RESULTS

statistical significance of the results.

Table (5) :

Show sex distribution among studied groups. there is statistical insignificant difference between cases and control groups regarding to sex distribution .

Table (6) :

Show comparison between the studied groups as regard to maternal age/year. there is statistical insignificant difference between cases and control groups regarding to different maternal age.

Table (7) :

show comparison between gestational age among the studied groups . there is statistical insignificant difference between cases and control groups regarding to different gestational age.

Table (8) :

Show mode of delivery among studied groups . there is statistical insignificant difference between cases and control groups regarding to different modes of delivery.

Table (9) :

Show comparison between the two groups as regard to birth Wt. there is statistical insignificant difference between cases and control groups regarding to different birth weights.

Table (10) :

Show comparison between the two groups as regard to CBC. there is statistical insignificant difference between cases and control groups regarding to different parameter of CBC.

Table (11) :

Show comparison between the two groups as regard to ABG.there is a statistical significant reduction in all parameters of ABGs in group 2 in comparison with group 1.

Table (12) :

Comparison between control group and cases as regard to troponin I level. there is statistical significant increase in the troponin I level in cases in comparison with control groups.

Table (13) :

Show comparison between the group 1and group2a as regard to troponin I level . there is statistical insignificant difference between group 1 and group 2a regarding to troponin I level . *(2a=group2 with mild R.D)*

Table (14) :
Show comparison between the group1 and group2b as regard to troponin I level . there is statistical significant increase in troponin I level in group 2b in comparison with group1. *(2b=group2 with moderate R.D)*

Table (15) :
Show comparison between the group1and group2c as regard to troponin I level .there is high statistical significant increase in troponin I level in group 2c in comparison with group1. *(2c=group2 with severe R.D)*

Table (16) :
Show comparison between the three subgroups (a), (b) and (c) as regard to troponin I level .there is there is statistical insignificant difference between group 2a and group 2b but show statistical significant difference between couples of other groups regarding to troponin I level.

Table (17) :
Show correlation of Tn I level with mode of delivery, wt,gestational age,sex,maternal age and ECG.there is statistical insignificant correlation of TnI with the mode of delivery, wt,gestational age,sex , maternal age ,ECG and ABGs.

Table (18) :
shows the comparison between control group and cases without ECG changes as regard to troponin I . there is statistical significant increase in troponin I level in cases without ECG changes in comparison with control group.

Table (19) :
shows the comparison between control group and cases with ECG changes as regard to troponin I . there is statistical significant increase in troponin I level in cases with ECG changes in comparison with control group.

Table (20) :
shows the comparison between cases without ECG changes and cases with ECG changes as regard to troponin I . there is statistical significant increase in troponin I level in cases with ECG changes in comparison with cases without ECG changes.

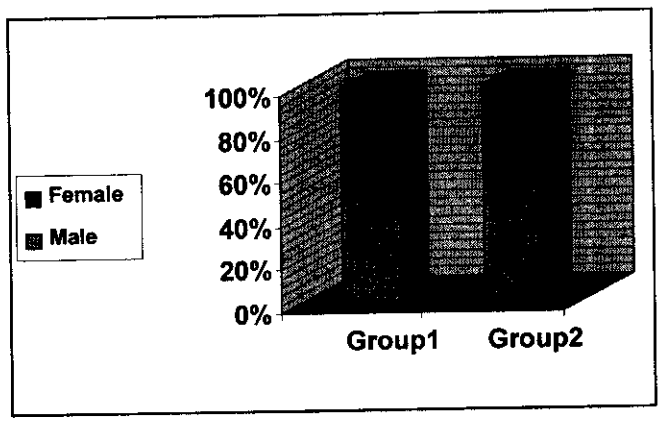
Table (21) :
shows comparison between troponin I and ECG as regard to Sensitivity, Specificity and predictive value.the table show that
(1)-troponin I is highly sensitive in diagnosis of myocardial damage and more reliable in excluding –ve cases of myocardial damage than ECG .
(2)-troponin I is more valuable in prediction of +ve and –ve cases than ECG.

Table(5): Show sex distribution among studied groups.

	Group 1		Group 2		Total
	No	%	No	%	
Male	7	46.6	25	55.5	32
Female	8	53.4	20	44.5	28
Total	15	100	45	100	60

there is statistical insignificant difference between cases and control groups regarding to sex distribution .

Fig(6): Show sex distribution among studied groups.

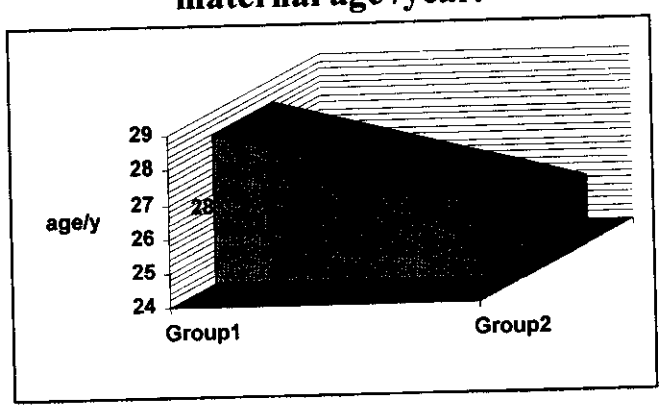


Table(6):Show comparison between the studied groups as regard maternal age /year.

	Group 1 No=15 Mean ± SD	Group 2 No=45 Mean ± SD	t.value	p.value
Maternal age/y	28.3 ± 4.6	26 ± 4.2	0.1	>0.05

there is statistical insignificant difference between cases and control groups regarding to different maternal age.

Figure(7):Show comparison between the studied groups as regard maternal age /year.



Table(7): show comparison between gestational age among the studied groups .

	Group 1 No=15	Group 2 No=45	Total	T	p.value
Gestational age/weeks	34.3 ± 1.4	33.2 ± 1.9	60	0.05	>0.05

there is statistical insignificant difference between cases and control groups regarding to different gestational age.

Fig(8): show comparison between gestational age among the studied groups .

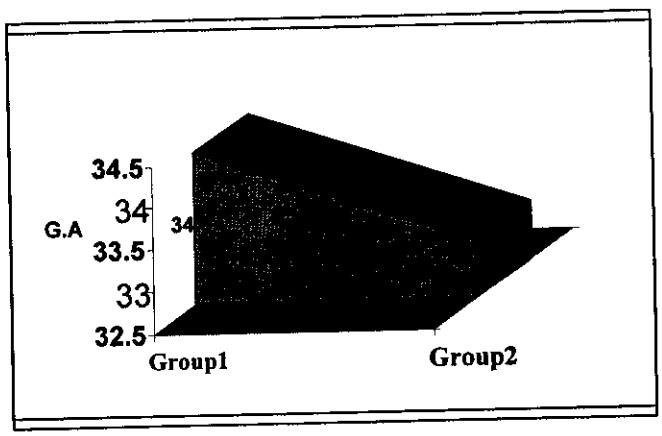


Table (8): Show mode of delivery among studied groups .

Mode of delivery	Group 1		Group 2		Total	P.Value
	No	%	No	%		
NVD	13	87%	34	76%	47	>0.05
CS	2	13%	11	24%	13	
	X2=0.55					

there is statistical insignificant difference between cases and control groups regarding to different modes of delivery.

Fig(9): Show mode of delivery among studied groups

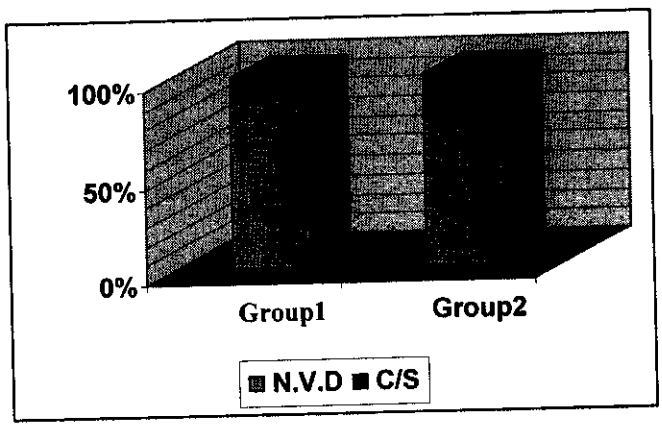


Table (9): Show comparison between the two groups as regard to birth Wt.

	Group 1 No=15	Group 2 No=45	Total	t	p.value
Birth Wt./kg	1.557 ±0.233	1.403 ±0.226	60	0.02	>0.05

there is statistical insignificant difference between cases and control groups regarding to different birth weights.

Fig(10): Show comparison between the two groups as regard to birth Wt.

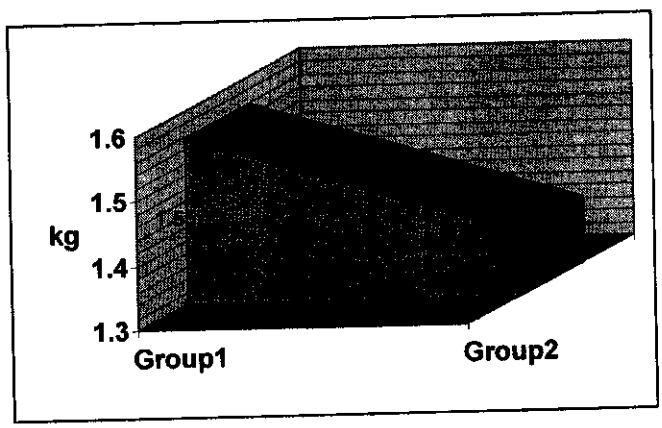


Table (10): Show comparison between the two groups as regard to CBC.

	Group 1 No=15 Mean ± SD	Group 2 No=45 Mean ± SD	t	p.value
HB%	16.5 ± 2.9	18 ± 3.9	0.07	>0.05
RBCs	5.3 ± 1	5.6 ± 1.4	0.4	>0.05
WBCs	10.2 ± 3.2	12 ± 4.8	0.18	>0.05
Platelets	187.7 ± 104	174 ± 99	0.66	>0.05

there is statistical insignificant difference between cases and control groups regarding to different parameter of CBC.

Table (11): Show comparison between the two groups as regard to ABG.

	Group 1 No=15 Mean ± SD	Group 2 No=45 Mean ± SD	t	p.value
PH	7.4 ± 0.5	7.3 ± 0.4	2.4	<0.05
PCO2 (mmHg)	37.5 ± 2.2	41.5 ± 9.9	2.1	<0.05
PO2 (mmHg)	86.9 ± 3.5	76.5 ± 10.7	3.1	<0.05
HCO3 (mEq/L)	25.1 ± 0.9	18.7 ± 6	2.3	<0.05

there is a statistical significant reduction in all parameters of ABGs in group 2 in comparison with group 1.

Fig(11): Show comparison between the two groups as regarding to PH.

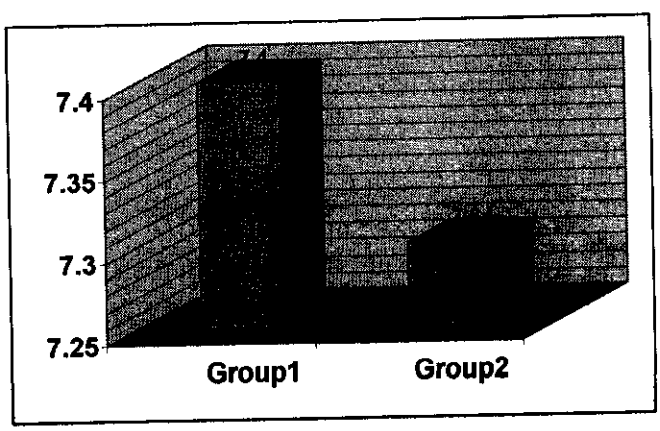


Table (12): Comparison between control group and cases as regard to troponin I

	Control group No=15 Mean ± SD	Cases No=45 Mean ± SD	t	p.value
Troponin I Ng/mL	0.011 ± 0.002	0.032 ± 0.014	2.2	<0.05

there is statistical significant increase in the troponin I level in cases in comparison with control groups.

Fig (12): Comparison between control group and cases as regard to troponin I

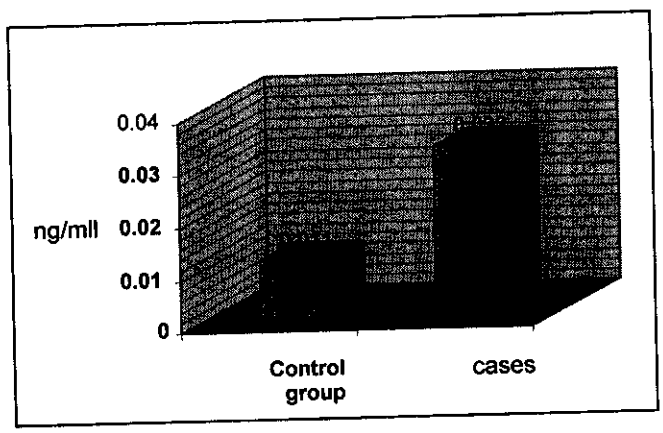


Table (13): Comparison between control group and group2a as regard to troponin I

	Group 1 No=15 Mean ± SD	Group 2a No=15 Mean ± SD	t	p.value
Troponin I Ng/mL	0.011 ± 0.002	0.012 ± 0.002	0.41	>0.05

there is statistical insignificant difference between group 1 and group 2a regarding to troponin I level . ***(2a=group2 with mild R.D)***

Fig (13): Comparison between control group and group2a as regard to troponin I.

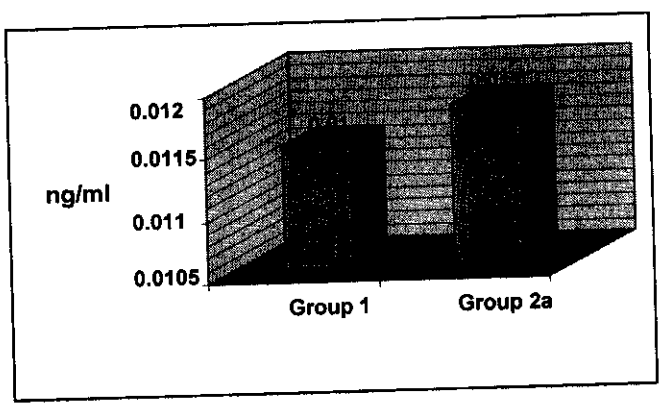


Table (14): Comparison between control group and group2b as regard to troponin I.

	Group 1 No=15 Mean ± SD	Group 2b No=15 Mean ± SD	t	p.value
Troponin I Ng/mL	0.011 ± 0.002	0.018 ± 0.004	2.3	<0.01

there is statistical significant increase in troponin I level in group 2b in comparison with group1. ***(2b=group2 with moderate R.D)***

Fig (14): Comparison between control group and group2b as regard to troponin I

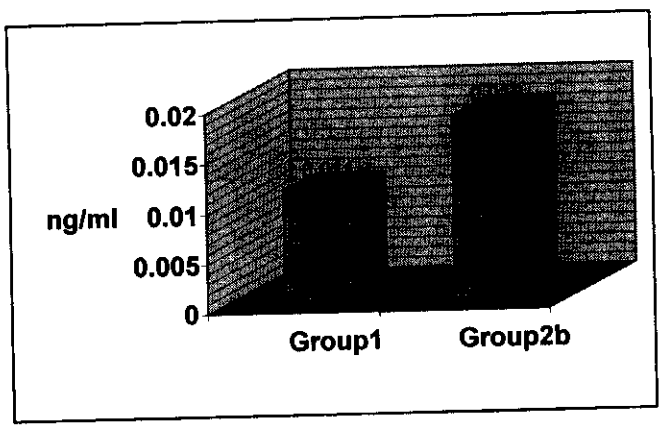


Table (15): Comparison between control group and group2c as regard to troponin I

	Group 1 No=15 Mean ± SD	Group 2c No=15 Mean ± SD	t	p.value
Troponin I Ng/mL	0.011 ± 0.002	0.037 ± 0.010	2.6	<0.01

there is high statistical significant increase in troponin I level in group 2c in comparison with group1. ***(2c=group2 with severe R.D)***

Fig (15): Comparison between control group and group2c as regard to troponin I

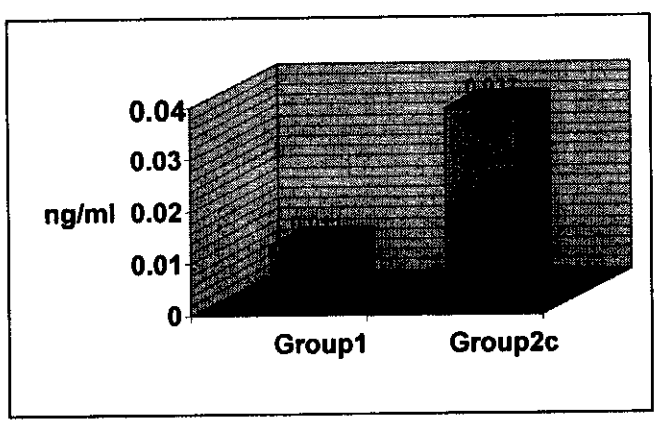


Fig (16): Show comparison between the control group and the three subgroups of sick infants as regard to troponin I .

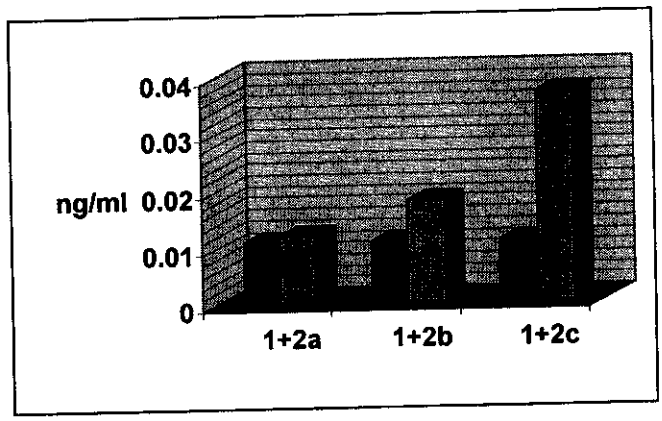


Table (16): Show comparison between the three subgroups (a) and (b) and (c) as regard to troponin I .

	1st group	2nd group	t	p.value
T R O P O N I N I	Group 2a No=15 Mean ± SD 0.012 ± 0.002	Group 2b No=15 Mean ± SD 0.018 ± 0.004	0.08	>0.05
	Group 2a No=15 Mean ± SD 0.011 ± 0.002	Group 2c No=15 Mean ± SD 0.037 ± 0.010	2.1	<0.05
	Group 2b No=15 Mean ± SD 0.018 ± 0.004	Group 2c No=15 Mean ± SD 0.037 ± 0.010	1.02	<0.05

there is there is statistical insignificant difference between group 2a and group 2b but show statistical significant difference between couples of other groups regarding to troponin I level.

Fig (17): Show comparison between the three subgroups (a), (b) and (c) as regard to troponin I .

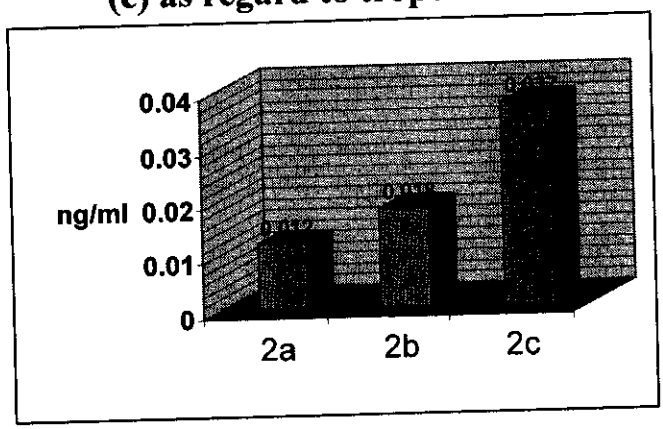


Table (17): Show correlation of Tn I level with mode of delivery,wt, gestational age,sex , maternal age , ECG changes and ABGs.

TROPONIN I With		Group 1 No=15			Group 2 No=45		
		r	p.value	Signi.	r	p.value	Signi.
Mode of delivery		0.050	>0.05	NS	0.156	>0.05	NS
wt		0.103	>0.05	NS	0.174	>0.05	NS
Gestational age		0.080	>0.05	NS	0.211	>0.05	NS
sex		0.099	>0.05	NS	0.167	>0.05	NS
Maternal age		0.112	>0.05	NS	0.214	>0.05	NS
ECG		0.106	>0.05	NS	0.213	>0.05	NS
ABGs	pH	0.159	>0.05	NS	-0.639	<0.01	HS
	PCO2	0.271	>0.05	NS	0.446	<0.01	HS
	PO2	0.013	>0.05	NS	-0.600	<0.01	HS
	HCO3	0.090	>0.05	NS	-0.604	<0.01	HS

there is statistical insignificant correlation of TnI with the mode of delivery, wt,gestational age,sex , maternal age ,ECG and ABGs.

Table (18): shows the comparison between control group and cases without ECG changes as regard to troponin I .

	Control group No=15 Mean ± SD	Cases without ECG changes No=40 Mean ± SD	t	p.value
Troponin I Ng/mL	0.011 ± 0.002	0.033 ± 0.009	2.3	<0.05

there is statistical significant increase in troponin I level in cases without ECG changes in comparison with control group.

Figure (18): shows the comparison between control group and cases without ECG changes as regard to troponin I .

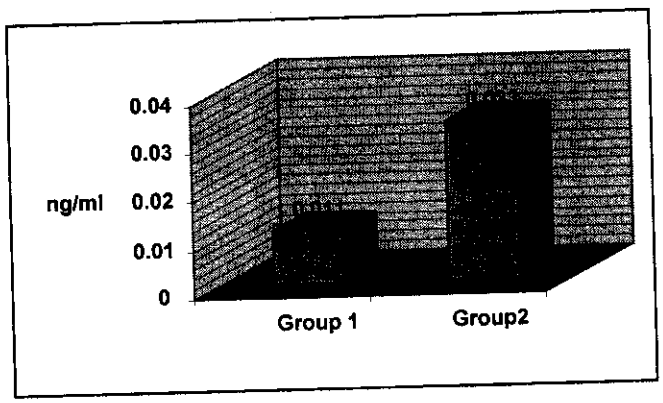


Table (19): shows the comparison between control group and cases with ECG changes as regard to troponin I

	Control group No=15 Mean ± SD	cases with ECG changes No=5 Mean ± SD	t	p.value
Troponin I Ng/mL	0.011 ± 0.002	0.036 ± 0.012	2.1	<0.05

there is statistical significant increase in troponin I level in cases with ECG changes in comparison with control group.

Figure (19): shows the comparison between control group and cases with ECG changes as regard to troponin I .

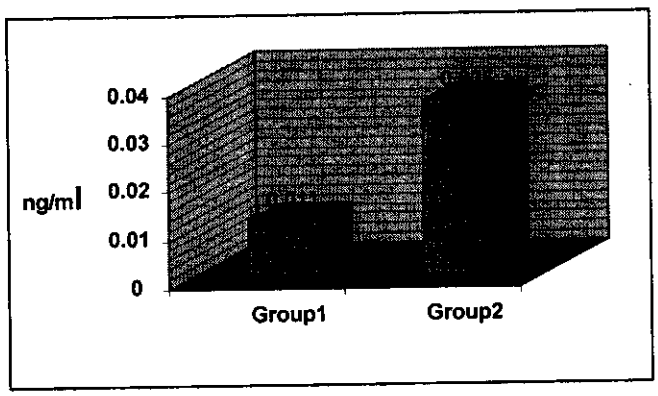


Table (20): shows the comparison between cases without ECG changes and cases with ECG changes as regard to troponin I .

	Cases without ECG changes No=40 Mean ± SD	cases with ECG changes No=5 Mean ± SD	t	p.value
Troponin I Ng/mL	0.033 ± 0.009	0.036 ± 0.012	2.6	<0.05

. there is statistical significant increase in troponin I level in cases with ECG changes in comparison with cases without ECG changes.

Table (21) shows comparison between troponin I and ECG as regard to Sensitivity, Specificity and predictive value.

	Troponin I	ECG
Sensitivity	80%	11%
Specificity	93%	86%
+ve predictive value	97.2%	71%
-ve predictive value	61%	24%

shows comparison between troponin I and ECG as regard to Sensitivity, Specificity and predictive value.the table show that

(1)-troponin I is highly sensitive in diagnosis of myocardial damage and more reliable in excluding –ve cases of myocardial damage than ECG .

(2)-troponin I is more valuable in prediction of +ve and –ve cases than ECG.