Results

Table (1): Demographic data

	Group I (N = 30)		Group II (N = 20)		t	p
Age (years) $\overline{\text{X}}$**±SD** **Range**	8.89±2.87 4.5-14.2		9.1±2.93 5-14		0.24	0.8
Gender **Male**	**No** 30	**%** 100.0	**No** 20	**%** 100.0	X^2 0.0	1.0

X^2 = Chi-squared test of significant
t = student test
p = Probability

This table shows demographic data of the studied groups regarding age and sex with no significant difference between group I and group II.

Table (2): Group I disease information

Group(I) (N= 30)	
Age of onset of disease (years) **X±SD**	3.58 ± 0.585
Duration of disease (years) **X±SD**	5.21 ± 2.67

This table shows age of onset and duration of the disease in group I.

Table (3): Troponin and CK-MB level among group I and group II

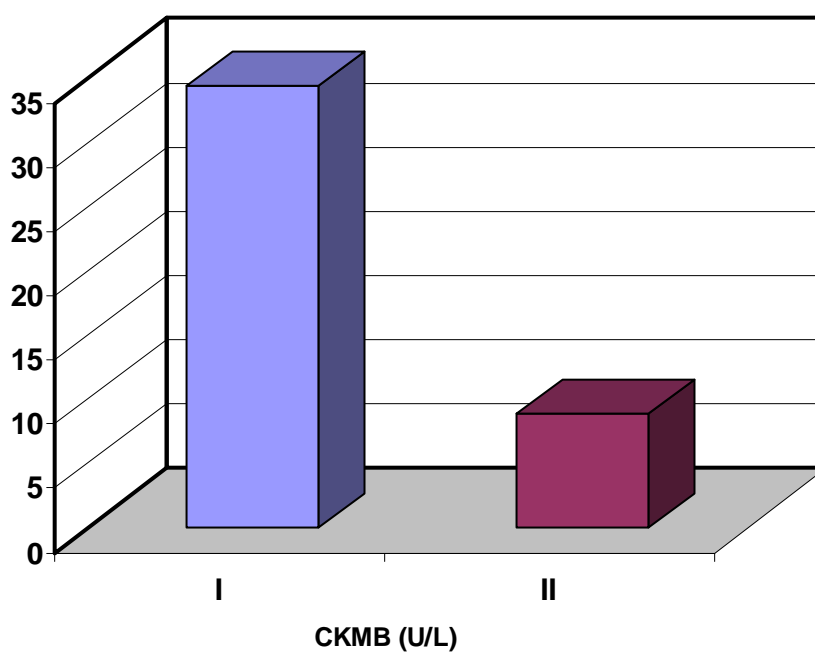|	Group I (N = 30)	Group II (N = 20)	t	p
Troponin (ng/ml)				
$\overline{X}\pm SD$	0.032±0.008	0.022±0.012	3.45	0.0011*
Range	0.021-0.057	0.01-0.05		
CKMB (U/L)				
$\overline{X}\pm SD$	34.5±44	8.5±4.66	10.58	0.001*
Range	3-220	2-20		
Median	20	8		

*Highly significant

This table shows troponin and CK-MB in the studied groups with highly statistically significant difference regarding both of them between the diseased group and control group.

Troponin and CK-MB level among group I and group II
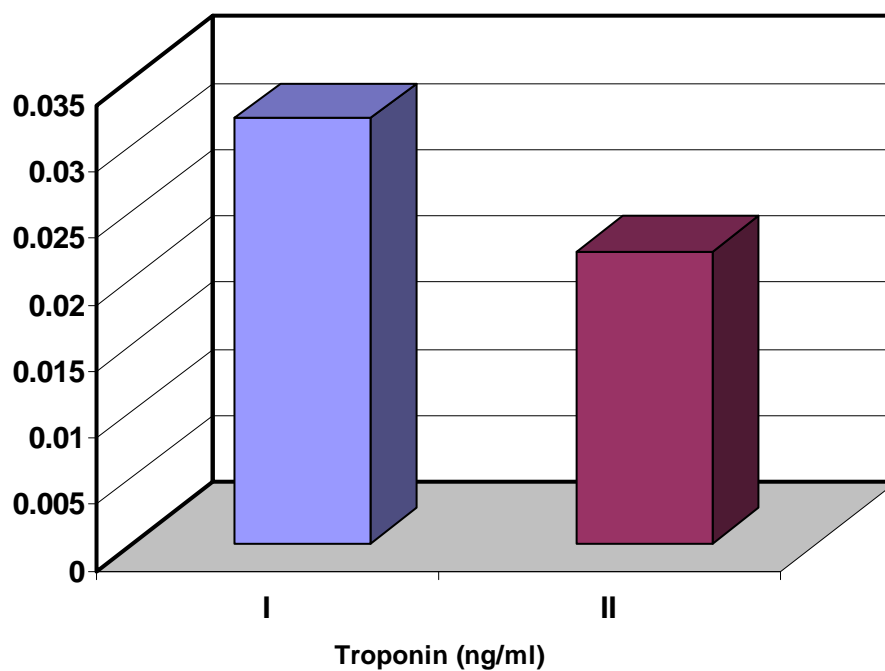
Figure (1): A highly significant rise of cTnI in patients group in comparison with the control group


Figure (2): A highly significant rise of CK-MB in patients group in comparison with control group

Table (4): Statistical study of ECHO parameters among the studied groups

	Group I (N = 30)	Group II (N = 20)	t	p
EF (%)				
X̄±SD	71.9±5.0	78.2±2.67	5.12	<0.001**
Range	61-80	70-81		
LVEDD (cm)				
X̄±SD	3.85±0.43	3.72±0.61	0.86	0.39
Range	3.2-4.8	2.2-4.8		
LVESD (cm)				
X̄±SD	2.51±0.25	2.52±0.36	0.11	0.9
Range	1.9-3	1.9-3.1		
LA (cm)				
X̄±SD	2.19 ± 0.26	2.16 ± 0.25	0.48	0.63
Range	1.70– 2.70	1.8 – 2.7		
AO (cm)				
X̄±SD	1.96 ± 0.29	1.96 ± 0.26	0.00	1.00
Range	1.50 –2.50	1.6 – 2.5		
IVS (cm)				
X̄±SD	0.62 ± 0.13	0.58 ± 0.11	1.18	0.24
Range	0.40–0.80	0.40 –0.80		
RV (cm)				
X̄±SD	1.59 ± 0.23	1.58 ± 0.23	0.24	0.80
Range	1.20– 2.00	1.2 – 2.0		
LVPW (cm)				
X̄±SD	0.61± 0.12	0.60 ± 0.12	0.46	0.64
Range	0.40– 0.80	0.40– 0.80		

This table shows Statistical study of ECHO parameters among the studied groups with EF was significant higher among control when compared with cases while there was no significant difference regarding the other parameters comparing the both groups.

Statistical study of ECHO parameters among the studied groups
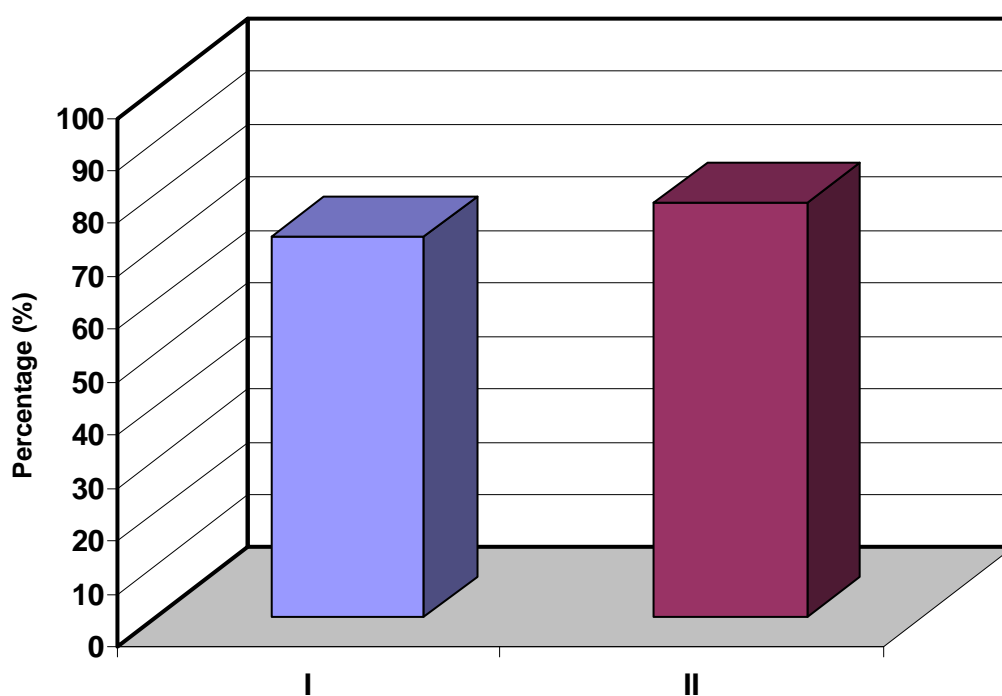
Figure (3): EF was significantly higher among control when compared with cases
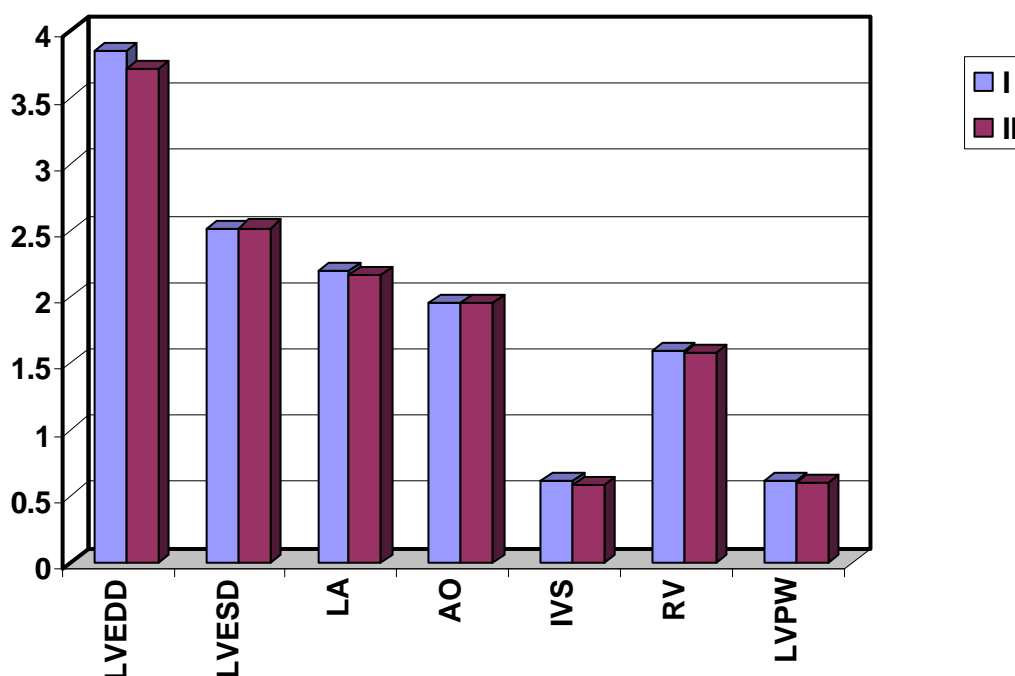
Figure (4): LVEDD, LVESD, LA, AO, IVS, RV and LVPW among group I and group II

Table (5): Statistical study of degree of motor disability in group I

	I	
	No	**%**
Motor		
Wheel chair	12	40.0
Walking with support	8	26.7
Ambulatory	10	33.3

p = p-value
**Significant

This table shows the motor functions of group I patients in which there is a highly significant decrease in the motor ability with 40% of patients were on wheel chair.

Table (6): Relation between troponin and degree of motor disability

	$\overline{X}\pm SD$ (range)
Wheel chair	0.038±0.007 (0.031-0.057)
Walking with support	0.033±0.004 (0.027-0.039)
Ambulatory	0.024±0.003 (0.021-0.029)

F = 19.16
$**p < 0.001$

This table shows the relation between troponin and the degree of motor disability in which there was a highly significant elevation of troponin in the more disabled patients.

Relation between troponin and degree of motor disability
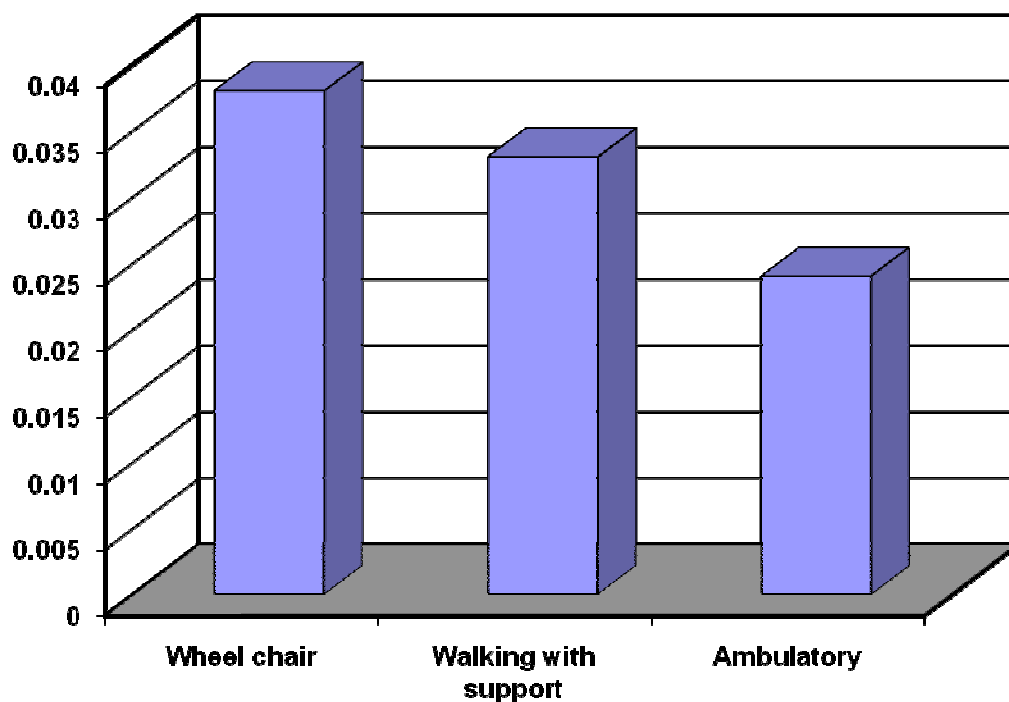
Figure (5): The motor disability in the diseased group

Table (7): Statistical correlation between troponin, CK-MB and ECHO parameters

	r	p
CKMB	0.76	<0.001**
EF	-0.59	<0.001**
LVEDD	0.71	<0.001**
LVESD	0.47	<0.001**
LA	0.522	<0.01*
AO	0.593	<0.001**
IVS	0.595	<0.001**
RV	0.683	<0.001**
LVPW	0.557	<0.001**

*Significant

**HS = Highly significant

This table shows Significant positive correlation between troponin and other parameters except, EF the correlation was -ve (inverse correlation).
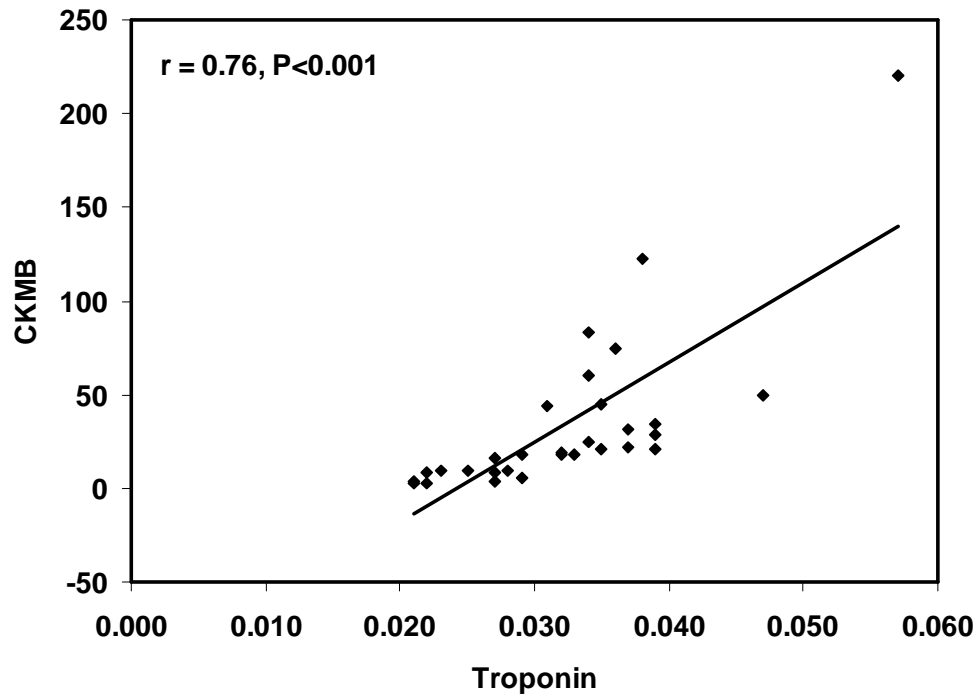
Figure (6): Highly significant positive correlation between cardiac Troponin and CKMB in group I
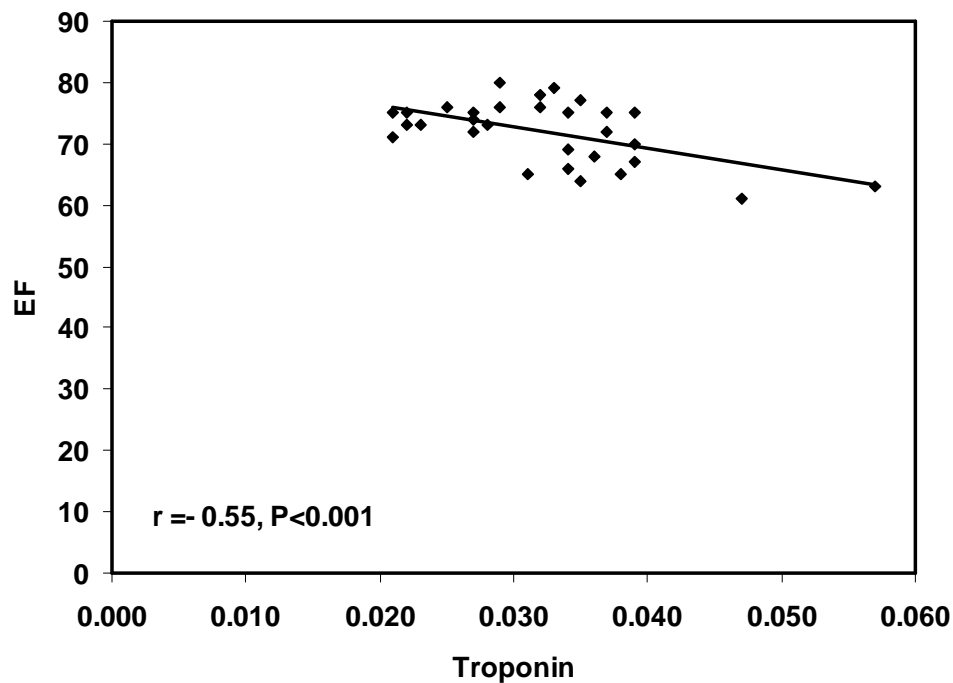
Figure (7): Highly significant negative correlation between EF and Troponin in the diseased group
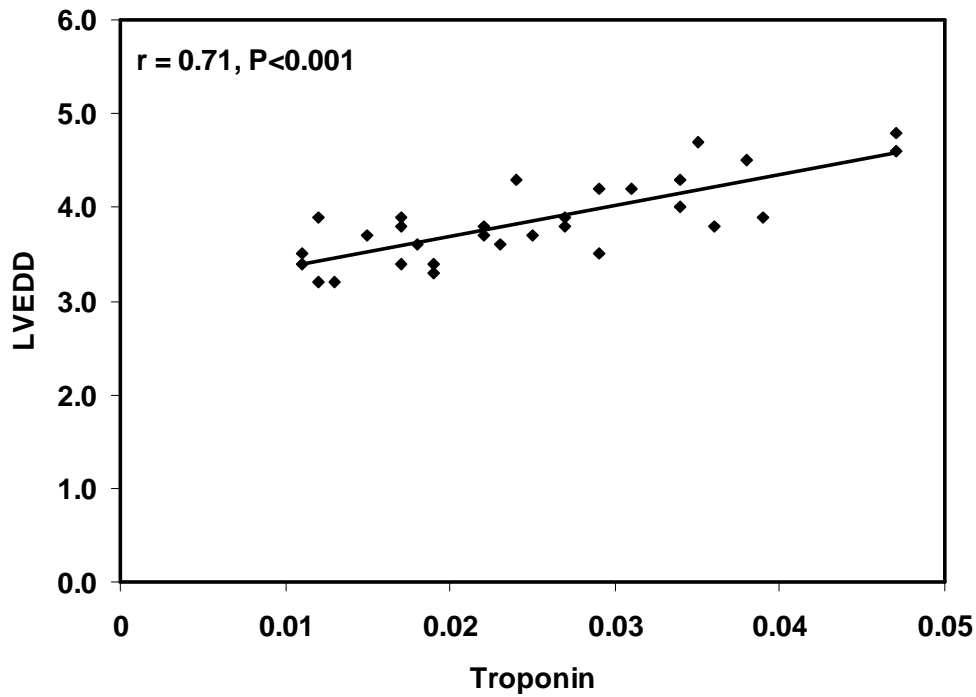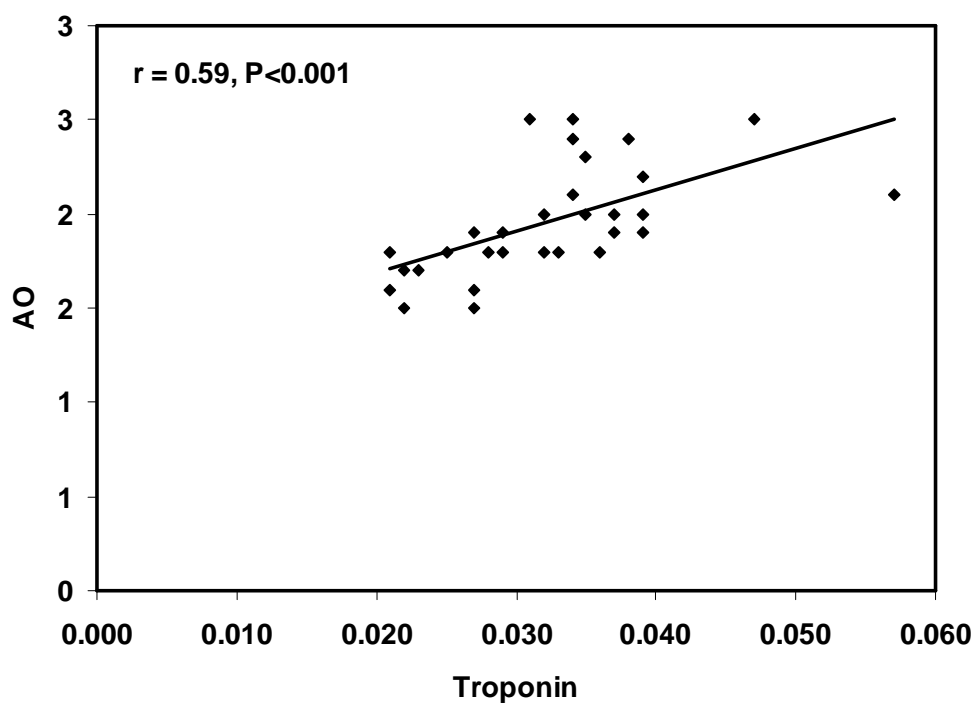
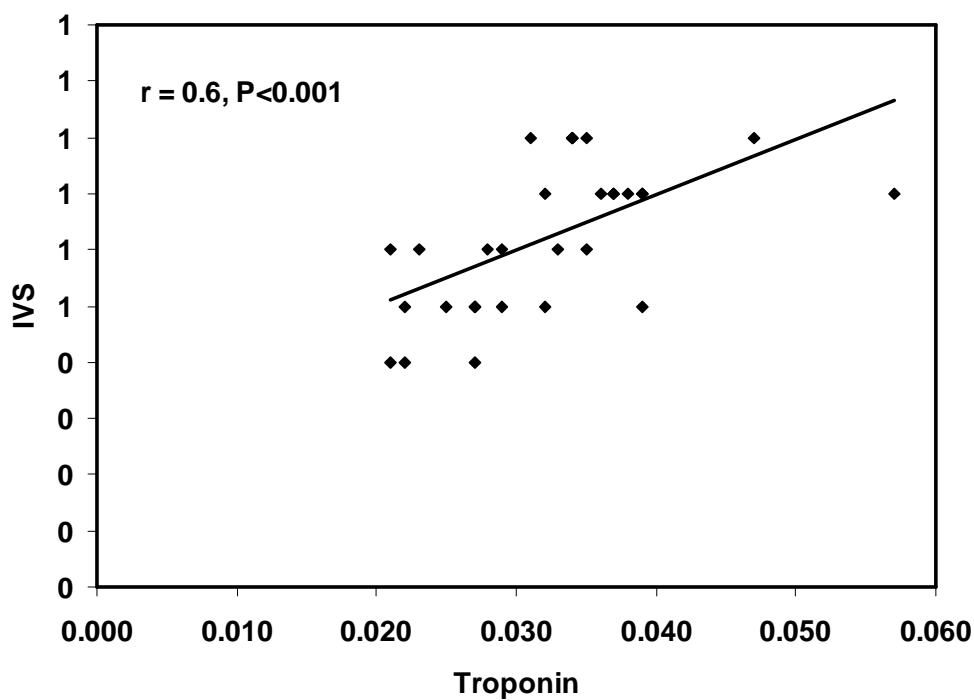**Figure (8):** Highly significant positive correlation between LVEDD and Troponin in the diseased group
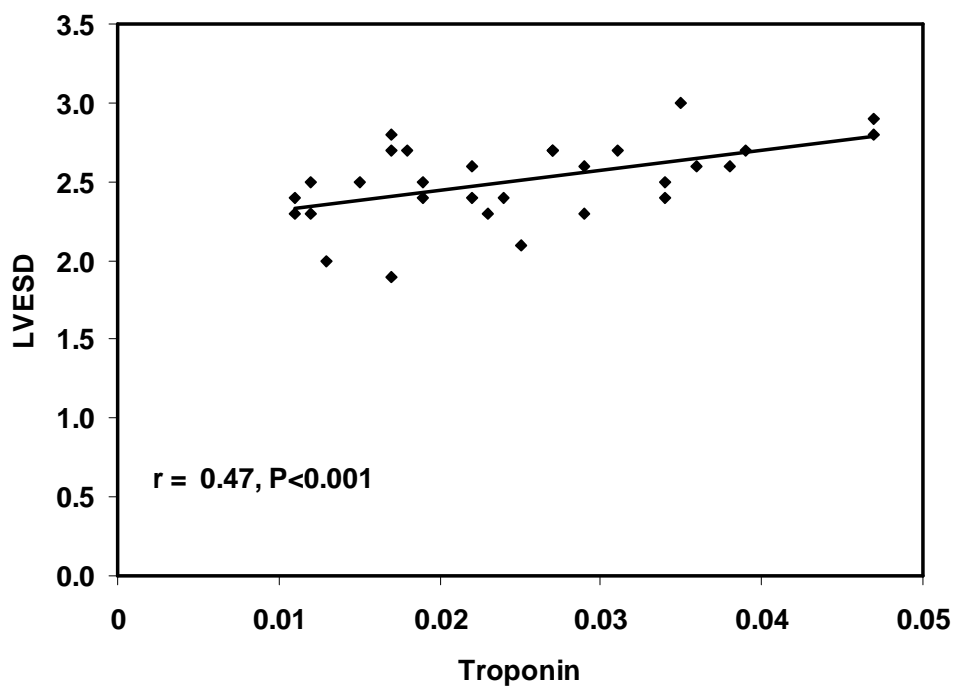
Figure (9): Highly significant positive correlation between LVESD and Troponin in the diseased group
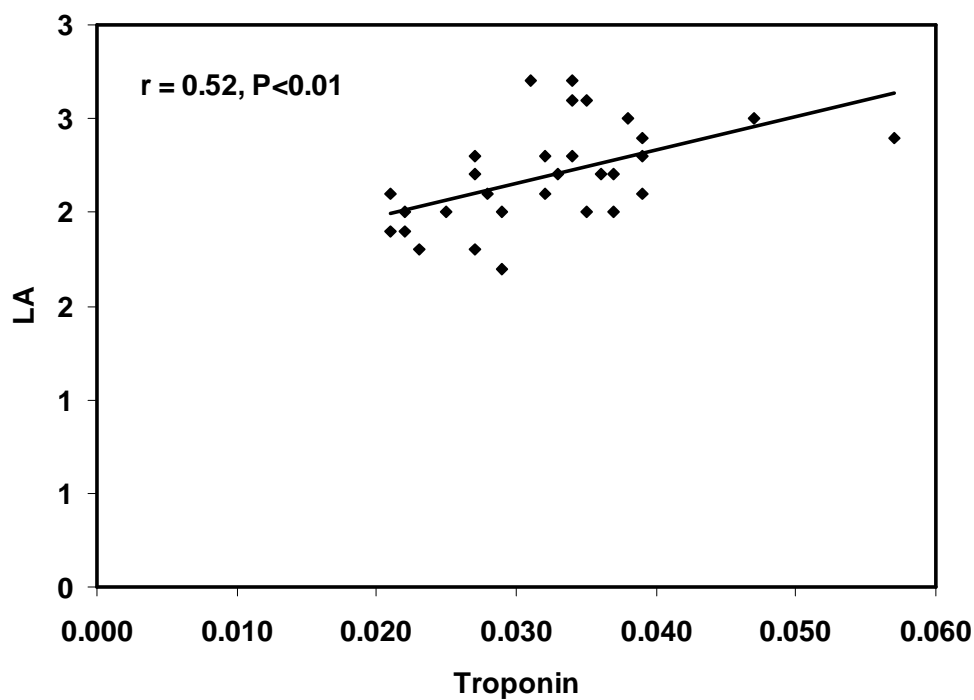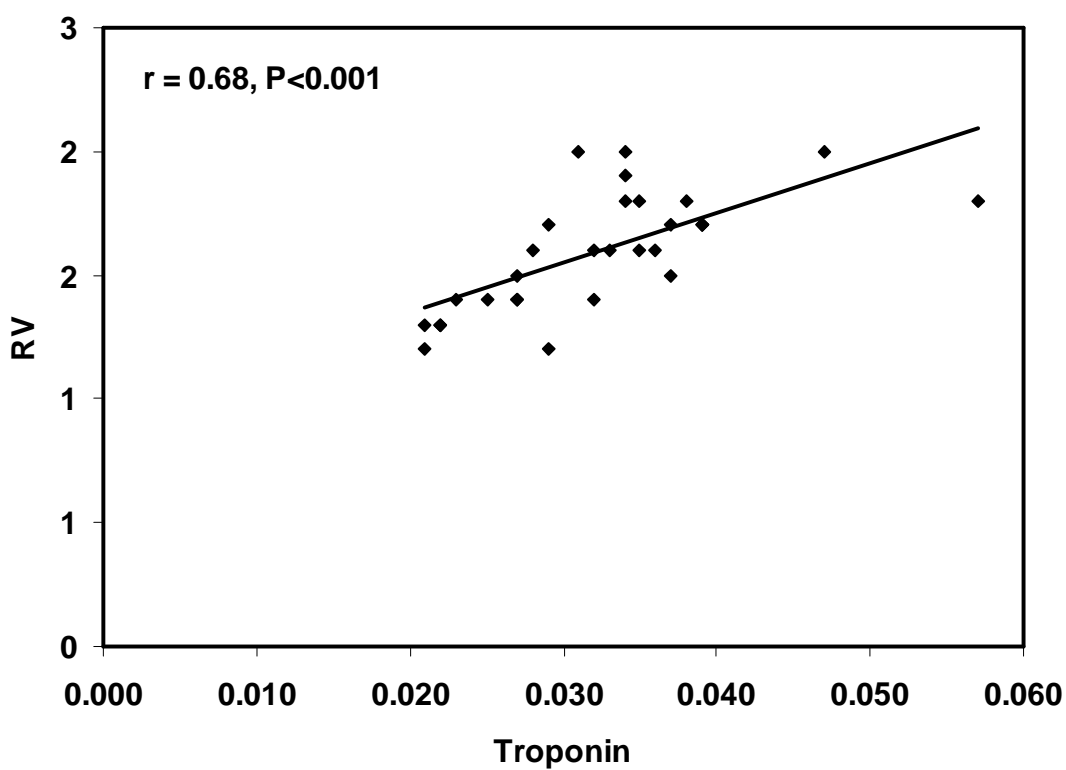
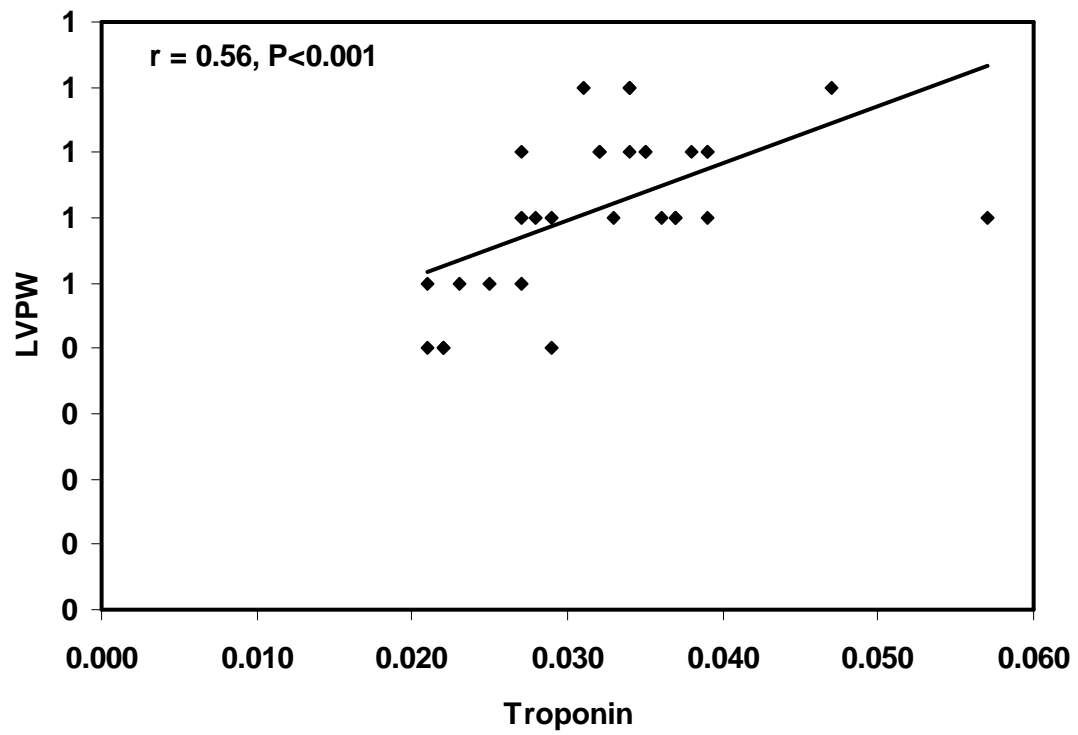**Figure (10):** Highly significant positive correlation between LA and Troponin in the diseased group

Figure (11): Highly significant positive correlation between AO and troponin in the diseased group

Figure (12): Highly significant positive correlation between IVS and troponin in the diseased group

Figure (13): Highly significant positive correlation between RV and troponin in the diseased group

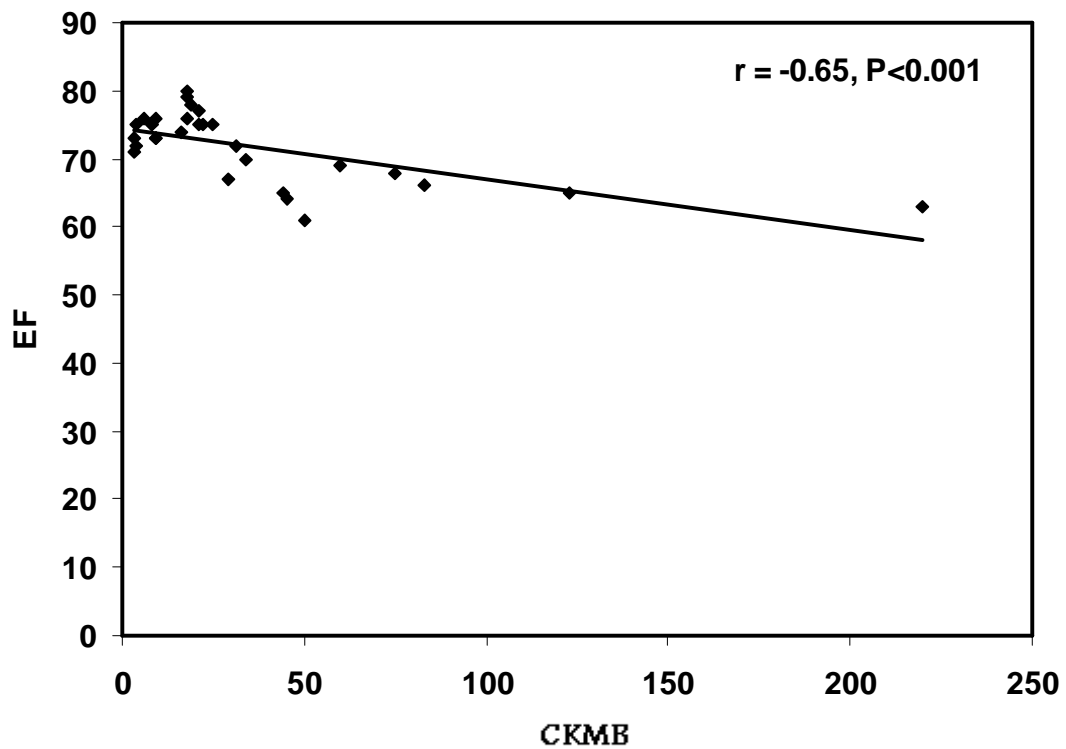**Figure (14):** Highly significant positive correlation between LVPW and troponin in the diseased group

Table (8): Statistical correlation between CKMB and ECHO parameters

|	r	p
EF	-0.65	<0.001**
LVEDD	0.71	<0.001**
LVESD	0.41	<0.05*
LA	0.537	<0.001**
AO	0.521	<0.01*
IVS	0.484	<0.01*
RV	0.541	<0.001**
LVPW	0.345	>0.01

*Significant
**HS = Highly significant

This table shows significant positive correlation between CKMB and LVEDD, LVESD, LA, AO, IVS and RV with significant negative correlation between CKMB and EF while there is no significant correlation between CKMB and LVPW.
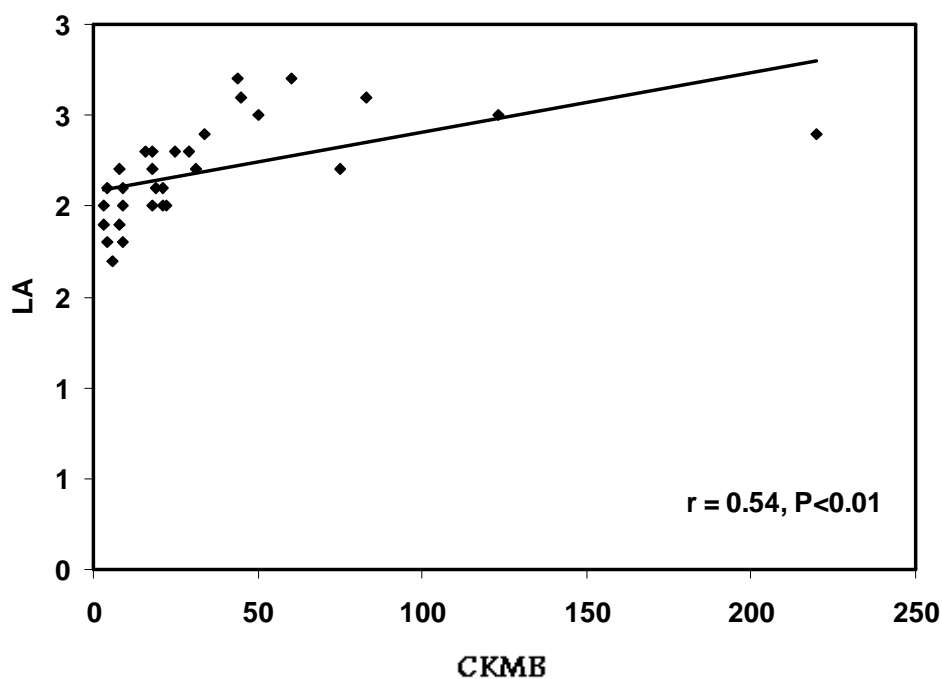
Figure (15): Significantly negative correlation between CKMB and EF
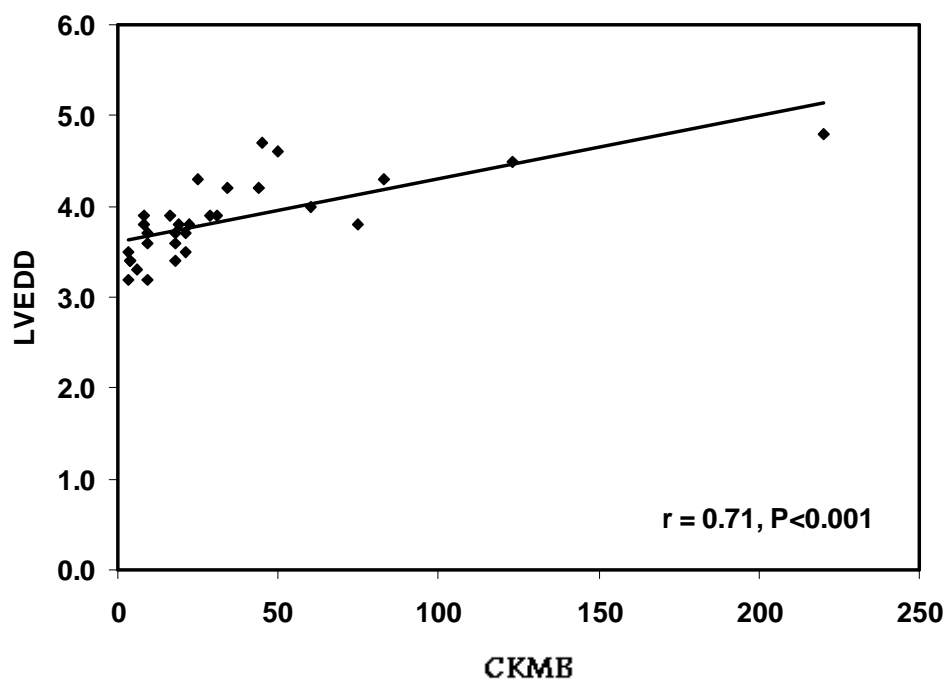
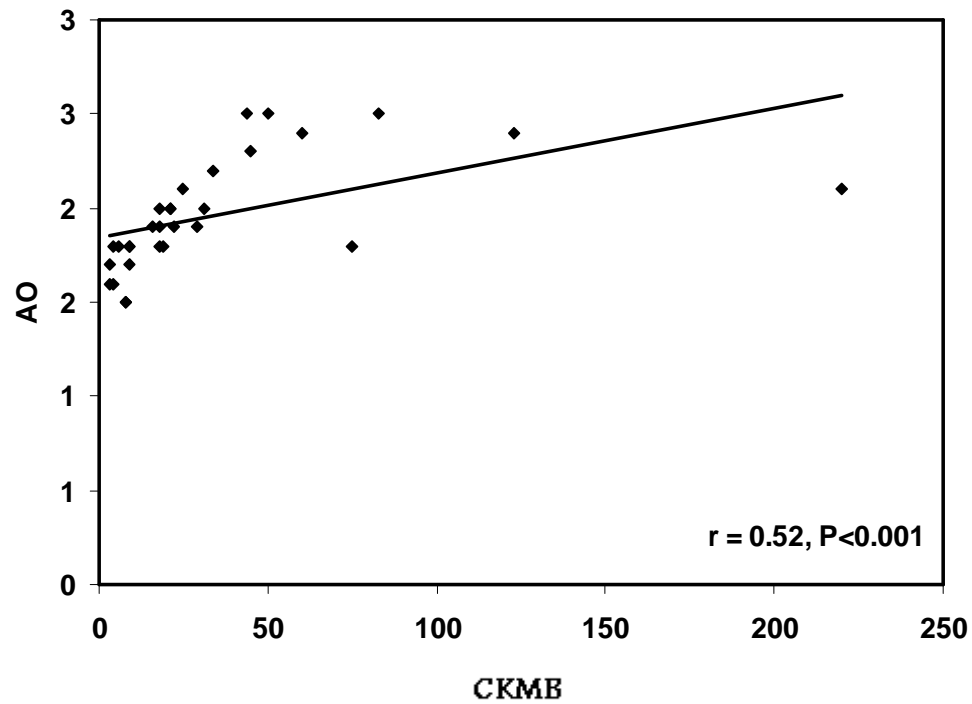**Figure (16):** Significantly positive correlation between CKMB and LVEDD
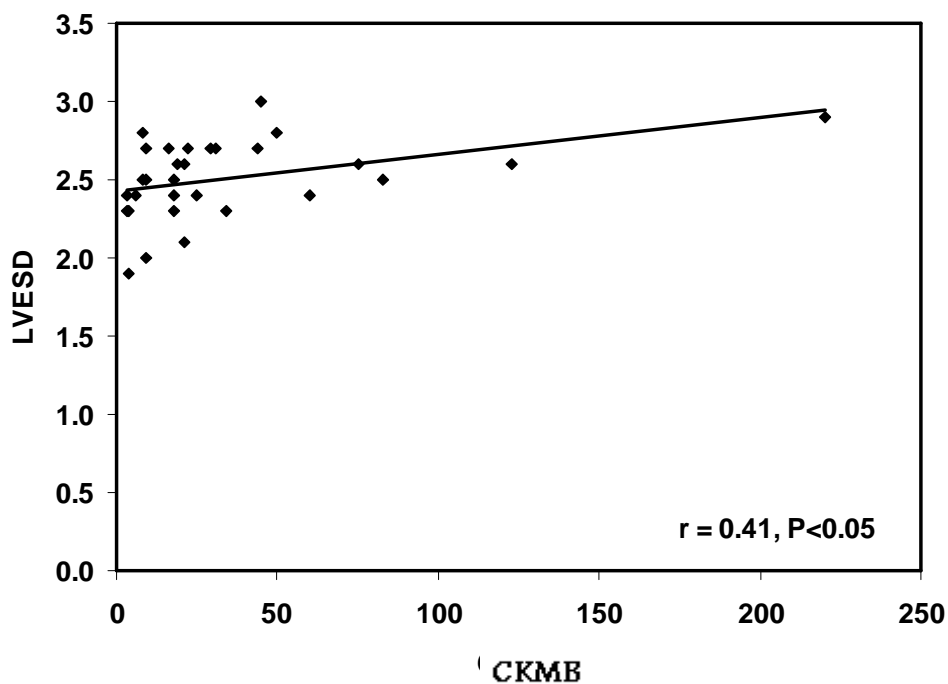
Figure (17): Significantly positive correlation between CKMB and LVESD
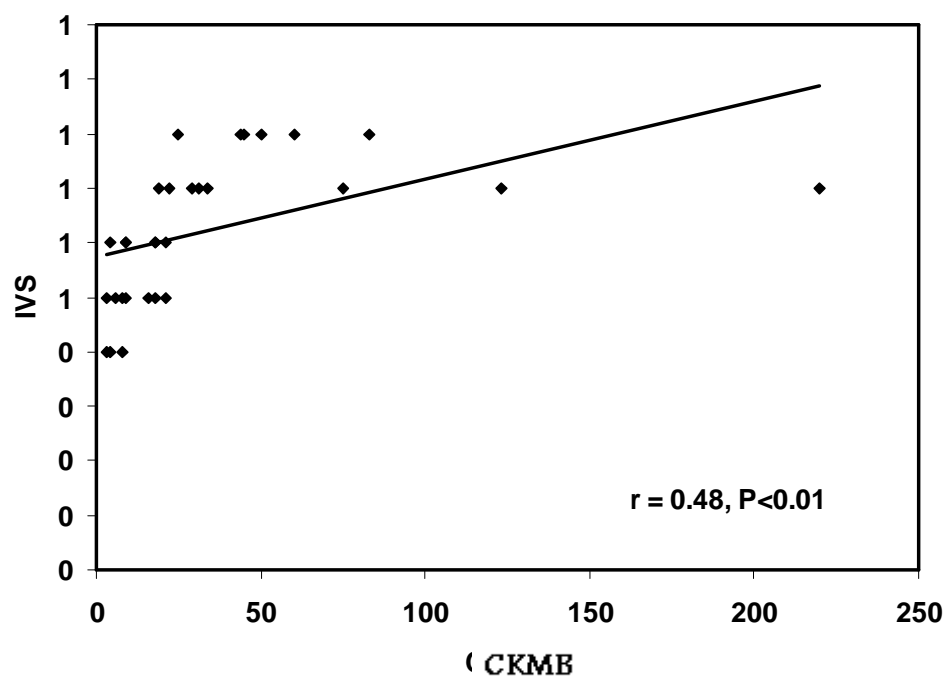

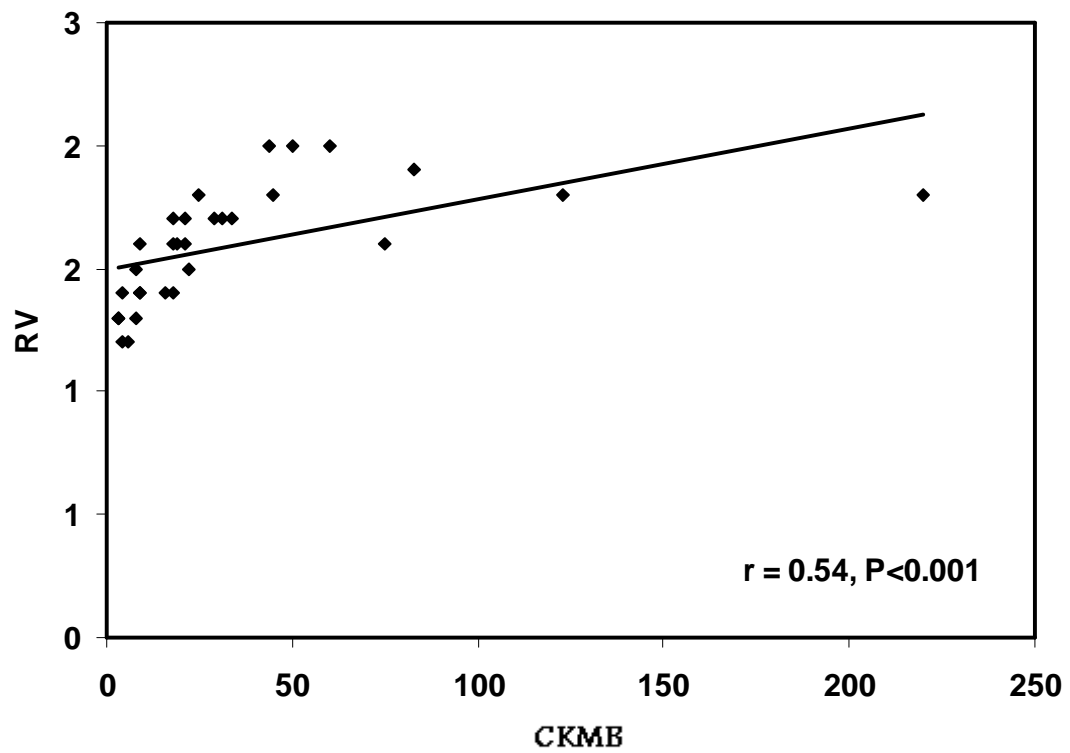**Figure (18):** Significantly positive correlation between CKMB and LA

Figure (19): Significantly positive correlation between CKMB and AO

Figure (20): Significantly positive correlation between CKMB and IVS

Figure (21): Significantly positive correlation between CKMB and RV