.39	13.63	21.46	10.26	14.32	287.5

**Table (21) : Master sheet for control group .**

No	Age (years)	Sex	T.Bilir. (mg/dl)	D.Bilir. (mg/dl)	T.prot. (g/dl)	Album. (g/dl)	Glob. (g/dl)	A/G	AST (U/L)	ALT (U/L)	ALP (K.A.U)	GGT (U/L)	cICAM-1 (ng/ml)
71	27	M	0.8	0.2	7.2	4.2	3	1.40	36	32	6	16	230
72	43	M	0.9	0.2	6.8	4.6	2.2	2.09	32	27	8	22	218
73	27	F	0.7	0.1	7.7	4.9	2.8	1.75	24	19	7	34	145
74	38	M	0.6	0.2	6.1	3.9	2.2	1.77	18	24	8	11	216
75	37	M	1	0.1	7.7	4	3.7	1.08	25	31	5	38	248
76	27	M	0.9	0.2	6.2	3.9	2.3	1.70	21	24	7	24	246
77	27	F	0.7	0.1	8	4.9	3.1	1.58	31	22	4	13	188
78	27	M	0.8	0.1	7.7	5	2.7	1.85	17	29	10	27	219
79	33	F	0.6	0.2	6.9	4.8	2.1	2.29	27	17	8	21	260
80	34	F	0.9	0.1	6.2	4.2	2	2.10	39	31	9	15	160
81	45	M	0.8	0.3	7.1	4.6	2.5	1.84	22	33	7	36	239
82	47	M	0.7	0.1	7.7	4.1	3.6	1.14	21	30	6	11	227
83	30	M	0.7	0.2	6.8	4.2	2.6	1.62	18	16	7	18	226
84	32	M	0.4	0.2	6.9	4.4	2.5	1.76	40	26	11	20	267
85	43	M	0.8	0.1	7	4.7	2.3	2.04	32	21	8	31	320
86	41	M	0.9	0.2	7.2	4	3.2	1.25	45	32	7	11	251
87	45	M	1	0.1	6.9	3.9	3	1.30	41	33	4	12	373
88	39	M	0.7	0.2	7.9	4.4	3.5	1.26	16	32	7	23	325
89	26	M	0.8	0.3	6.4	4	2.4	1.67	32	17	7	31	156
90	27	F	0.9	0.2	8.1	5	3.1	1.61	21	33	5	18	198
Min.	26		0.4	0.1	6.1	3.9	2	1.08	16	16	4	11	145
Max.	47		1	0.3	8.1	5	3.7	2.28	45	33	11	38	373
Mean	34.75		0.78	0.17	7.12	4.38	2.74	1.65	27.9	26.45	7.05	21.6	235.6
SD.	7.39		0.14	0.06	0.62	0.39	0.51	0.33	8.93	6.01	1.79	8.73	56.75
Cut off value(mean+2SD)			1.07	0.3	8.3	5.1	3.07	2.33	45.77	38.47	10.63	39.07	349.10