Results

Patient characteristics

Our study was conducted on two groups of females
Group I: Pre-eclamptic patient in third – trimester.
Group II: Normotensive third – trimester pregnant females.
(Table 5)

Table (5): Patients characteristics

	Normotensive pregnant (NT)	Preeclamptic (PE)	Significance
Number. of individual	15	15	
Age(Yr.)	22.4 (16-36)	26.4 (19-36)	P = 0.067
Gestational age(Wk.)	34.3 (32-37)	33.6 (31-37)	P = 0.198
Diastolic blood pressure (mm Hg.)	83.0 (70-90)	106.6 (100-120)	P=0.001
Mean platelet volume (M.P.V.) (μm^3)	8.2 (4.2-11.1)	8.8 (7.70-10.60)	P = 0.255
Platelet count (x10^3/μl)	218.7 (167-300)	211.0 (153-292)	P = 0.615
Proteinurea (gm/day)	*	3.6 (0.5-11.3)	P = 0.002

N.B. $P<0.05$ is significant

The platelet count didn't differ significantly between the normotensive and preeclampitc patients groups (P= 0.615). Also, the mean platelet volume didn't differ significantly between the normotensive and precelamptic patients groups (P= 0.255).

There were statistically significant difference between normotensive and preclamptic groups as regarding both blood pressure and proteinuria (P= 0.0001 and P = 0.0002 respectively).

* Platelet activation analysis:

The results of the data analysis as percent platelet activation as showing in table 6.

The median percentage of activated platelets by the surface expression of CD62 (P- selection) was significantly higher in preeclamptic group (20.3%) than in normotensive group (4.2%) (P= 0.05).

The median percentage of activated platelets as assessed by the surface expression of CD 63 significantly higher in preeclamptic group (15.03%) than the Normotensive group (1.9%) (P = 0.018).

Regarding both PAC-1 (indicating fibrinogen receptors availability) and CD 31 (PECAM-1), this study revealed no statistically significant difference between preclamptic and normotensive groups. (P=0.277, P=0.846 respectively).

Table (6): Analysis of percent activated platelets:

	Normotensive (NT)	Preeclamptic (PE)	Significance
CD62	4.2 (-1.87-22.09)	20.3(-1.06-88.48)	0.050
CD63	1.9 (-1.50-8.80)	15.03(-94-60.02)	0.018
PECAM-1 (CD31)	1.7 (-1.81-7.43)	2.1(-1.80-69.3)	0.846
PAC-1	10.1 (-1.92-63.27)	19.09(-4.24-24.65)	0.277

The result of the second data analysis:

To determine the mean fluorescence intensities is mean antigen expression of the whole platelets population, are presented in table 7. All markers values highly, but not significantly increased in the preeclamptic patients compared with the normotensive healthy pregnant women.

Table (7): Analysis of mean fluorescence intensities:

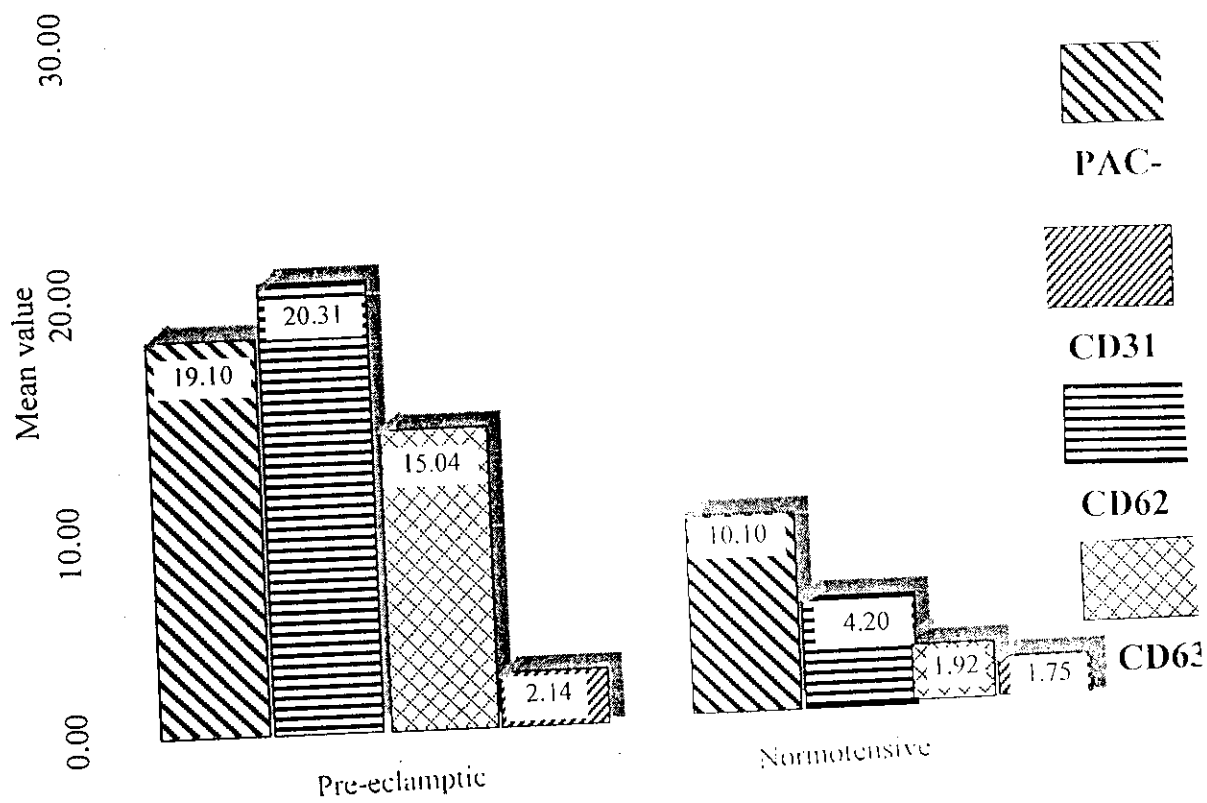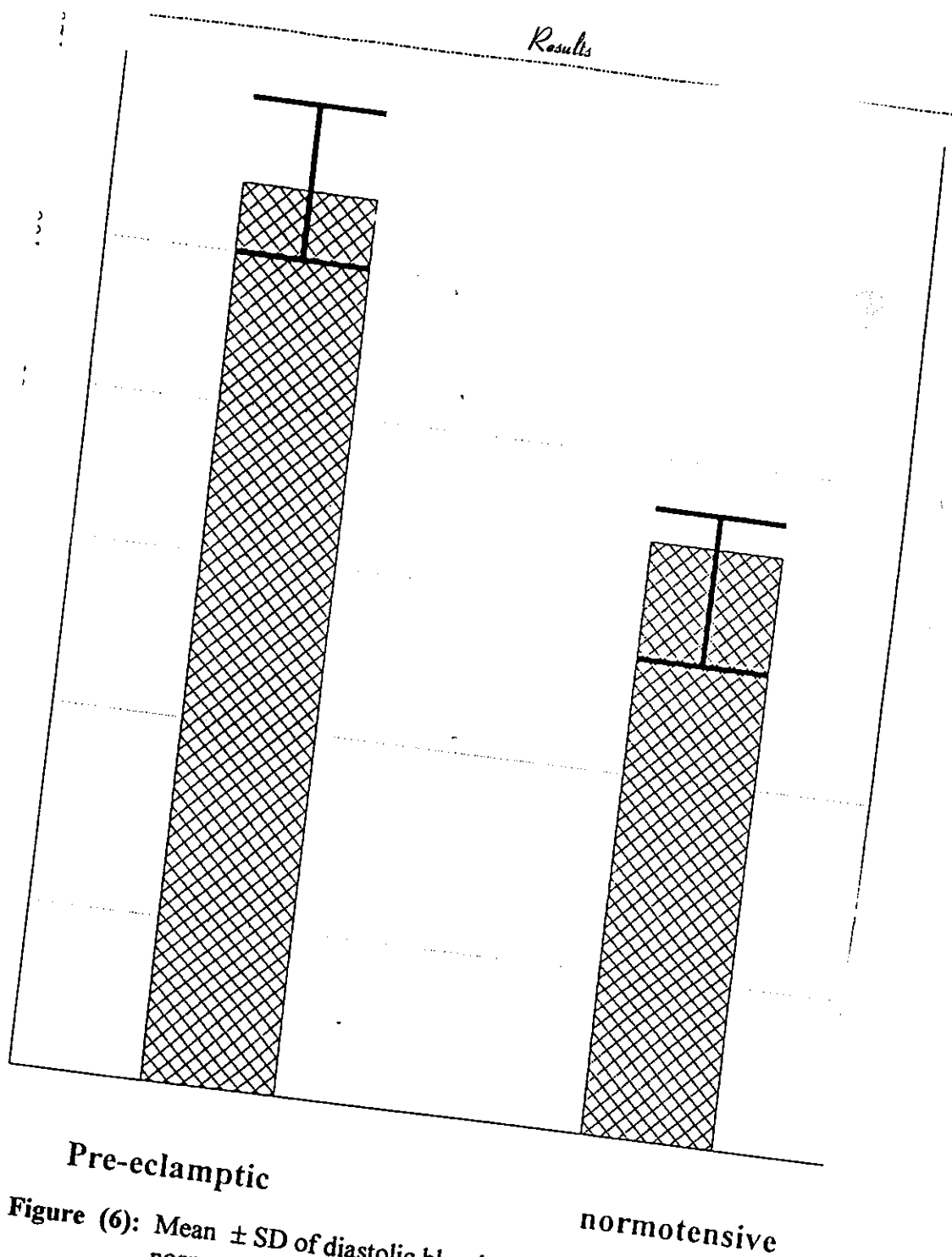|	Normotensive (Nt)	Preeclamptic(PE)	Significance
CD62	21.4 (2.43-104.01)	21.9 (3.43-106.30)	0.257
CD63	13.7 (1.91-36.75)	15.0 (1.75-37.34)	0.076
PECAM-1 (CD31)	55.6(5.66-108.95)	55.9 (4.33-156.22)	0.179
PAC-1	22.1667(6.22-90.11)	23.7 (8.22-91.71)	0.515

Figure (5): Mean value of the platelets activation markers among pre-elecamptic and normotensive groups.

Pre-eclamptic

normotensive

Figure (6): Mean ± SD of diastolic blood pressure in pre-eclamptic and normotnsive groups.