Results

This study included 30 patients; 16 males and 14 females with a ratio (8/7) and their ages ranged from 35 – 70 years (mean 55.83 ± 7.76 SD).

The baseline characteristics of the studied patients (n = 30) are listed in Table (٩)

Table (٩): Baseline clinical characteristics of the studies (Patients n = 30)

Age mean ± SD (55.83 ± 7.76)

	No	Percent %
Sex		
Male	16	53.3
Female	14	46.7
Rest angina	30	100%
Market E.C.G. ischaemic changes abnormalities	18	60%
Hypertension	18	60%
Diabetes mellitus	23	76.7%
Hyper cholesteraleamia	19	63.3%
Smoking	10	33.3%

Among 30 patients included in the study n = 16 patients (53.3%) had CTn I value > 0.6 ug/L (Group I) and n = 14 patients (46.7%) had CTn I < 0.6 ug/L group II.

The mean serum CTn I value was (0.24 ± 0.08) at oh in group 1 and was 0.16 ± 0.07 at oh in group II. P. value < 0.05. The mean serum

CTn I value was 0.7 ± 0.06 at 12h in group I and was 0.43 ± 0.112 at 12h in group II. P. value < 0.05. Table (5).

Table (5).

Parameter	Group I	Group II
CTn I	Mean ± S.D	Mean ± SD
at Oh	0.24 ± 0.08	0.16 ± 0.07 P < 0.05
at 12 hrs	0.70 ± 0.06	0.43 + 0.112 P < 0.05

Clinical Findings:

There was no significant relationship between the 2 groups as regard to risk factors of coronary artery disease. Table (6).

Table (6).

Parameters	Group I (n = 16)	Group II (n = 14)	P. value
Age	56.8 ± 7.3	54.7 ± 8.3	P > 0.05
Sex M/F	9/7	7/7	P > 0.05
D.M	13(81.3%)	10(71.4%)	P > 0.05
HTN	10(62.5%)	8(57.1%)	P > 0.05
Hypercholest	10(62.5%)	9(64.3%)	P > 0.05
Smoking	5(31.3%)	5(35.7%)	P > 0.05

Patients in group I had a significantly longer duration of anginal pain (29 ± 15 vs 9 ± 7 min, P < 0.0001) than those from group (II).

More patients from group I had significantly unstable angina of Braunwald's class III (A and B) than those from group II.

n = 15 (93%) vs n = 8 patients (57%) (P. value < 0.05).

Patient in group I had higly significant marked ECG changes n = 15 (93%) vs (21%). P. value < 0.001 on the ECG during admission than those from group I (Table 7).

Table (7)

Parameter	Group I (n = 16)	Group II (n = 14)	P. value > 0.05
Mean duration of anginal pain	29 ± 15	9 ± 7 min	< 0.001
Braudwald's Class III (A&B)	n = 15(93%)	n = 8 (57%)	P < 0.05
Marked E.C.G. changes ST. depression T wave inversion ≥ 0.2 mv	n = 15 (93%)	n = 3 (21%)	P < 0.001

Angiographic Findings:

With regard to the number of vessels involved 3 patients from group II had no vessel involved vs no patients from group I (21.4% vs 0%), 3 patient from group I had single vessel disease vs 7 patients from group II (18.7% vs 50%), 6 patients from group I had double vessel disease vs 4 patients from group II (37.5% vs 28.57), while 7 patients from group I had triple vessel disease vs no patient from group II (43.75% vs 0%), respectively with P value < 0.001. there is a highly significant correlation between level of trophonin I and number of vessel involved.

Type of culprit lesion according AHA/A.C.C. score, 1 patient from group I had type A lesion vs 3 patients from group II (6.25% vs 21.42%),

2 patients from group I had type B, lesion us 4 patients from group II (12.5% vs 28.5 5.74).

Only patient from group I had type B_2 culprit lesion vs 3 patients from group II (6.25% vs 21.42%), while 12 patients from group I had type C lesion vs 4 patients from group II (75% vs 28.57%) with P value = 0.087. There was a Bordeline significant correlations between level of troponin I and culprit lesion score AHA/ACC.

Only patient from group I had intra coronary thrombus (6.25% vs 0%) P value > 0.05.

With regard to TIMI grade flow in the culprit artery 10 patients from group I had grade 0 vs 1 patient. From group II (62.5% vs 7.14), 4 patients from group I had grade vs 3 patients from group II (25% vs 28.57%).

1 patient from group I had TIMI grade flow 2 vs 4 patients from group II (16.66vs 28.57).

1 patient from group I had grade 3 vs 6 patients from group II (6.25% vs 42.85%). P value < 0.001. There was a highly significant correlation between level of troponin and TIMI ggrade flow.

11 patients from group I had LV ejection fraction < 40% vs 2 patients from group II (68.75% vs 14.28%). P < 0.0001. there was a highly significant correlation between level of Troponin and LV ejection fraction < 40%.

With regard to culprit lesion location, 4 patients from group I had left main culprit lesion vs no patient from group II (25% vs 0%). P value = 0.06. This correlation was bordline significant.

8 patients from group I had LAD culprit lesion vs 6 patients from group II (50% vs 42.85%), 2 patients from group I had ex culprit lesion vs 4 patiens from group II (12.5% vs 28.57%).

2 patients from group I had R.C.A. culprit lesion vs 1 patient from group II (12.5% vs 7.14). P value > 0.05

ANGIOGRAPHIC FINDINGS

Parameters	All Patients		Group I		Group II		P. value
	No	%	No	%	No	%	
	30	100	16	53.3	14	46.6	
Number of vessels involved							
0	3	10	-	-	3	21.42	
Single	10	69	3	18.7	7	50	< 0.001
Double	10	69	6	37.5	4	28.57	
Triple	7	23.33	7	43.75	-		
Culprit lesion AHA/ACC score							
A	4	13.3	1	6.25	3	21.42	
B_1	6	20	2	12.5	4	28.57	P = 0.087
B_2	4	13.3	1	6.25	3	21.42	
C	16	53.3	12	75	4	28.57	
Thrombus	1	3.3	1	6.25	-	-	P > 0.05
TIMI Grade Flow							
0	11	36.66	10	62.5	1	7.14	
1	7	23.33	4	25	3	21.4	P < 0.001
2	5	16.66	1	6.25	4	28.57	
3	7	23.33	1	6.25	6	42.85	
L.V Ejection Fraction < 40%	13	43.33	11	68.75	2	14.28	P < 0.0001
Culprit lesion location							
- Left main lesion	4	13.33	4	25	0	0	P = 0.06
- LAD	14	46.66	8	50	6	42.85	> 0.05
- CX	6	20	2	12.5	4	28.57	> 0.05
- R.C.A	3	10	2	12.5	1	7.14	> 0.05

Table (8)

- **Early follow** up 15 days events only 4 patients from group I underwent revascularization during early follow up period because of failure of medical treatment vs no patient from group II (25% vs 0%). P = 0.057. It was bordline significant correlation.
- Death for only one patients from group I during early follow up period.

Table (9): Early follow up 15 days events

Parameters	Group I	Group II	P. value
Revascularization DTCA + CABG	4(25%)	-	P = 0.057
Death	1(6.25%)	-	P > 0.05

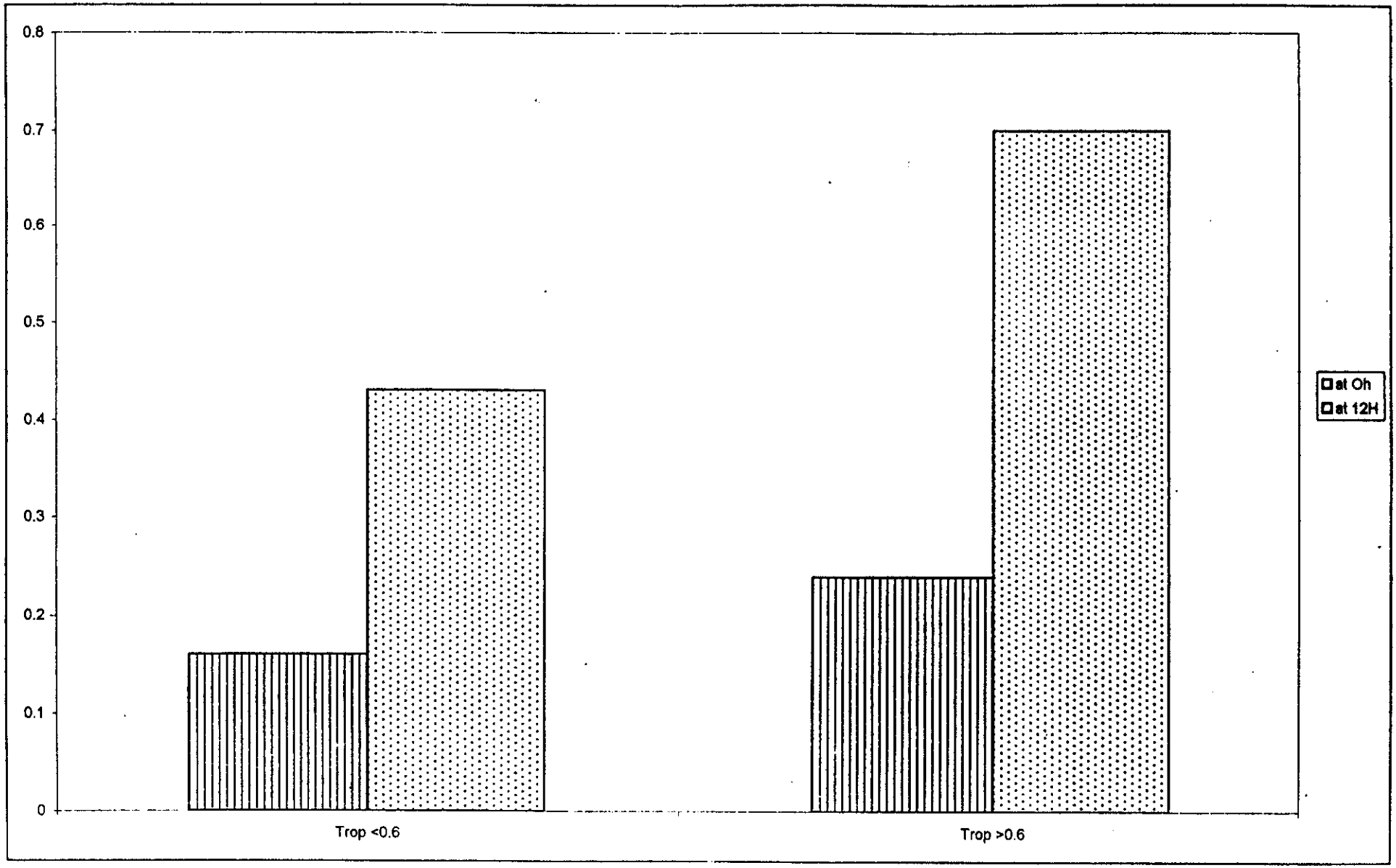
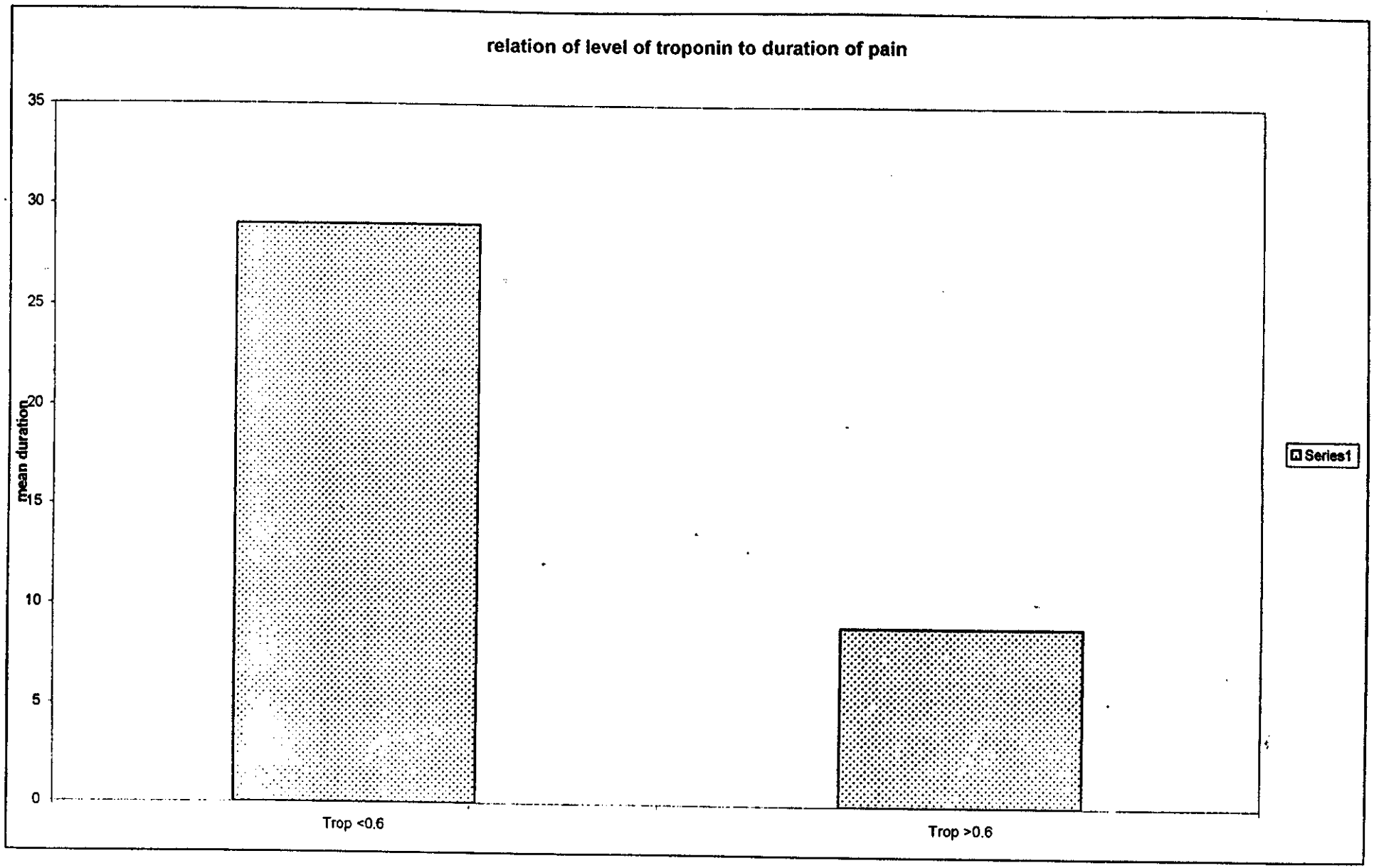
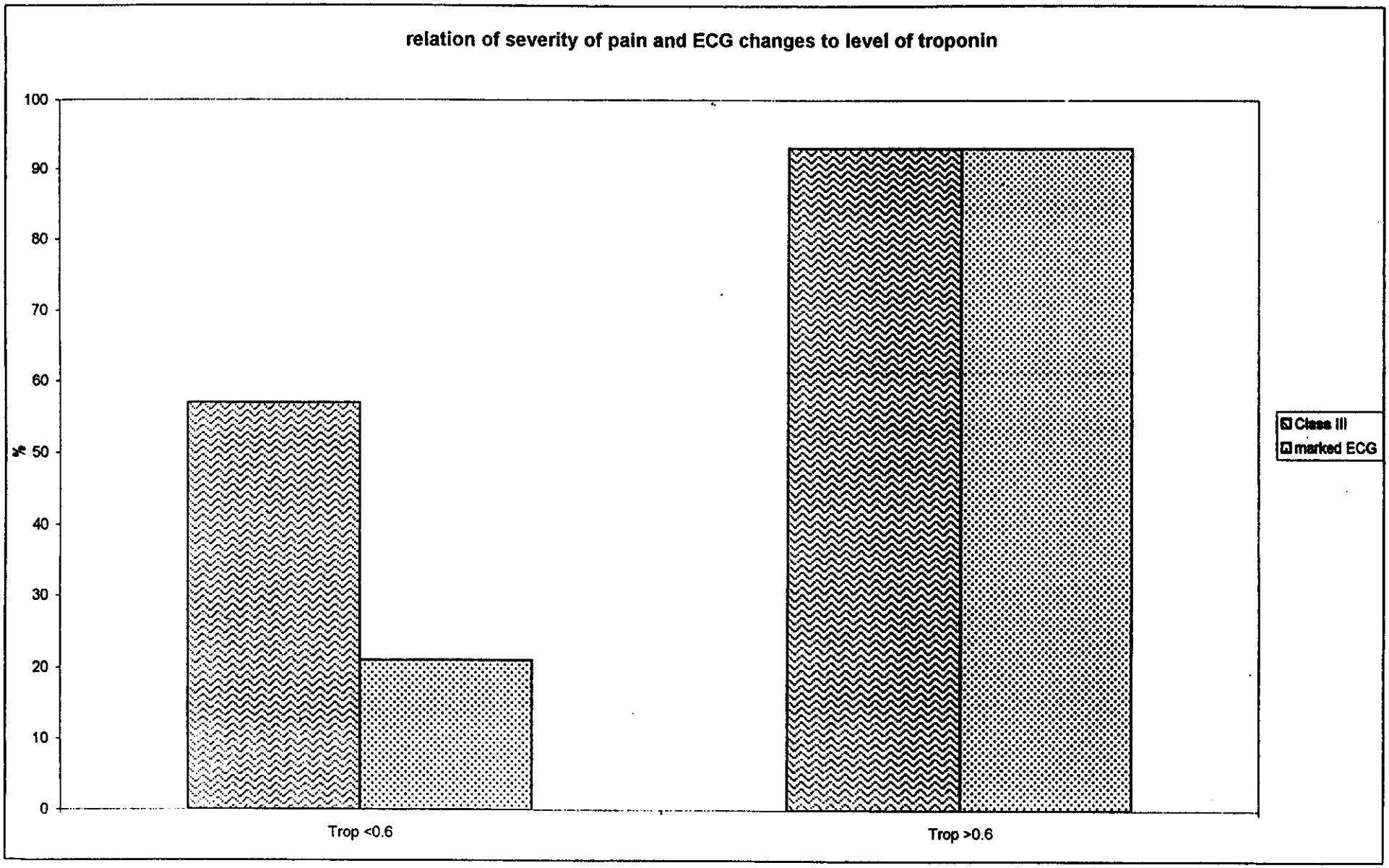


Fig 11


relation of level of troponin to duration of pain
35
30
25
20
15
10
5
0
mean duration
Trop <0.6
Trop >0.6
Series1


relation of severity of pain and ECG changes to level of troponin
100
90
80
70
60
50
40
30
20
10
0
%
Trop <0.6
Trop >0.6
Class III
marked ECG

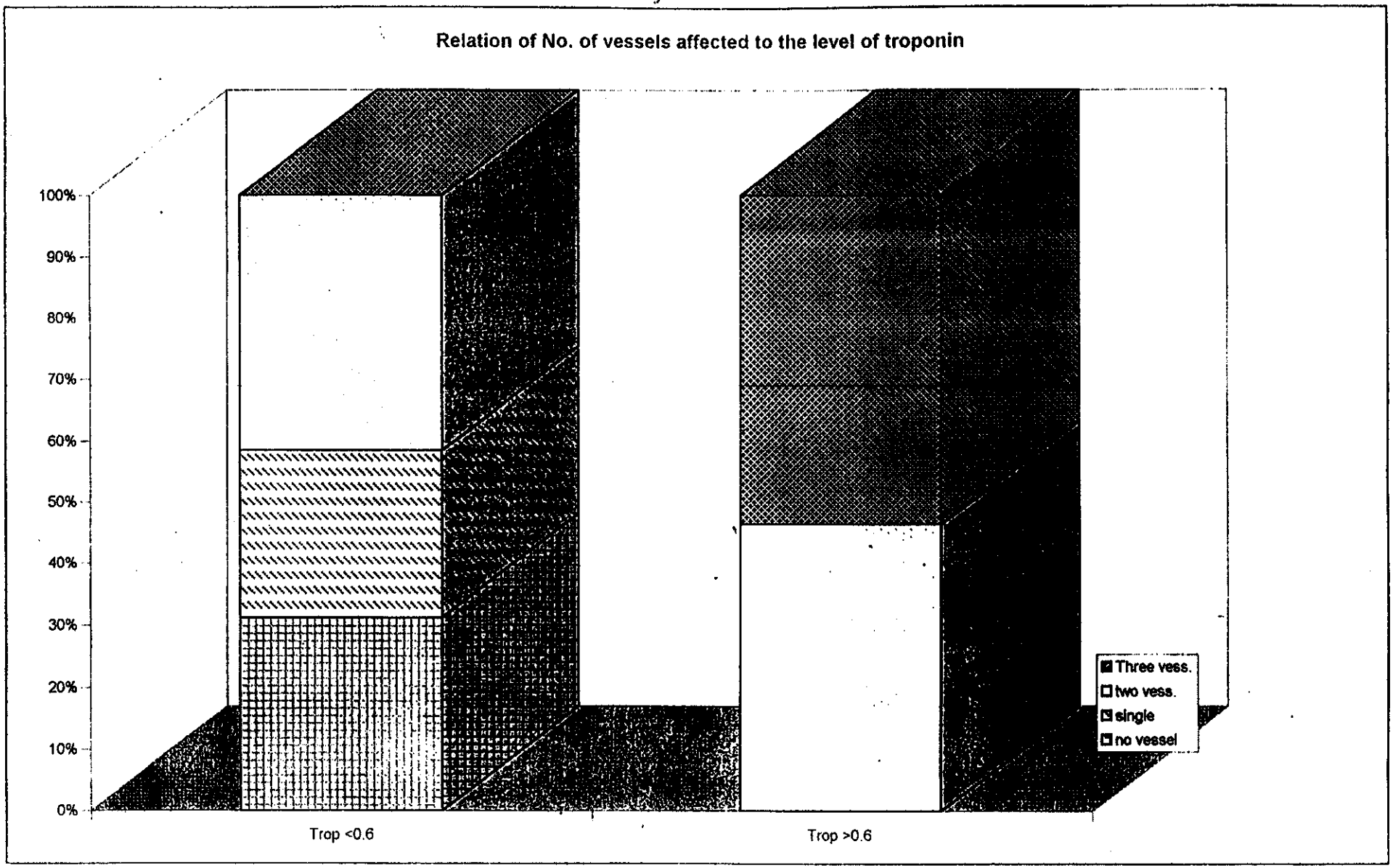

Relation of No. of vessels affected to the level of troponin
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Trop <0.6
Trop >0.6
Three vess.
two vess.
single
no vessel

Fig 14

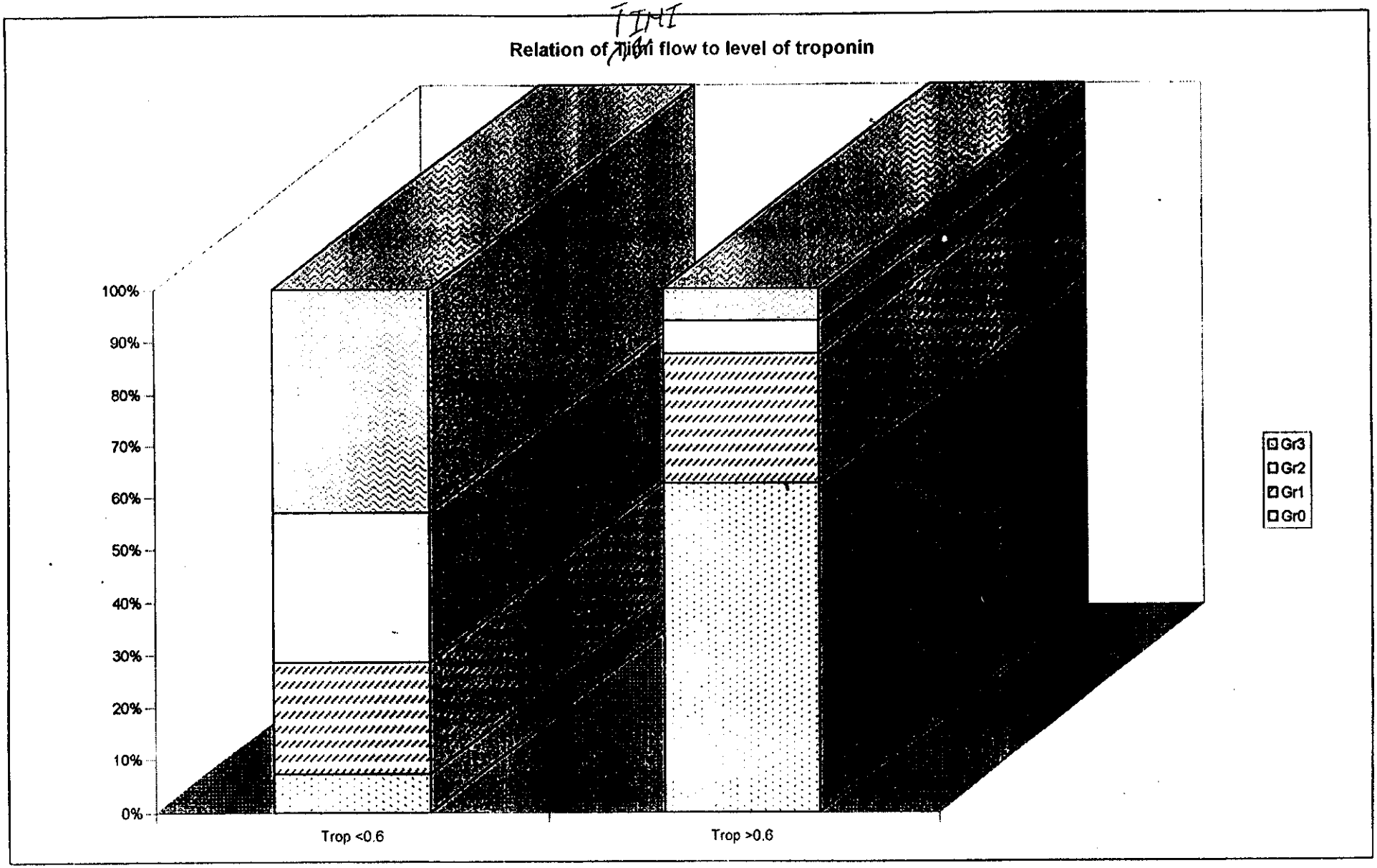

Relation of TIMI flow to level of troponin
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Trop <0.6
Trop >0.6
Gr3
Gr2
Gr1
Gr0

Fig 15

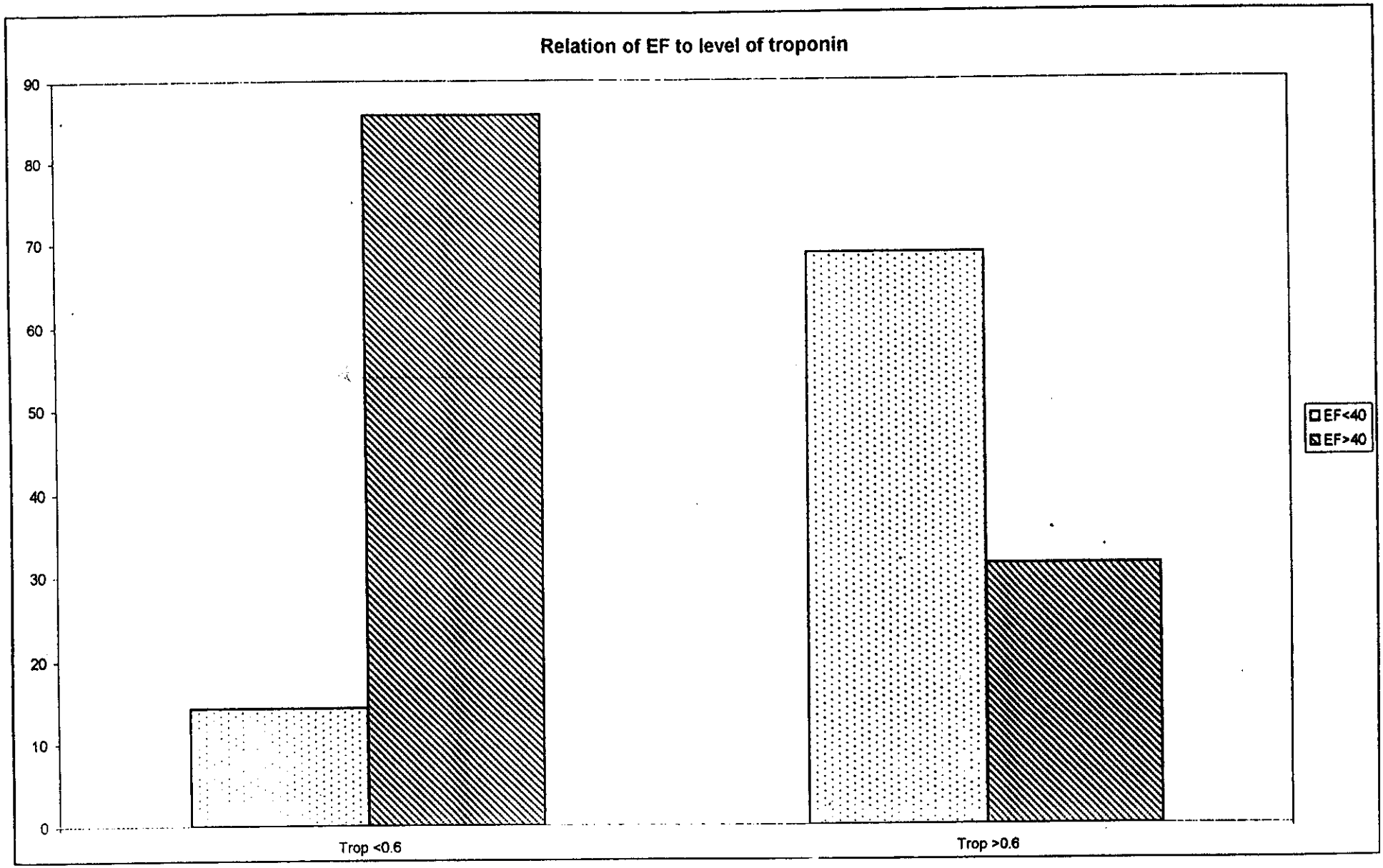

Relation of EF to level of troponin
90
80
70
60
50
40
30
20
10
0
Trop <0.6
Trop >0.6
EF<40
EF>40

Fig 16

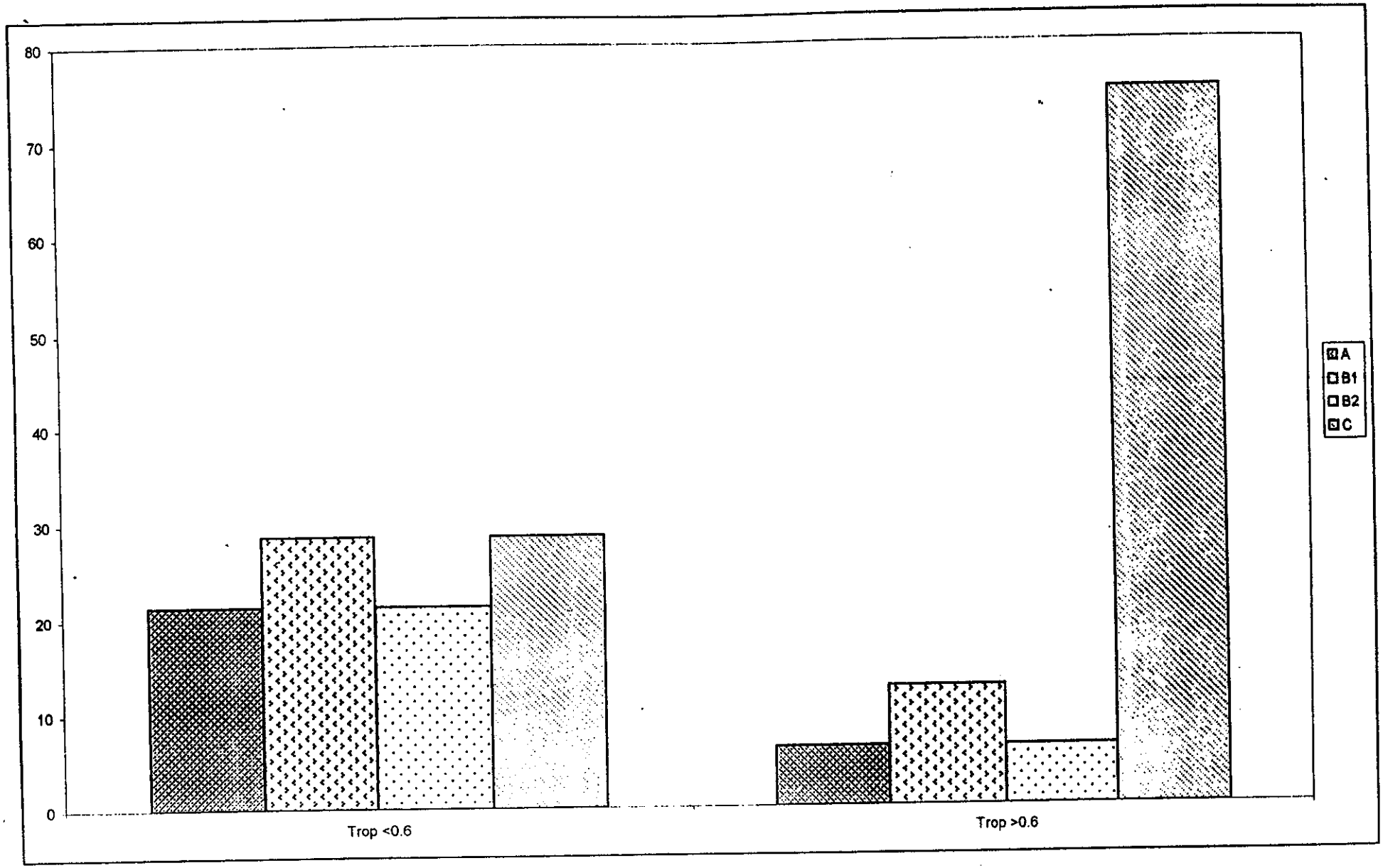


Fig 17

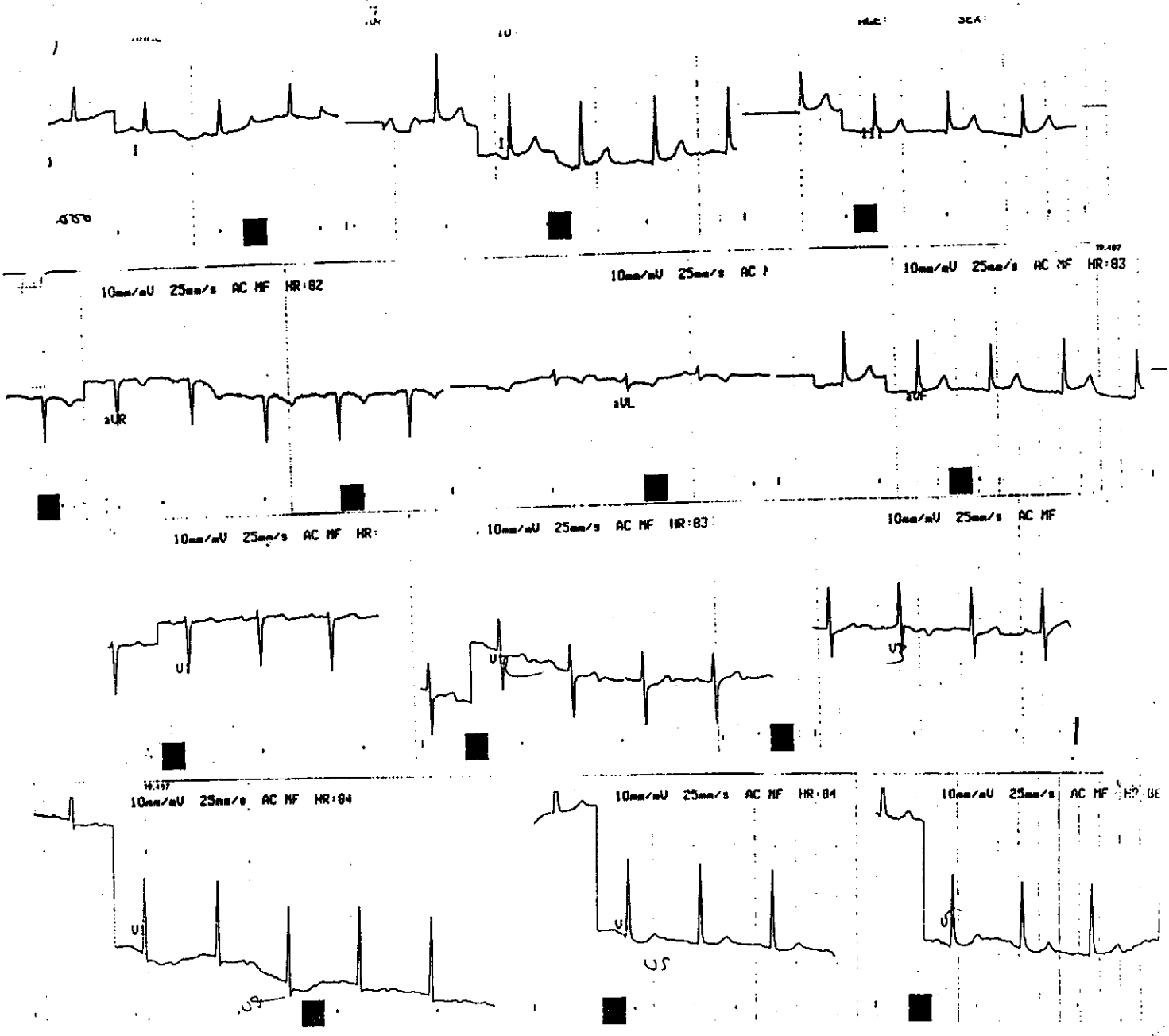


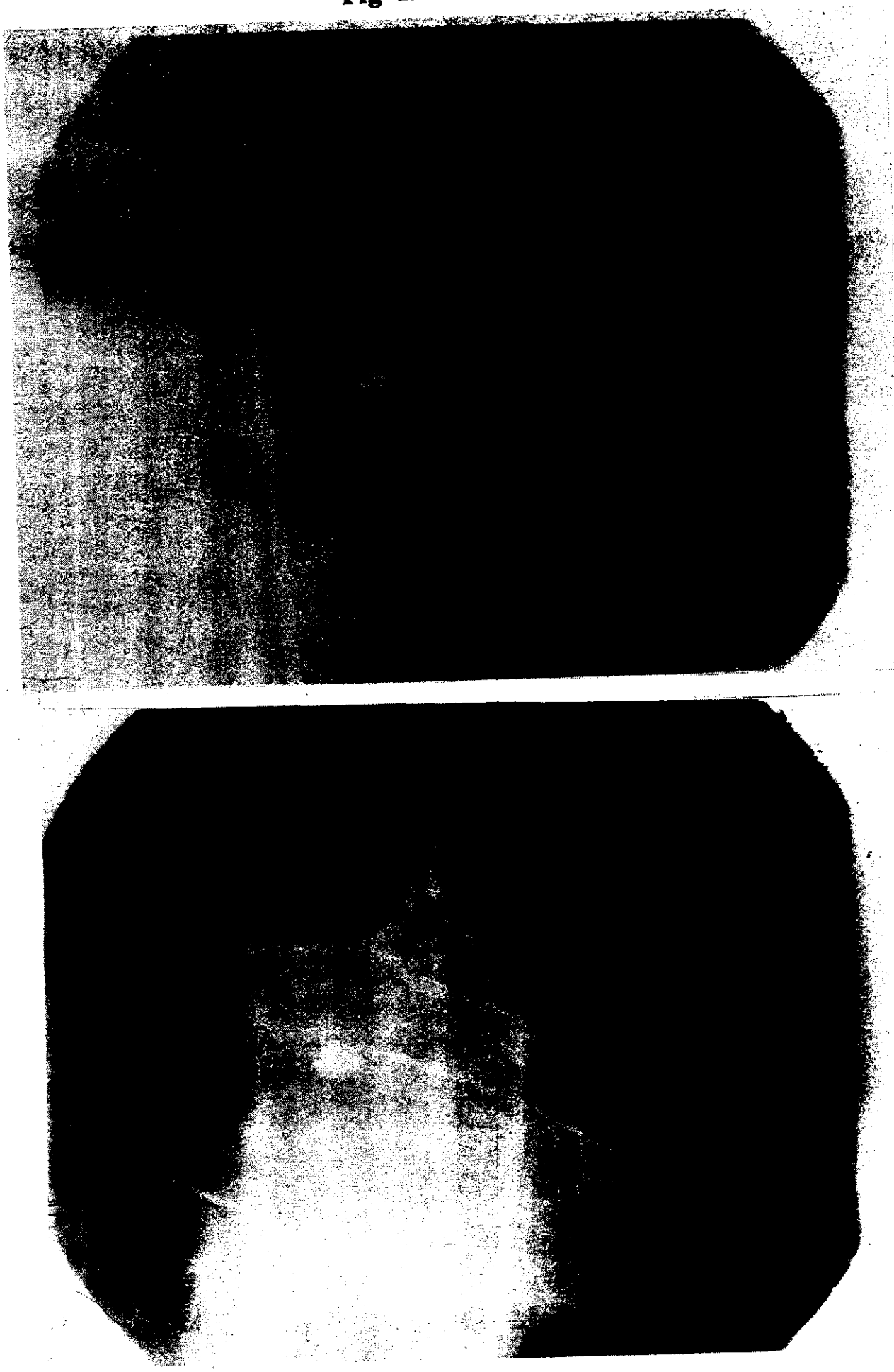
Fig 18

12 lead E .C.G of one of our patients no (3) showing marked ST&T wave changes.

Fig 19 A

Coronary angiogram of one of our patients no. (3) showing eccentric lesion about 99% in L.CX . after 1st. o.M.

Fig 19 B



P.T.C.A. and stent for patient no.(3)

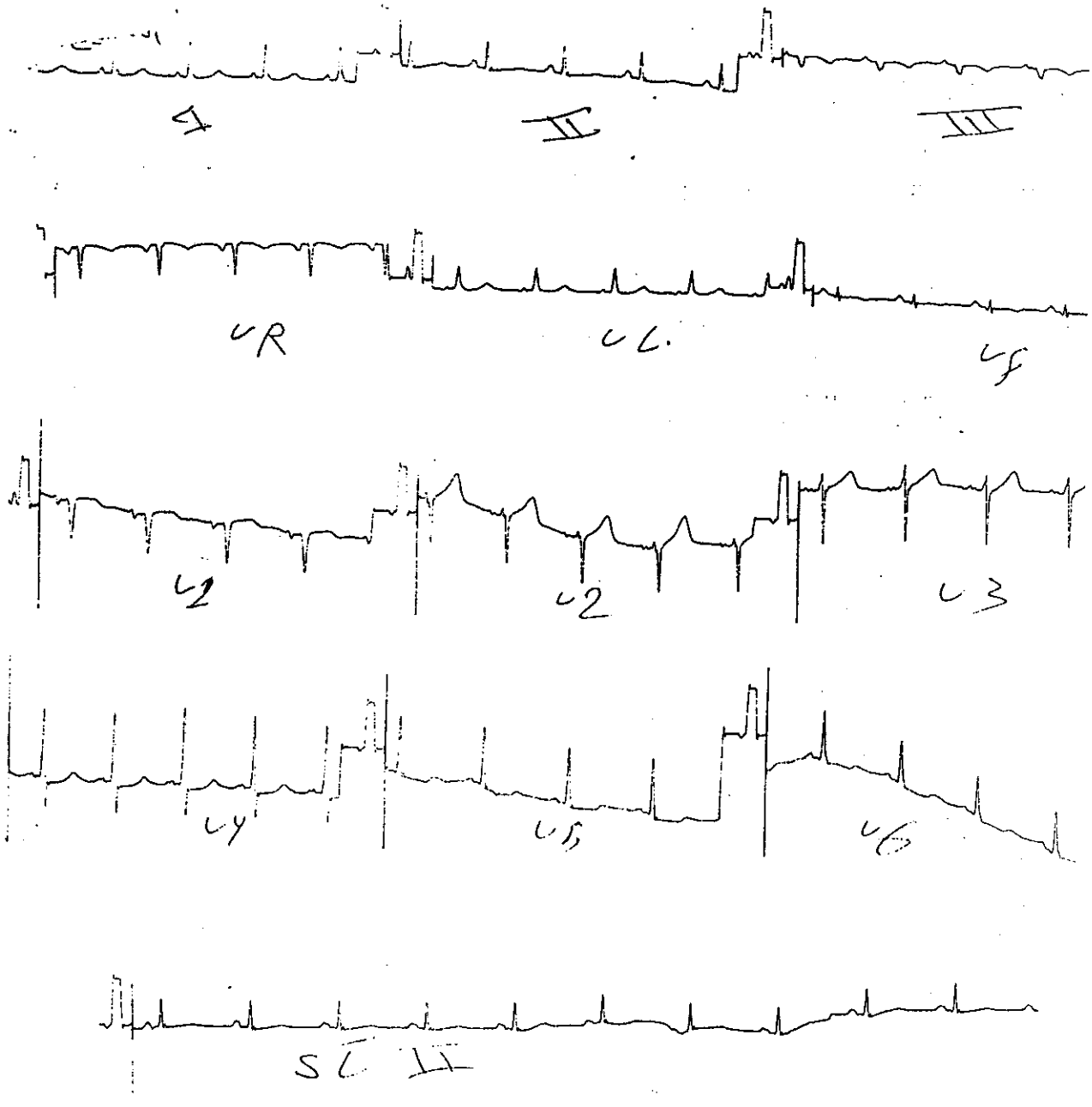


Fig 20

12 lead E .C.G of one of our patients no (16) showing marked ST&T wave changes.

Coronary angiogram of the of the
lesion about 99% in left circumflex (L.CX.) before bifurcation.

Fig 21 A

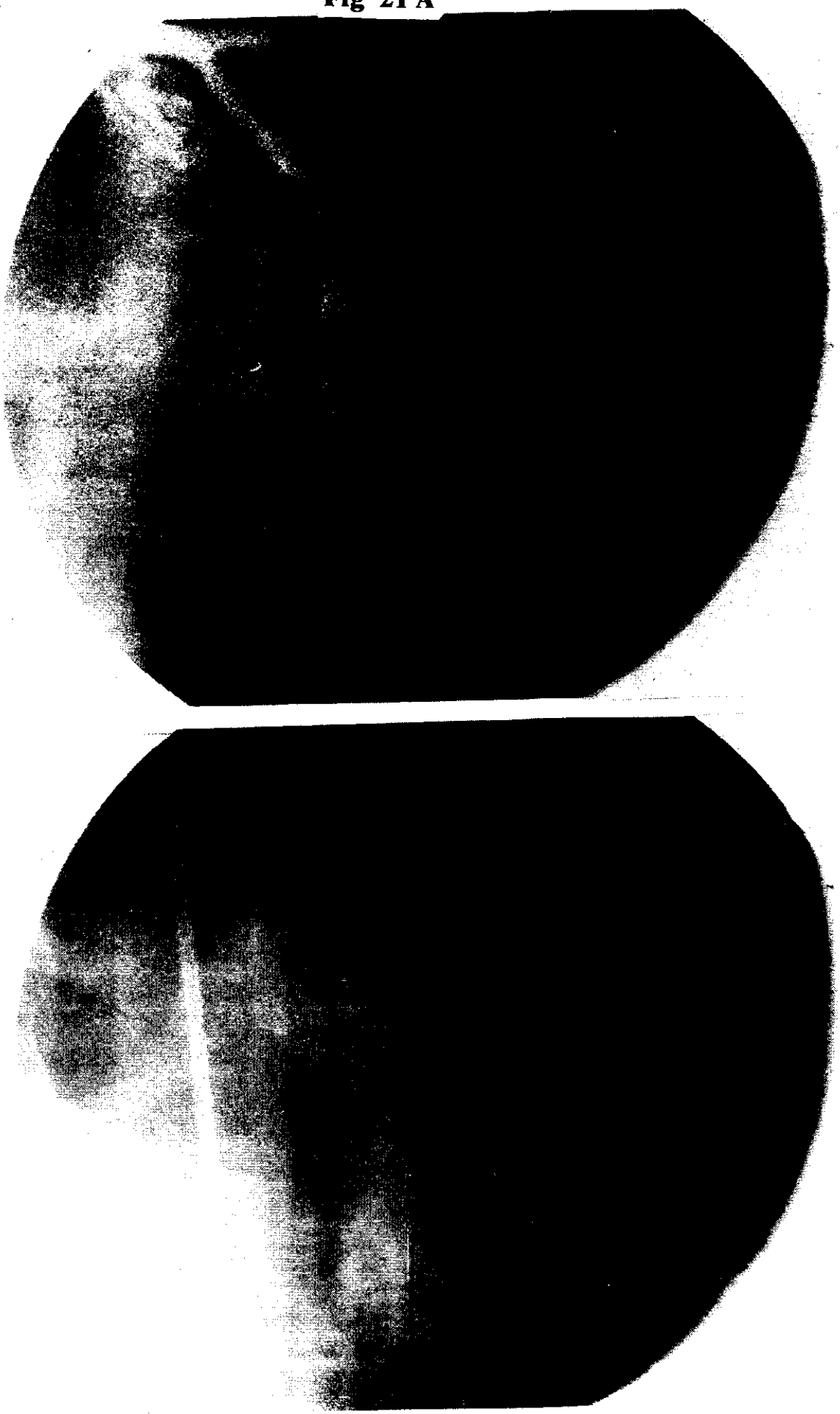


Fig 21 B

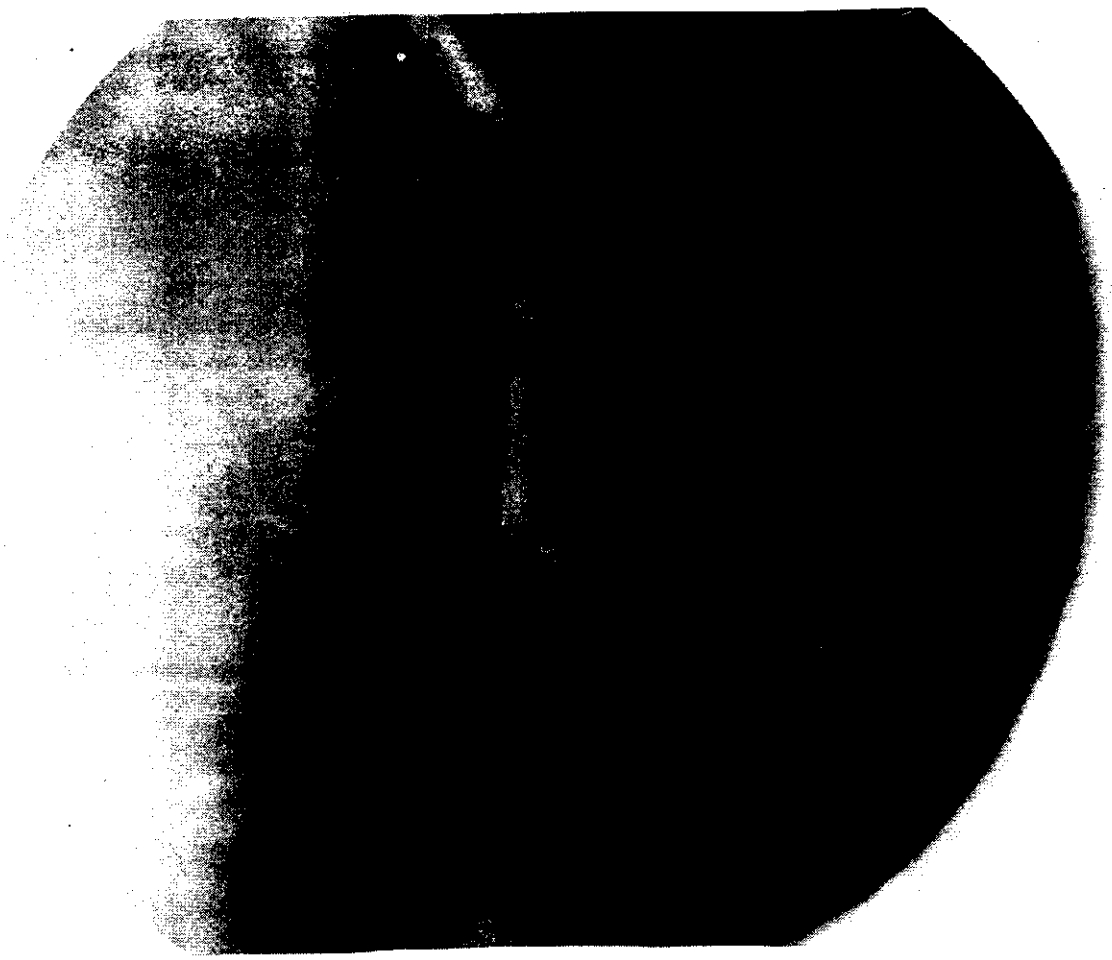


Fig 21 C

P.T.C.A. and stent for patient no.(16)

Pts. No.	Studied Risk Factors						Lab.		Clinical	
	Age Ys	Sex	D.M.	HTM	Smoking	Hypercholest.	CTnI		Duration of Chest Pain Min	Braunwald Classification
							Oh	12 h		
1	58	M	-	+	+	+	0.15	0.5	1 e	IIIA
2	45	F	+	+	-	-	0.06	0.45	7	IIA
3	52	M	+	-	-	+	0.2	0.75	30	IIIB
4	65	M	+	+	-	+	0.1	0.65	40	IIIB
5	49	M	+	+	+	-	0.3	0.7	35	IIIA
6	45	F	+	-	-	+	0.06	0.56	15	IIIB
7	71	F	+	+	-	+	0.09	0.4	10	IIB
8	58	M	-	+	-	-	0.3	0.85	20	IIIB
9	56	M	+	-	-	+	0.15	0.3	5	IIIA
10	54	F	+	+	-	-	0.25	0.45	4	IIIA
11	60	F	+	+	-	-	0.3	0.65	32	IIIA
12	53	M	-	-	-	-	0.25	0.54	9	IIA
13	65	M	-	+	-	+	0.25	0.65	45	IIIB
14	72	F	+	+	-	+	0.3	0.8	39	IIIA
15	48	M	+	+	-	+	0.15	0.4	8	IIA
16	51	F	+	-	+	+	0.2	0.79	40	IIIB
17	51	F	-	-	+	-	0.15	0.59	16	IIIB
18	54	M	+	-	-	-	0.2	0.71	18	IIIA
19	58	F	+	+	-	-	0.15	0.2	3	IIA
20	54	F	+	+	-	-	0.35	0.7	15	IIIA
21	67	M	+	-	+	+	0.3	0.54	10	IIIA
22	57	M	+	-	+	+	0.26	0.7	30	IIIB
23	59	M	+	+	+	+	0.3	0.8	40	IIIA
24	45	M	+	+	-	-	0.15	0.3	5	IIIB
25	44	F	+	-	-	-	0.3	0.65	35	IIB
26	50	F	+	+	-	+	0.2	0.4	12	IIA
27	47	F	+	+	-	+	0.3	0.61	15	IIIB
28	64	M	+	+	-	+	0.2	0.65	25	IIIA
29	65	M	+	+	+	+	0.15	0.4	7	IIA
30	59	F	-	-	-	+	0.2	0.65	19	IIIB

Pts. No.	E.C.G.		Coronary Angiography							
	Minor ischeamic E.D.G changes ST ↓, T wave ↓ > 0.1 mv	Marked E.C.G changes ST ↓, T wave inversion ≥ 0.2 mv	Number of vessels invoved				Culprit Artery	Culprit Lesion Score AHA/ACC	TIMI grade low inculprita	L.V.E.F. < 40%
			Single	Double	Triple	0				
1	+		+				LAD	A	0	
2	+		+				LAD	A	2	+
3		+	+				CX	C	1	+
4		+		+			LAD	A	0	+
5		+		+			LT main	B_1	1	+
6	+		+				LAD	B_2	3	
7		+				+	---	B_2	2	+
8		+			+		LT main	C	0	
9	+					+	---	C	3	+
10		+	+				LAD	B_1	1	
11		+			+		LAD	C	0	+
12	+			+			LAD	C	2	
13		+			+		LAD	C	0	+
14		+	+				LT main with Thrombus	C	0	+
15	+					+	—	A	3	
16		+	+				CX	C	1	+
17	+			+			RCA	B_1	3	
18		+		+			LAD	C	2	+
19	+			+			LAD	B_2	1	
20		+			+		LAD	C	0	+
21	+		+				CX	B_1	2	
22		+			+		LAD	C	0	+
23	+				+		RCA	C	3	
24	-	-	+				CX	C	3	
25		+			+		LT main	B_1	0	
26		+		+			CX	C	3	
27		+		+			RCA	C	1	
28		+		+			LAD	C	0	
29			+				CX	B_1	1	+
30		+		+			LAD	B_2	0	+

Early Follow up < 15 days

Pts. No.	Revascularization PTCA or CABG	Death
1		
2		
3	+	
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16	+	
17		
18		
19		
20		
21		
22		
23		+
24		
25		
26		
27		
28		
29		
30		