RESULTS

Table (3): Demographic Data.

	Control group	Patient group	P
Age(mean ±SD	45±9	45±10	>0.05
Males(%)	70%	72%	>0.05
Females(%)	30%	28%	>0.05

There is no significant difference between patients with unstable angina and control group as regard age and sex.

Table (4): Comparison between patients with unstable angina and controls as regard NN50.

Groups / Variables	Control group	Unstable angina	T	P
	Mean ±SD	Mean ±SD		
NN50(ms)	20.1±4.3	3.2±1.6	10.6	<0.01

There is significant difference in NN50 between unstable angina and control group.

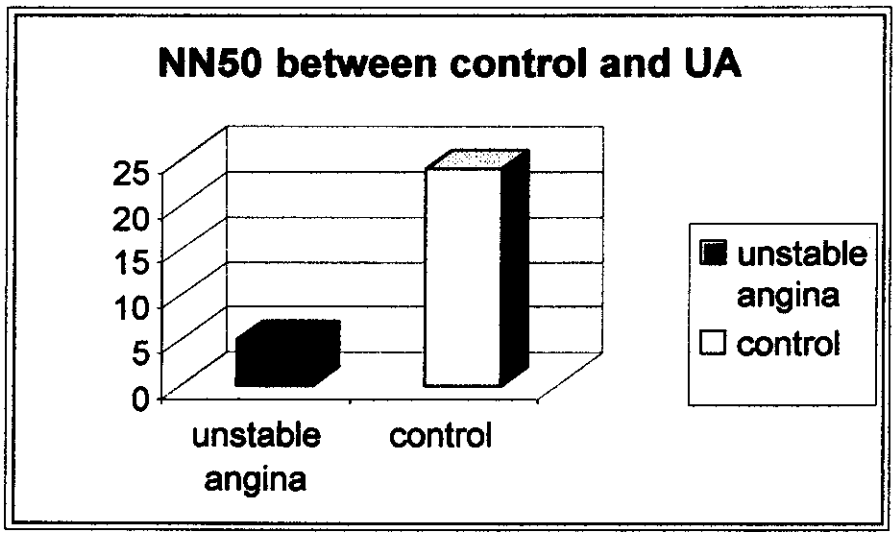

Figure (1): There is significant difference in NN50 between unstable angina and control (p<0.01).

Table(5): Comparison between patients with unstable angina and controls as regard rMSSD.

Groups / Variables	Control group Mean ±SD	Unstable angina Mean ±SD	T	P
rMSSD(ms)	42.1±6	10.11±2.7	15.5	<0.01

There is significant difference in rMSSD between unstable angina and control group.

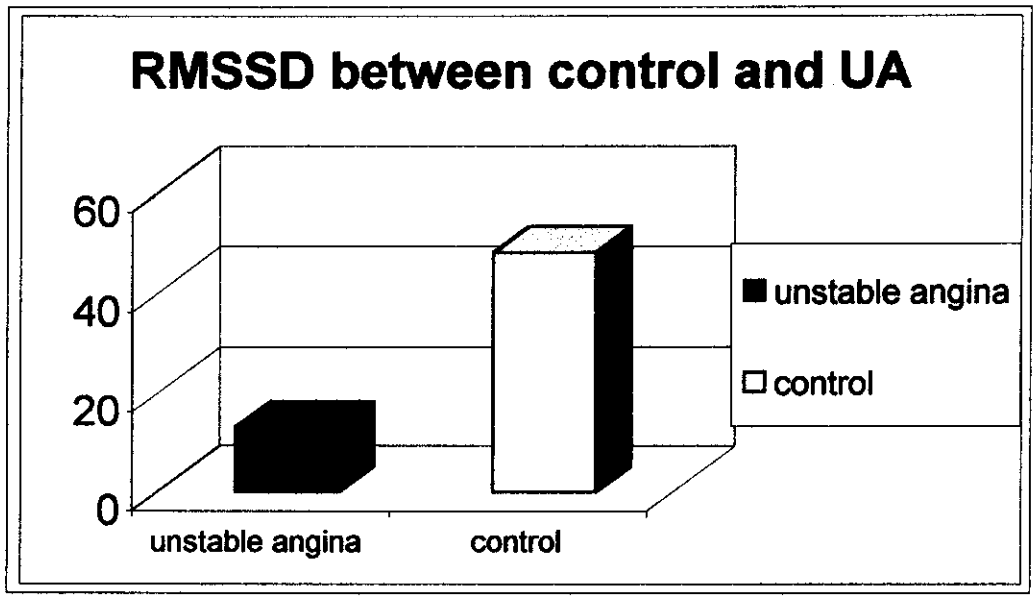

Figure (2): There is significant difference in rMSSD between unstable angina and control group (p<0.01).

Table (6): Comparison between patients with unstable angina and controls as regard low frequency (LF).

Groups / Variables	Control group Mean ±SD	Unstable angina Mean ± SD	T	P
L.F(ms^2)	350±12	50±9	75	<0.001

There is significant difference in L.F between unstable angina and control group.

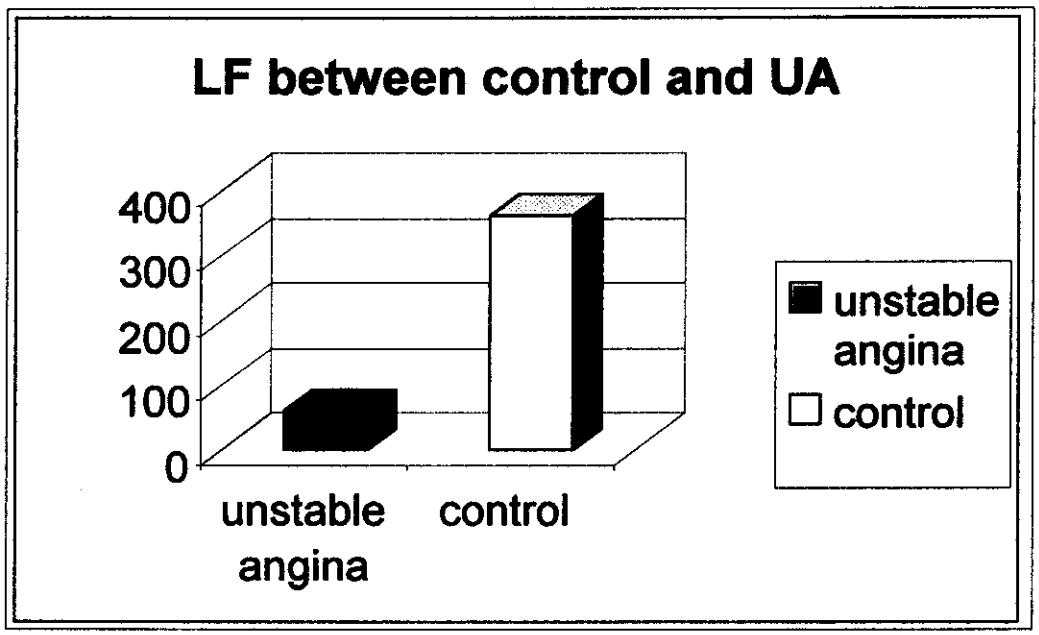

Figure (3): There is significant difference in L.F between unstable angina and control group ($p<0.01$).

Table (7): Comparison between patients with unstable angina and controls as regard high frequency (HF).

Groups / Variables	Control group Mean ± SD	Unstable angina Mean± SD	T	P
H.F(ms^2)	246±14	32.5±9	46	<0.001

There is significant difference in H.F between unstable angina and control group.

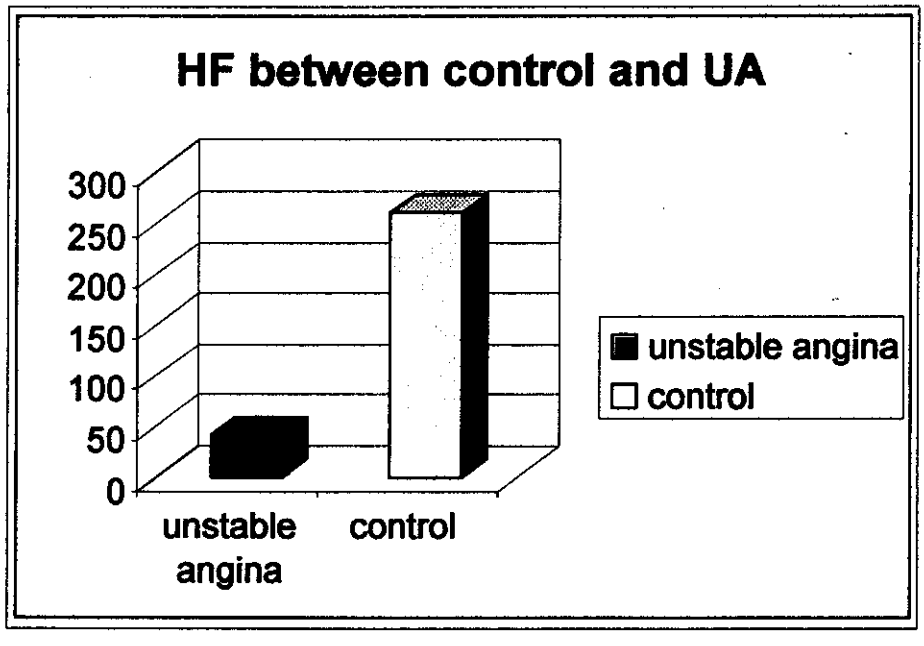

Figure (4): There is significant difference in H.F between unstable angina and controls (p<0.01).

Table (8): Comparison between patients with unstable angina and controls as regard LF/HF ratio.

Groups / Variables	Control group Mean ± SD	Unstable angina Mean± SD	T	P
L.F/H.F	1.6±0.7	1.5±0.4	0.4	>0.05

There is no significant difference in L.F/ H.F between patients with unstable angina and controls.

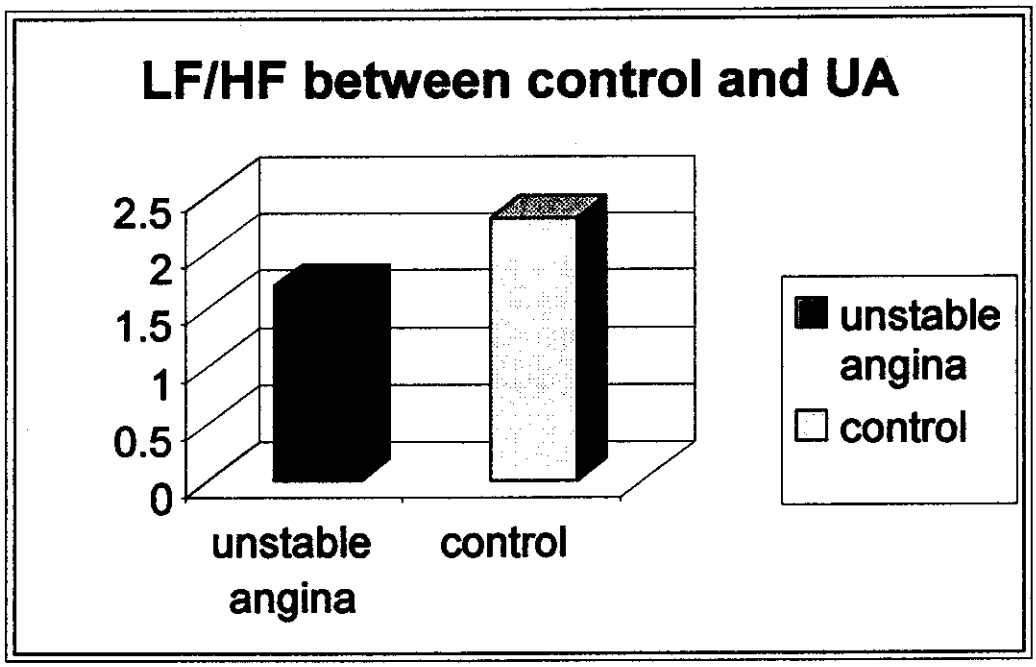

Figure (5): There is no significant difference in L.F/ H.F between unstable angina and control group (p>0.05).

During short term (two weeks) follow up five patient (10%) developed recurrent chest pain without elevation in cardiac enzymes (no M.I)

However, there were no mortality, arrhythmias or acute myocardial infarction among studied population.

Table (9): comparison between patients with and patients without recurrent chest pain as regard different parameters of heart rate variability.

Groups / Variables	Without chest pain Mean ± SD	With chest pain Mean ± SD	T	P
NN50	3.2 ±1.6	3± 1.5	0.5	>0.05
rMSSD	10 ±2	9 ±2.5	0.8	>0.05
L.F	50 ±9	42 ± 8	1	>0.05
H.F	31± 8	26 ± 9	1.3	>0.05
L.F/H.F	1.6± 0.6	1.9 ±0.9	2.3	<0.05

No significant difference between patients with and patients without chest pain as regard NN50, rMSSD, L.F and H.F ($p>0.05$). But there is significant difference between them as regard L.F/H.F ratio ($p<0.05$).

All subjects with recurrent chest pain had abnormal LF/HF ratio. Whereas, all other subjects without chest pain had such ratio within normal.

SUBGROUP ANALYSIS

Table(10): Sex .

	Males (No. 32) Mean ±SD	Females (No. 18) Mean ±SD	T	P
NN50	3±1.6	3.2 ± 1.7	0.6	> 0.05
L.F	42 ± 9	50 ± 10	1	> 0.05
L.F/H.F	1.6±.0.7	1.5 ± 0.9	0.8	> 0.05

There is no significant difference in NN50, L.F and L.F./ H.F ratio between males and females.

Table (11): smokers versus non smokers.

	Smokers Mean ±SD	Non Smokers Mean ±SD	T	P
Nn50	3.2±1.5	3.2±1.6	0.05	>0.05
L.F	50±9	49±8	0.4	>0.05
L.F/H.F	1.6±.07	1.5±0.4	0.4	>0.05

There is no significant difference in NN50, L.F and L.F/H.F ratio between smokers and nonsmokers.

Table (12): comparison between patients with single vessel and patients with three vessel disease as regard NN50, LF and LH/HF ratio.

	Single vessel disease (No. 17) Mean ±SD	**Three vessel disease (No. 10) Mean ±SD**	**T**	**P**
NN50	5±1	2±1	5	<0.01
L.F	57±6	48±8	3	<0.05
L.F/H.F	1.6 ± 0.7	1.7 ± 0.2	0.8	>0.05

There is significant difference in NN50 and L.F between Single vessel disease and Three vessels disease. But there is no significant reduction in L.F./H.F. ratio between single vessel disease and three vessel disease.

CORRELATION COEFFICIENT STUDIES

Table(13): Correlation coefficient (r) and probability (p) between HRV (NN50) and different variables.

Variables	NN50	
	r	P
Age	0.2	>0.05
Severity	0.7	<0.01
Ejection Fraction	0.8	<0.01
End Systolic Diameter	-0.03	>0.05
End Diastolic Diameter	-0.02	>0.05

There is significant correlation coefficient between NN50 and severity of coronary artery disease and ejection fraction but no significant correlation coefficient between NN50 and age , ESD and EDD

Table(14): Correlation coefficient (r) and probability (p) between HRV (LF) and different variables.

Variables	L.F	
	r	P
Age	0.2	>0.05
Severity	0.7	<0.01
Ejection Fraction	0.8	<0.01
End Systolic Diameter	-0.03	>0.05
End Diastolic Diameter	-0.02	>0.05

There is significant correlation coefficient between L.F and severity of coronary artery disease and ejection fraction but no significant correlation coefficient between L.F and age , ESD and EDD