RESULTS

I. Results of Clinical Examination

Age

Group (A) :	Range (23 - 60),	Mean (31 years)
Group (B) :	Range (18 - 65)	Mean (30 years
Group (C) :	Range (20 - 60)	Mean (32 years)
Group (D) :	Range (20 - 60)	Mean (33 years)

A. Symptomatology

Epigastric pain : which was stabbing in nature and usually felt just before the onset of bleeding in some patients with oesophageal varices:

Group (A) : 6 (40%)

Group (B) : 5 (33%)

Group (C) : 6 (40%)

Group (D) : 0

Epistaxis :

Group (A) : 10 (66%)

Group (B) : 9 (60%)

Group (C) : 9 (60%)

Group (D) : 0

Easy fatiguability :

Group (A) : 3 (20%)

Group (B) : 4 (26%)

Group (C) : 4 (26%)

Group (D) : 0

As appeared from the symptoms epigastric pain and epistaxis easily fatiguability, there is no significant difference between all groups (A, B, and C).

B. Physical Examination

Patients were examined concerning:

Weight:

Group (A) : Range (50 - 100) Mean (54 kg)

Group (B) : Range (50 - 77) Mean (60 kg)

Group (C) : Range (60 - 95) Mean (70 kg)

Group (D) : Range (50 - 75) Mean (61 kg)

Signs of chronic liver disease as palmar erythema, spider naevi, ascites, flapping tremors, jaundice, clubbing of fingers, gynaecomastica, hair distribution, size of liver and spleen.

The number and percentage of different signs of chronic liver disease are shown in table (I), where there is no significant difference between groups A, B, and C.

Table (I): Clinical data of patients.

Signs	Group A No.	Group A (%)	Group B No.	Group B (%)	Group C No.	Group C (%)
1. Signs of chronic liver disease						
* Jaundice	8	(53)	8	(53)	7	(33)
* Spider naevi	4	(26)	4	(26)	5	(33)
* Pulmar erythema	4	(26)	5	(33)	4	(26)
* Ascites	4	(26)	2	(13)	4	(26)
2. Other signs						
* Cynaecomastica	8	(53)	8	(53)	7	(46)
* Clubbing of fingers	5	(23)	5	(23)	3	(33)
* Hair distribution						
Female dist.	-	(0)	-	(0)	1	(6)
Scanty	5	(33)	3	(20)	4	(16)
Normal	10	(66)	12	(80)	10	(66)
3. Liver size						
* Small	6	(40)	5	(33)	5	(33)
* Enlarged	9	(60)	10	(66)	10	(66)
4. Spleen size						
* Just palpable	5	(33)	8	(53)	7	(46)
* Enlarged	8	(53)	7	(46)	7	(46)
* Shrunken	-	(0)	-	(0)	1	(6)

II. Laboratory Investigations

1. Liver Function Tests (Tables II & III)

Table II

		SGOT μ/L	SGPT μ/L	S. bilirubin mg/dl	Alk. Ph. μ/L
A	x	20.7	30.33	1.7	10.19
	S.E.	0.4392	0.5167	0.1007	0.2170
B	x	23.63	28.08	1.68	10.52
	S.E.	0.4521	0.516	0.0591	0.3100
C	x	20.44	23.34	1.462	10.22
	S.E>	0.4702	1.679	0.1395	0.2041
D	x	8.49	8.7	0.85	9.04
	S.E.	0.1136	0.1111	0.0085	0.0852

Table III
Showing comparison betwen liver function tests in all groups

		SGOT μ/L	SGPT μ/L	S. bilirubin mg/dl	Alk. Ph. μ/L
D : A	t	26.99	36.55	8.3	4.9
	p	< 0.05	< 0.05	< 0.05	< 0.05
D : B	t	32.34	36.55	13.97	4.5
	p	< 0.05	< 0.05	< 0.05	< 0.05
D : C	t	24.61	8.59	4.3	5.3
	p	< 0.05	< 0.05	< 0.05	< 0.05
A : B	t	4.51	3.111	0.1474	0.87
	p	< 0.05	< 0.05	> 0.05	> 0.05
A : C	t	0.52	3.91	1.39	0.122
	p	> 0.05	< 0.05	> 0.05	> 0.05
B : C	t	4.87	2.63	1.46	0.796
	p	< 0.05	< 0.05	> 0.05	> 0.05

a. Serum bilirubin (mg/dl)

The results show statistically significant increase in the level of total serum bilirubin in groups (A), (B), and (C) as compared to group (D) [$p < 0.05$].

However, no statistical difference was detected between groups (A - B), (A - C), and (B - C) as shown in table (III).

b. Serum transaminase (SGOT, SGPT)

S.G.P.T: Table II showed statistically significant increase in serum levels of G.P.T. in groups A, B, and C more than group D ($p < 0.05$). Also the difference between groups (A - B), (A - C), (B - C) was also statistically significant ($p < 0.05$), [Table III].

S.G.O.T: Table II reveals increase in serum levels of G.O.T in groups A, B, and C more than group D. The difference was statistically significant ($p < 0.05$). Also the statistical comparison between S.G.O.T. levels in groups (A - B), (B - C) was significant. Contrarily, no significant difference was found between the results of group (A - C), ($p > 0.05$), [Table III].

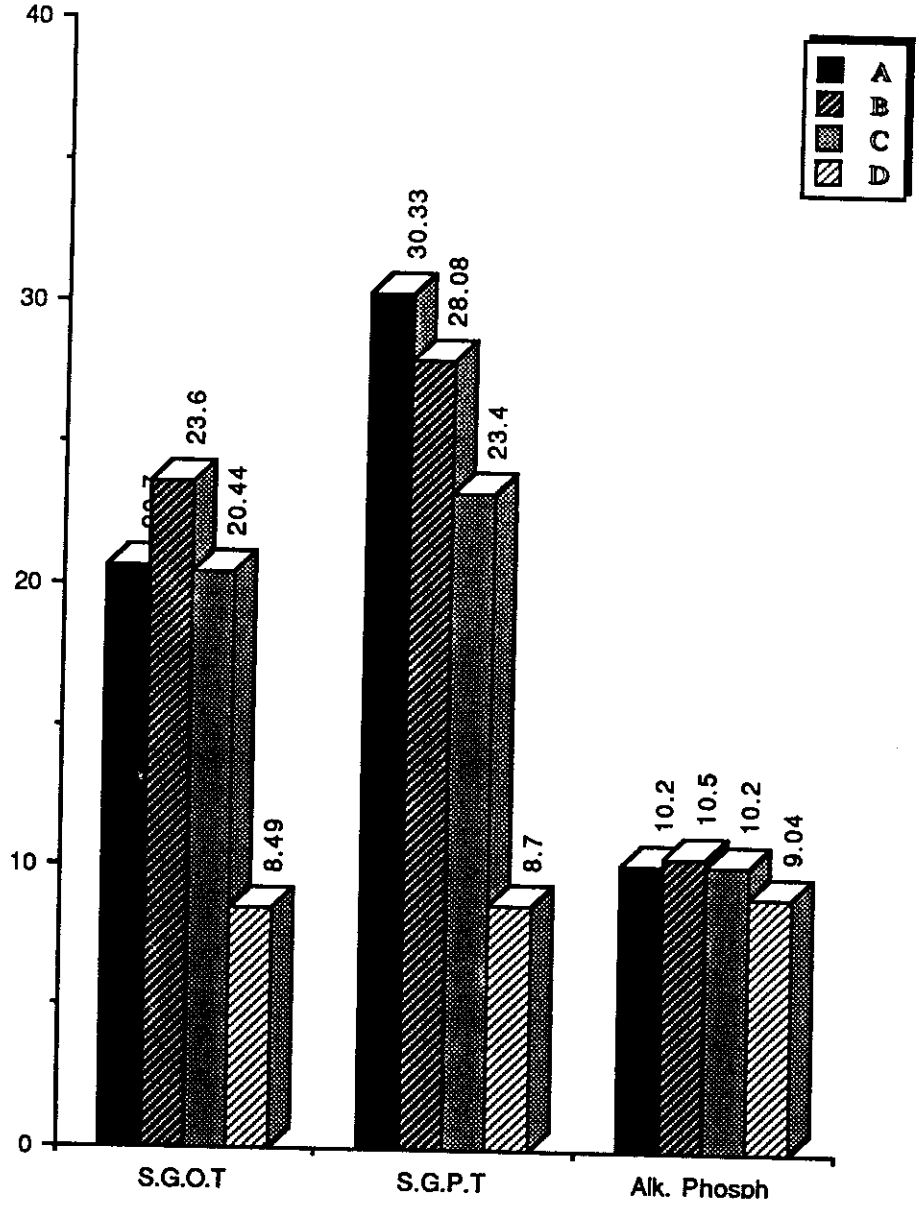
c. Serum Alkaline Phosphatase

Table II shows increased serum levels of alkaline phosphatase among patients in groups A, B, C as compared with those of group D. The difference was statistically significant ($p < 0.05$).

Also table III shows that the comparison between group (A - B), (A -C), (B - C), (B - C) was statistically insignificant ($p > 0.05$).

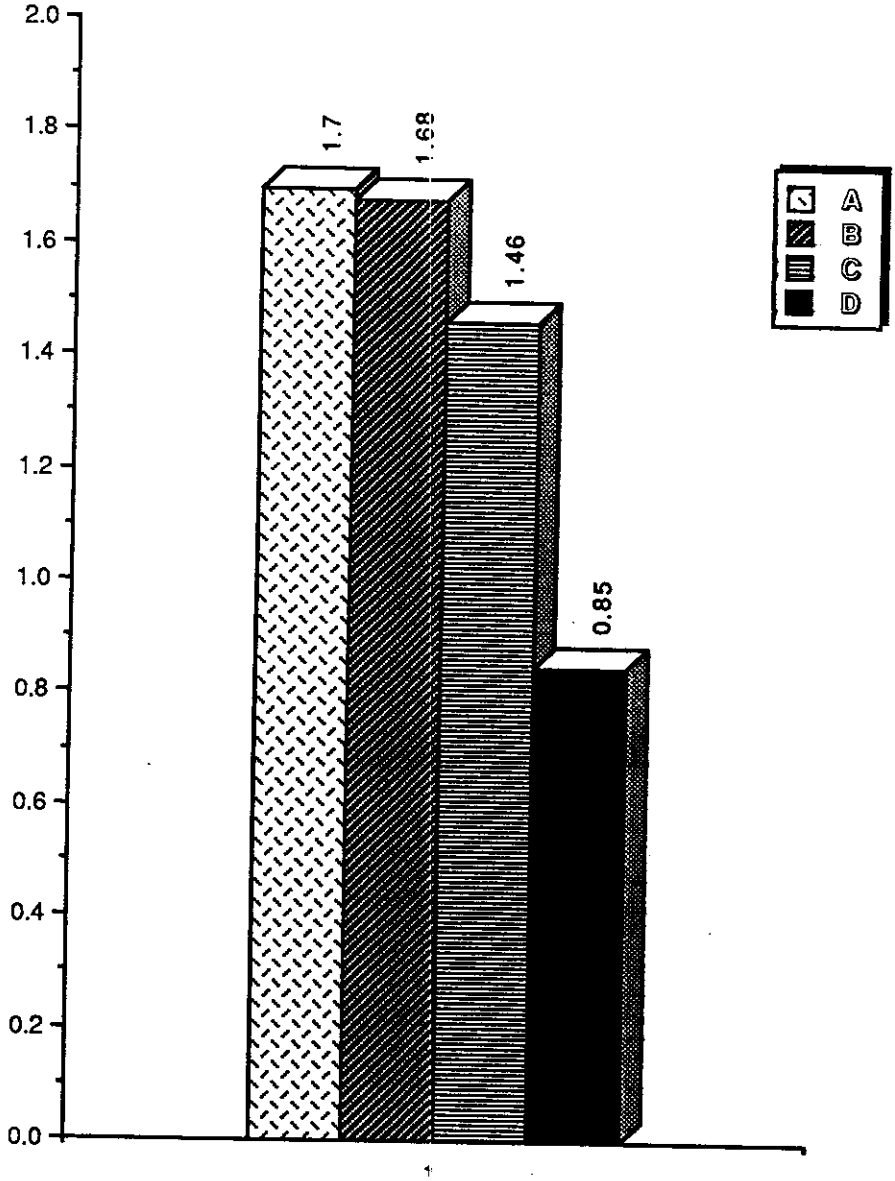
Bar chart showing mean values

of S.G.O.T, S.G.P.T, Alk. Phosph. in studies groups.



Bar charts showing mean values

of serum bilirubin level in studies groups



2. *Results of Coagulattion Profile*

Table IV

		P.T. (sec.)	P.T.T. (sec.)	B.T. (min.)	Platelet count x $10^3/mm^3$
A	x	15.3	59.1	9.7	146
	S.E.	0.490	0.5348	0.1664	2.3669
B	x	15.43	43.5	8.68	161
	S.E.	0.0643	0.3255	0.1269	1.692
C	x	14.84	41.71	7.96	163
	S.E.	0.1193	0.5943	0.2103	1.8346
D	x	13.3	36.08	3.37	223
	S.E.	0.0434	0.4056	0.0416	0.3798

Table V

Showing comparison between coagulation profile in all groups

		P.T. (sec.)	P.T.T. (sec.)	B.T. (min.)	Platelet count x $10^3/mm^3$
D : A	t	29.6	34.2	37.05	32.12
	p	< 0.05	< 0.05	< 0.05	< 0.05
D : B	t	26.8	14.33	39.14	53.92
	p	< 0.05	< 0.05	< 0.05	< 0.05
D : C	t	11.747	7.8	21.48	32.25
	p	< 0.05	< 0.05	< 0.05	< 0.05
A : B	t	1.05	12.13	4.95	5.05
	p	> 0.05	< 0.05	< 0.05	> 0.05
A : C	t	3.895	21.76	6.516	5.5
	p	< 0.05	< 0.05	< 0.05	< 0.05
B : C	t	4.37	2.74	2.85	0.75
	p	< 0.05	< 0.05	< 0.05	> 0.05

a. Prothrombin time (sec.) and bleeding time (min.)

The overall means of prothrombin time (sec.) in Table IV showing difference between groups A, B, C, and D. From this table, it is clear that prothrombin time was prolonged in groups A, B, and C more than group D, which is statistically significant ($p < 0.05$).

Also, the comparison between groups (A - B), (A - C), (B - C) was statistically significant as shown in Table V ($p < 0.05$).

The bleeding time was prolonged in groups A, B, and C more than group D, and the comparison between groups (A - B), (A - C), and (B - C) was statistically significant ($p < 0.05$). [Table V].

b. Activated partial thromboplastin time 'P.T.T.' (sec.)

The activated partial thromboplastin time (Tables IV & V) was found to be prolonged in groups A, B, and C more than group D. This was statistically significant. Also the difference between groups (A - B), (A - C), and (B - C) was statistically significant ($p < 0.05$).

c. The platelet count (x $10^3/mm^3$)

Data presented in Table IV & V represent the mean value of platelets count in patients of different groups. It is obvious that the platelet count was decreased in groups A, B, and C more than group D, which is statistically significant {$p < 0.05$).

Also, it was found that the platelet count was less in group A than in group B. Statistical comparison between all groups revealed that the difference in (A - B) and (A - C) was statistically significant ($p < 0.05$).

However, between (B - C), there was no statistical significance ($p > 0.05$) as shown in Table V.

3. Examination of stool for occult blood

Table VI shows the relation between occult blood in stool in different groups A, B, C, and D.

Table VI

Occult blood	A		B		C		D	
+ve	8	(53%)	5	(33%)	2	(13%)	0	(0%)
-ve	7	(47%)	10	(66%)	13	(80%)	15	(100%)
Total	15	(100%)	15	(100%)	15	(100%)	15	(100%)

(D - A)	:	x^2	8.25	$p < 0.05$
(D - B)	:	x^2	3.84	$p < 0.05$
(D - C)	:	x^2	0.536	$p < 0.05$
(A - B)	:	x^2	0.543	$p < 0.05$
(A - C)	:	x^2	3.75	$p > 0.05$
(B - C)	:	x^2	0.745	$p > 0.05$
(D - C)	:	x^2	4.07	$p < 0.05$

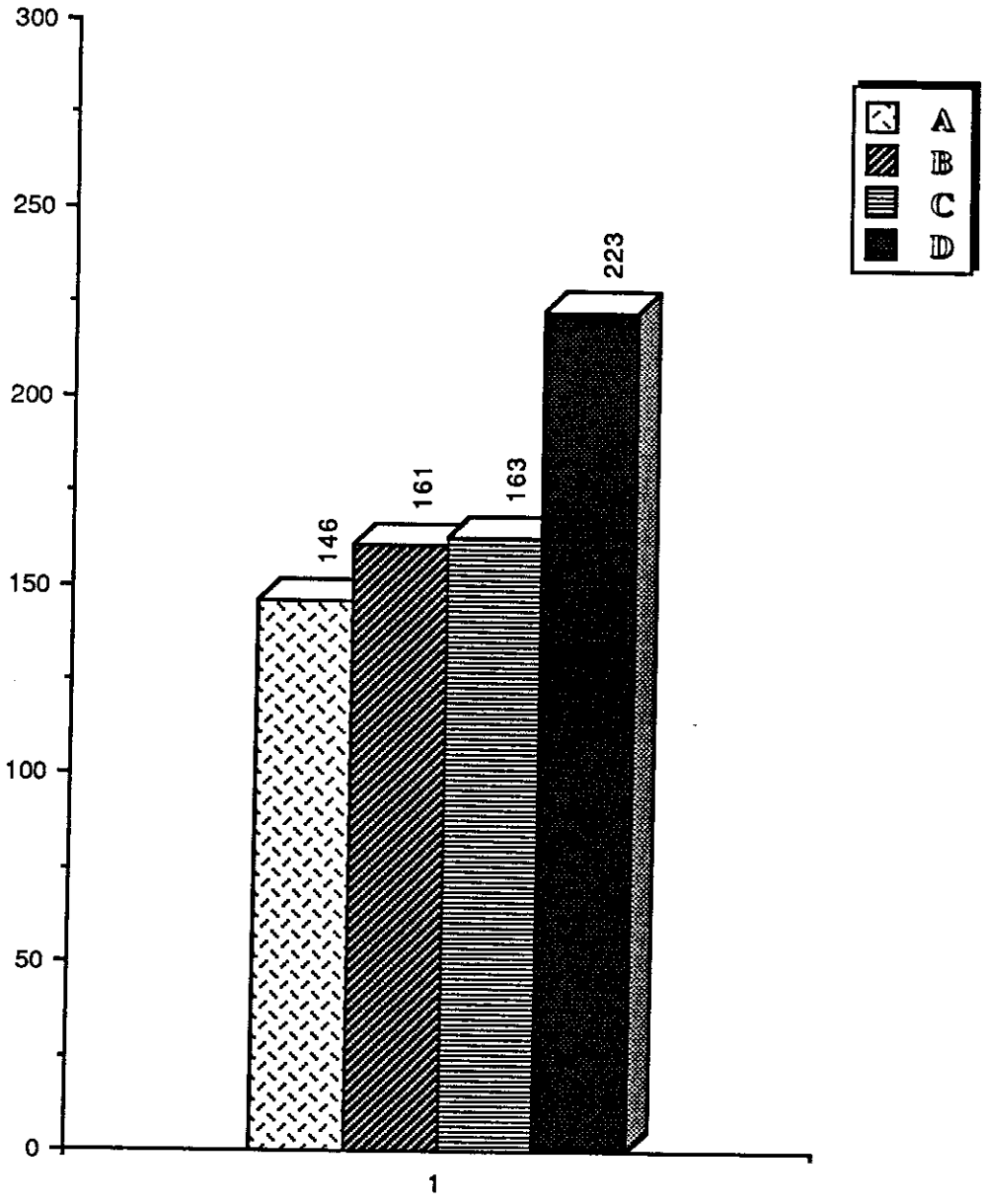
Among the 60 subjects involved in this study, it was found that occult blod in stool was positive in 15 patients.

* *In group (A):* occult blood was detected in the stools of 53% of patients which is statistically significant.

* *In group (B):* occult blood was detected in the stools of 33% of the patients, which is statistically significant.

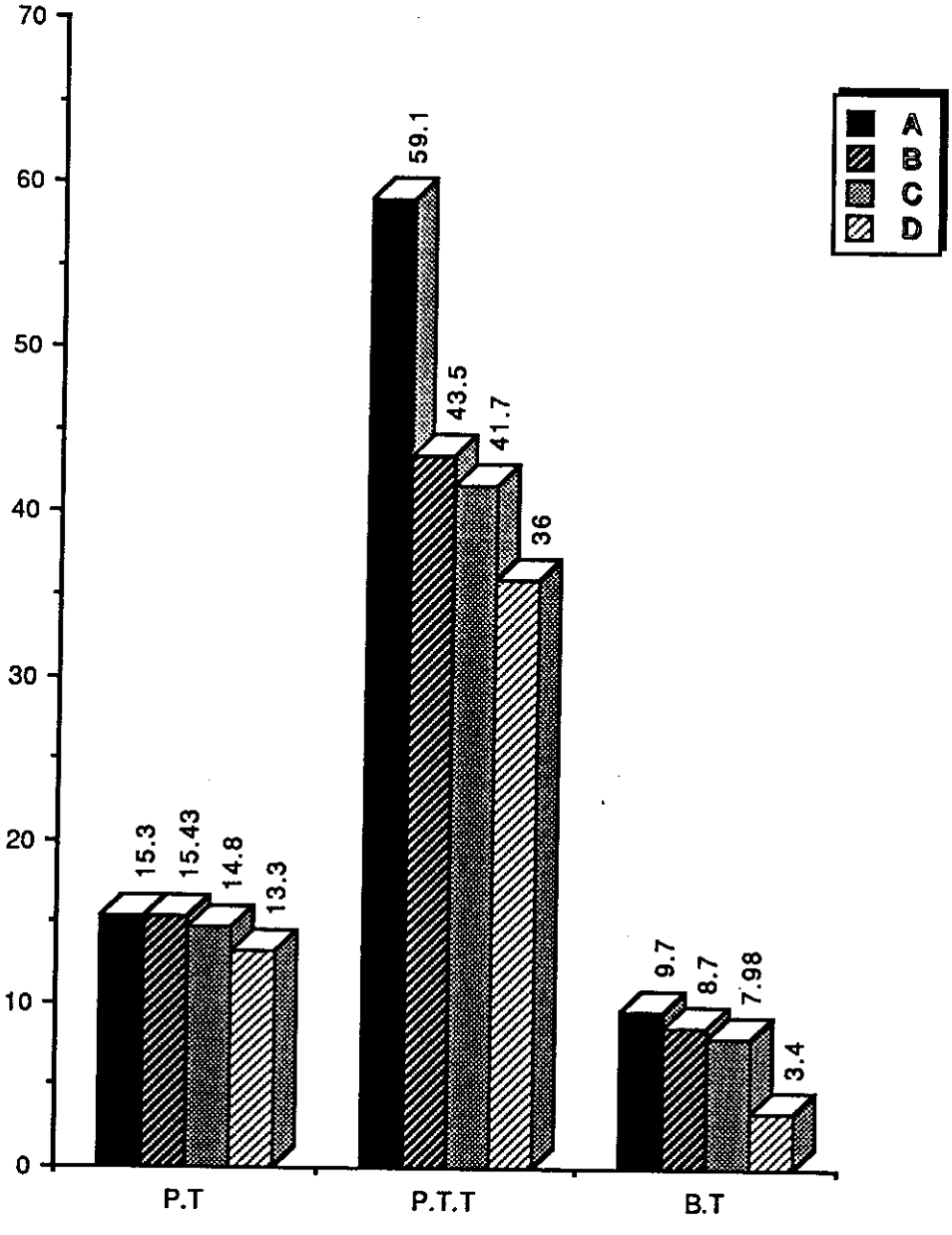
Bar charts showing mean values

of platelets count in studies groups



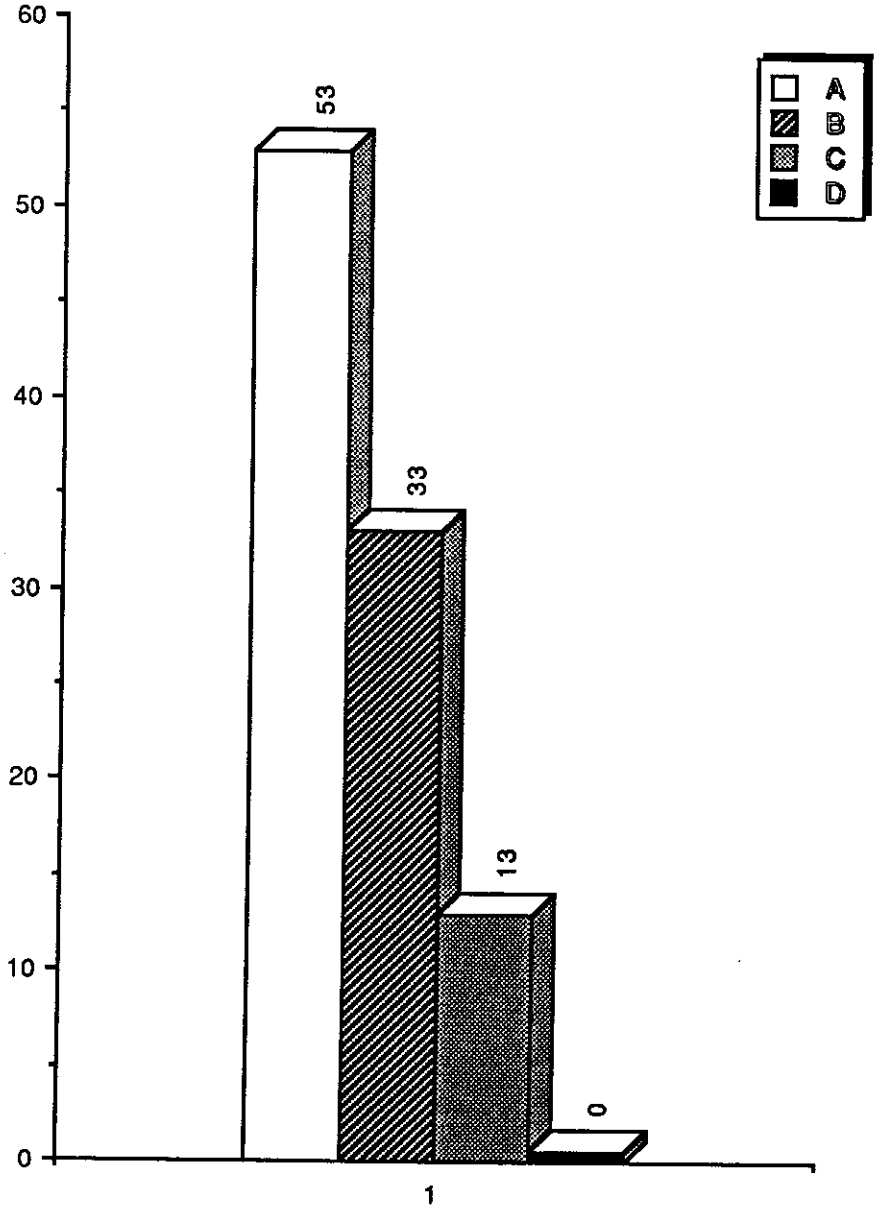
Bar charts showing mean values

of P.T, P.T.T, B.T, in studies groups.



Bar chart showing the relation between occult blood in stool in diferent groups

Percentage



* *In group (C):* The test was positive in 13% of the patients which is statistically significant.

However, when a comparison is made between the control group (D) and the sum of groups (B) and (C), which are the patients with no past history of haematemesis and/or melaena, the results show statistical significance.

* *In group (D):* the control group, the result was negative for occult blood in stool.

As shown from the table, the results revealed that the study of occult blood in stool in patients with chronic liver disorders was statistically significant.

III. Results of endoscopic examination

Varices were observed as submucosal bulging into the oesophageal lumen. They ran usually in a serpentine form, some extend more even to through the whole length of the tube. Large varices overlined by thin mucosa with red spots. In some cases, the mucosa on the varices was normal and the congestion was less.

This study was carried out on 60 patients which are classified according to the presence of varcies into 4 groups.

Table VII

	oesophageal varices			hiatus hernia	reflux oesoph.	lower end oesph.	gastritis		douadenitis	
	G II	G III	G IV				acut	ch.	non erosive	erosive
A	3	7	5	1	3	-	1	3	-	-
B	5	5	5	1	2	-	-	3	-	-
C	-	-	-	1	-	1	-	2	1	-
D	-	-	-	-	-	-	-	-	-	-

Group (A): Includes patients having chronic liver disorders and oesophageal varices with history of previous attack of haematemesis and/or maleana. Among this group 3 patients had grade II O.V., one of them had a small sliding hiatus hernia and 7 patients had grade III O.V. and 2 of them had reflux oesophagitis, and one had chronic gastritis.

Five patients had grade IV O.V., one of them acute gastritis and two had chronic gastritis and one had reflux oesophagitis.

Group (B): Patients having chronic liver disorder and O.V. without history of previous attack of haematemesis and/or meleana. It was found that 5 patients had grade II O.V., one of them had a small sliding hiatus hernia. Five patients had grade III O.V., one of them had reflux oesophagitis and one had chronic gastritis.

Five patients had grade IV O.V., two of them had chronic gastritis and one had reflux oesophagitis.

Group (C): Patients with chronic liver disorders without oesophageal varices. It was found that one patient had small sliding hiatus hernia with lower end oesophagitis. Two patients had chronic gastritis and one patient had non erosive douadenitis.

Group (D): The control group which was endoscopically free.