RESULTS

Table (1): Comparison between cases and control groups as regard to gestational age.

	Gestational age	
	Control	**Cases**
Range	34 – 36wks	28 – 36wks
Mean	32.40	32.98
± SD	2.836	2.527
t. test	0.6	
p. value	>0.05	

The table shows that there is no statistical significant difference between different gestational ages in cases group in comparison with the control group.

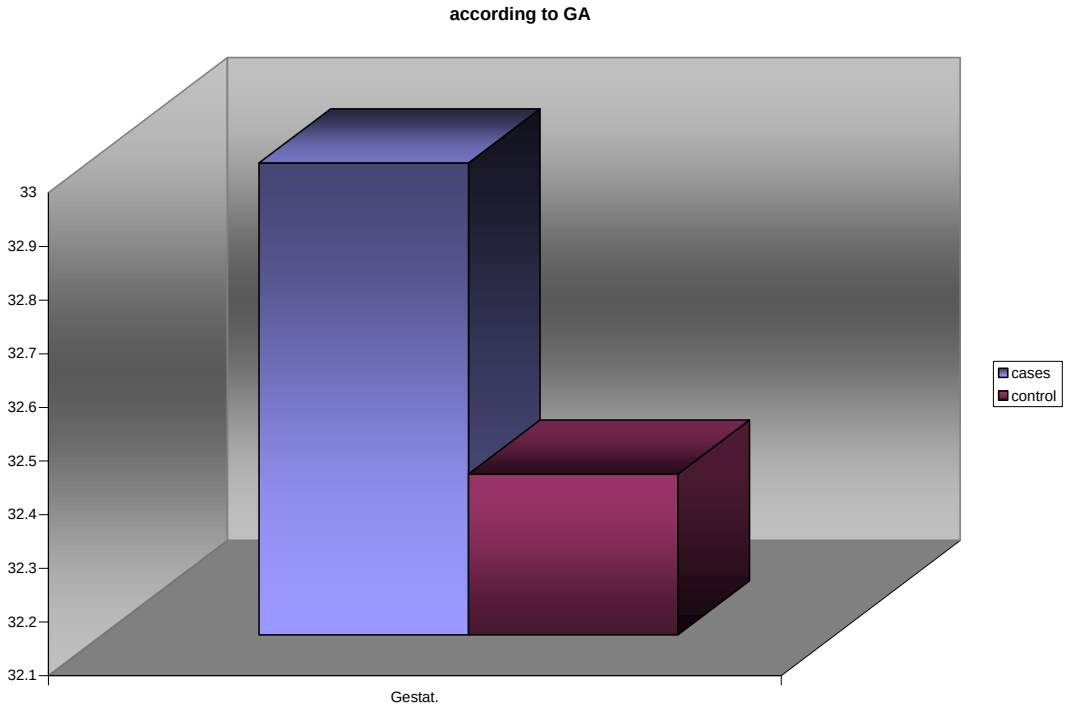

Fig. (1): Comparison between cases and control groups as regard to gestational age.

Table (2): Comparison between cases and control groups as regard to birth weight.

	Weight	
	Control	**Cases**
Range	2000 - 2600	900 - 2500
Mean	2233.00	1517.50
± SD	170.575	438.609
t. test	9.040	
p. value	>0.05	

The table shows that there is no statistical significant difference between birth weights in Cases in comparison with the control group.

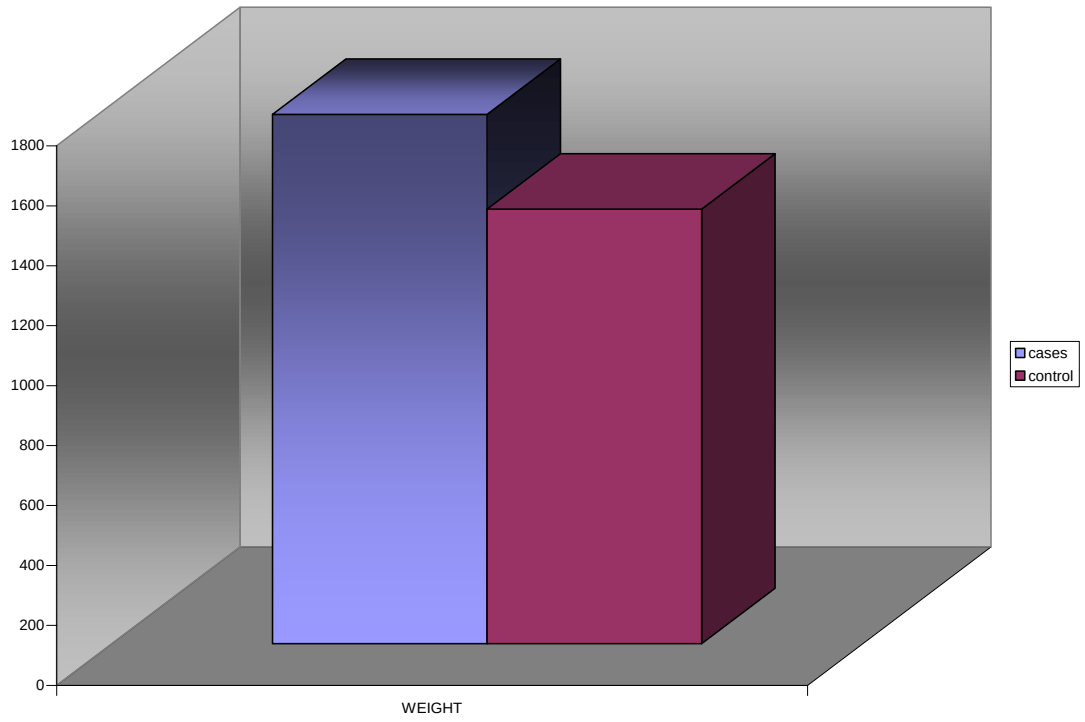

Fig. (2): Comparison between cases and control groups as regard to birth weight.

Table (3): Comparison between cases and control groups as regard to sex distribution.

		Sex		
		Male	**Female**	**Total**
Control	N	5	5	10
	%	50	50	100
Cases	N	22	18	40
	%	55	45	100
Total	N	27	23	50
	%	54	46	100
Chi-Square	X^2	0.183		
	P-value	>0.05		

The table shows that there is no statistical significant difference between males and females in cases in comparison with the control group.

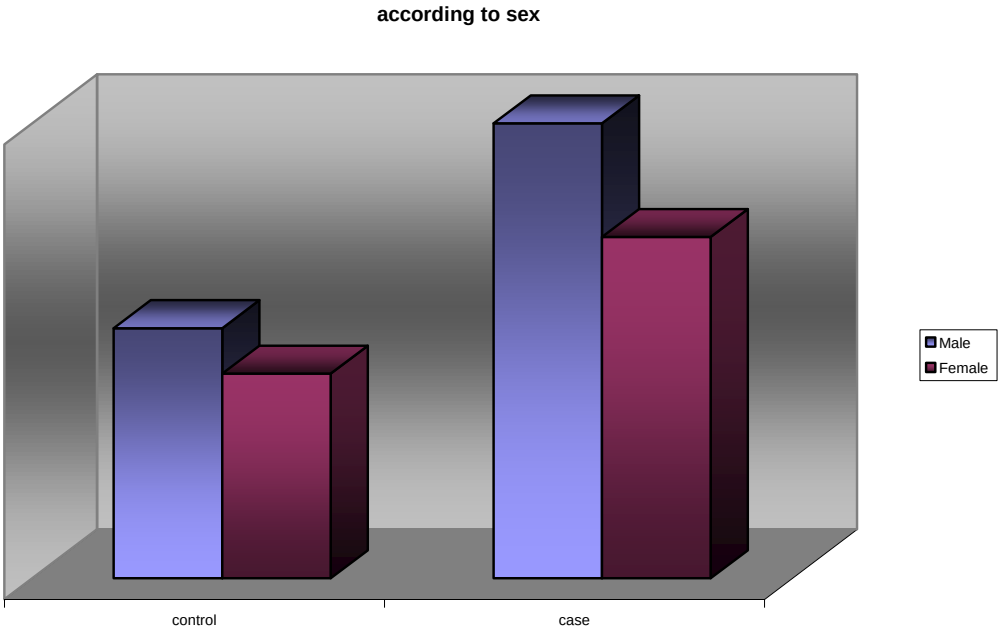

Fig. (3): Comparison between cases and control groups between males and females.

Table (4): Comparison between cases and control groups as regard to CBC parameters.

	N	Range	Mean	Std. Deviation	t	p
HB gm/dl	Cases (40)	10.40 – 20	14.708	2.7221	1.3	>0.05
	Control(10)	12.50 – 18.30	15.680	1.7856		
RBC 10^6/mm^3	Cases (40)	3 – 7.90	5.649	1.4538	0.6	>0.05
	Control(10)	3.90 – 7.90	5.420	.9065		
L.C 10^3/mm^3	Cases (40)	4.50 – 17.3	10.78	3.800	0.3	>0.05
	Control(10)	7 – 16.70	10.43	2.900		
PLC 10^3/mm^3	Cases (40)	30 – 243	128.13	50.687	2.15	>0.05
	Control(10)	100 – 290	156.15	40.948		

The tables show that there is no statistical significant difference between CBC parameters in cases in comparison with the control group.

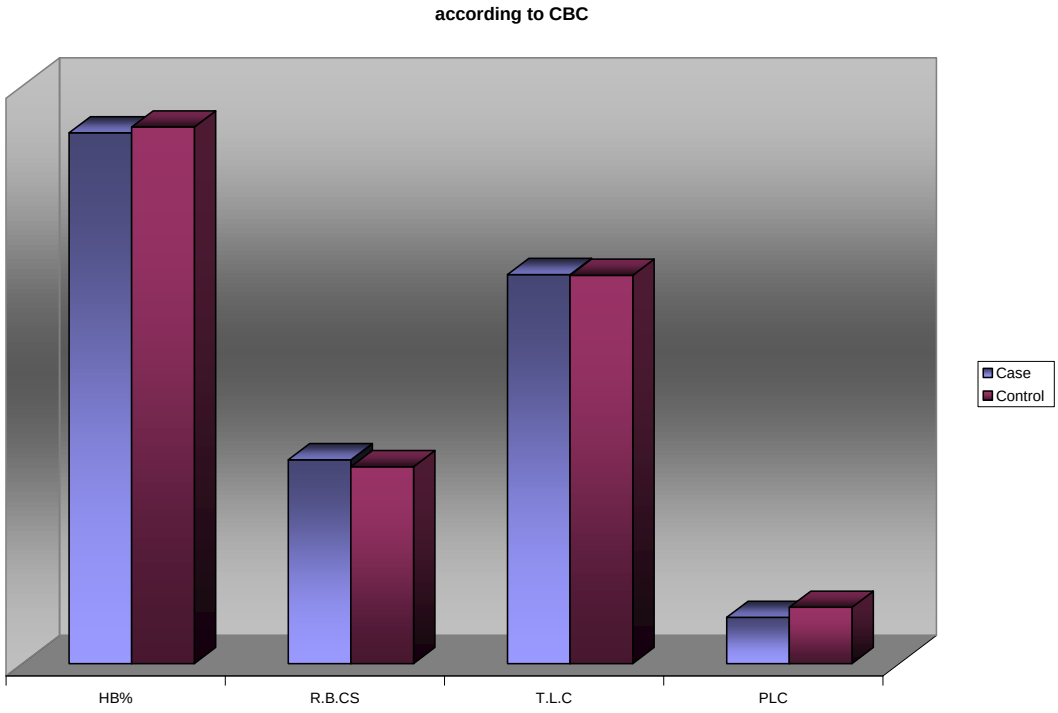

Fig. (4): Comparison between cases and control groups as regard to CBC parameters.

Table (5): Comparison between cases and control groups as regard to Apgar score at 1 min.

	Apgar score	
	At 1 min	
	Control	Cases
Range	5 – 8	4 – 7
Mean	6.40	6.05
+ SD	0.966	1.061
t. test	0.9	
p. value	>0.05	

The table shows that there is no statistical significant difference between Apgar score at 1 min in cases group in comparison with the control group.

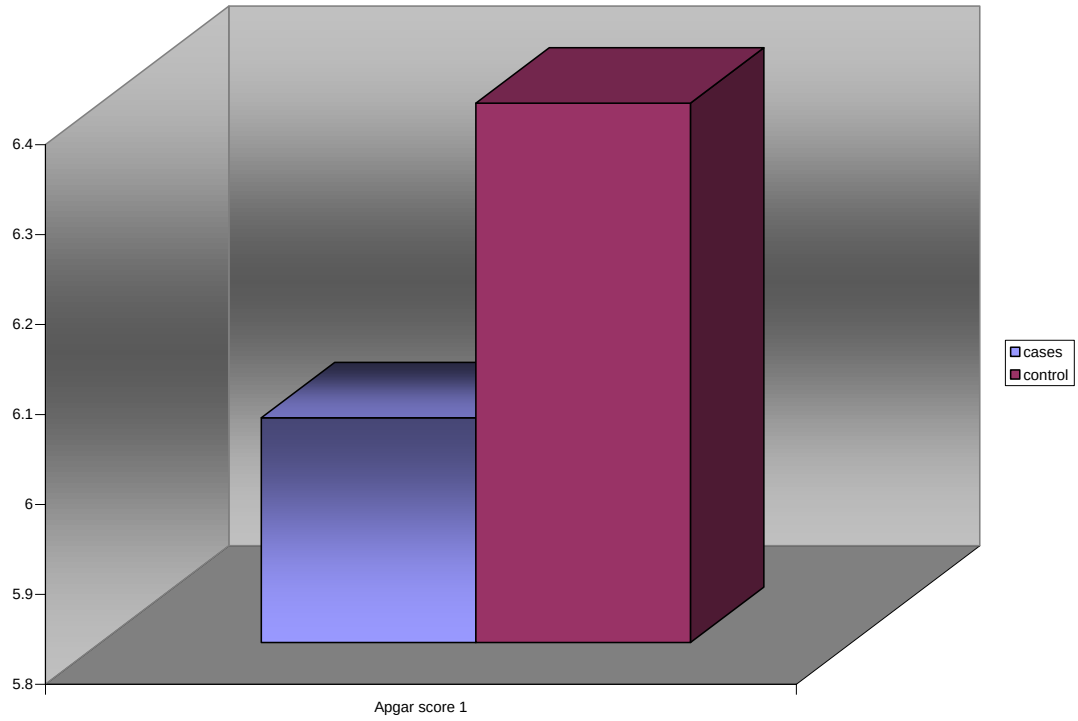

Fig. (5): Comparison between cases and control groups as regard to Apgar score at 1 min.

Table (6): Comparison between cases and control groups as regard to Apgar score at 5 min.

	Apgar score	
	At 5 min	
	Control	Cases
Range	5 – 8	4 – 7
Mean	8.70	8.38
+ SD	0.949	0.979
t. test	0.9	
p. value	>0.05	

The table shows that there is no statistical significant difference between Apgar score at 5 min in cases group in comparison with the control group.

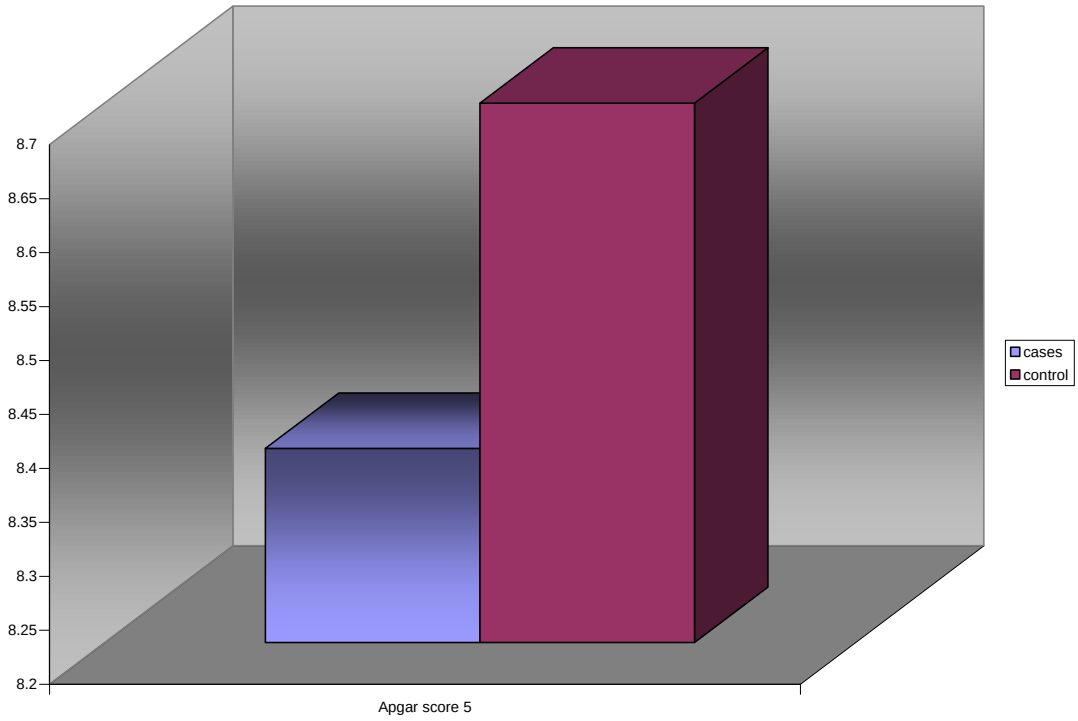

Fig. (6): Comparison between cases and control groups as regard to Apgar score at 5 min.

Table (7): Comparison between cases and control groups as regard to C-reactive protein (CRP).

			CRP		
			Positive	**Negative**	**Total**
Control		N	0	10	10
		%	0	100	100
Cases		N	20	20	40
		%	50	50	100
Chi-Square	X^2		6.3		
	P-value		<0.05		

The table shows that there is statistical significant difference between C-reactive protein (CRP) in cases group in comparison with the control group.

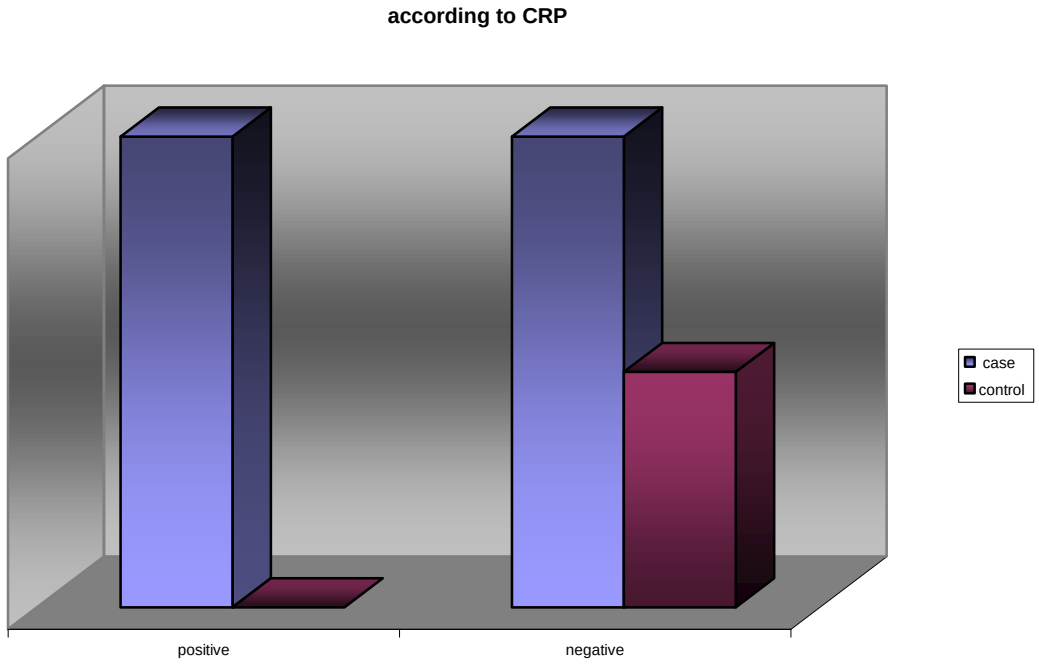

Fig. (7): Comparison between C-reactive protein (CRP) in cases group in comparison with the control group.

Table (8): Comparison between cases and control groups as regard to Serum Aspartate aminotransferase (AST).

	Serum Aspartate aminotransferase (AST)	
	Control	**Cases**
Range	28 - 35	29 - 70
Mean	32.40	43.08
± SD	2.836	9.654
t. test	3.4	
p. value	<0.05	

The table shows that there is statistical significant difference between Serum Aspartate aminotransferase (AST) in cases group in comparison with the control group.

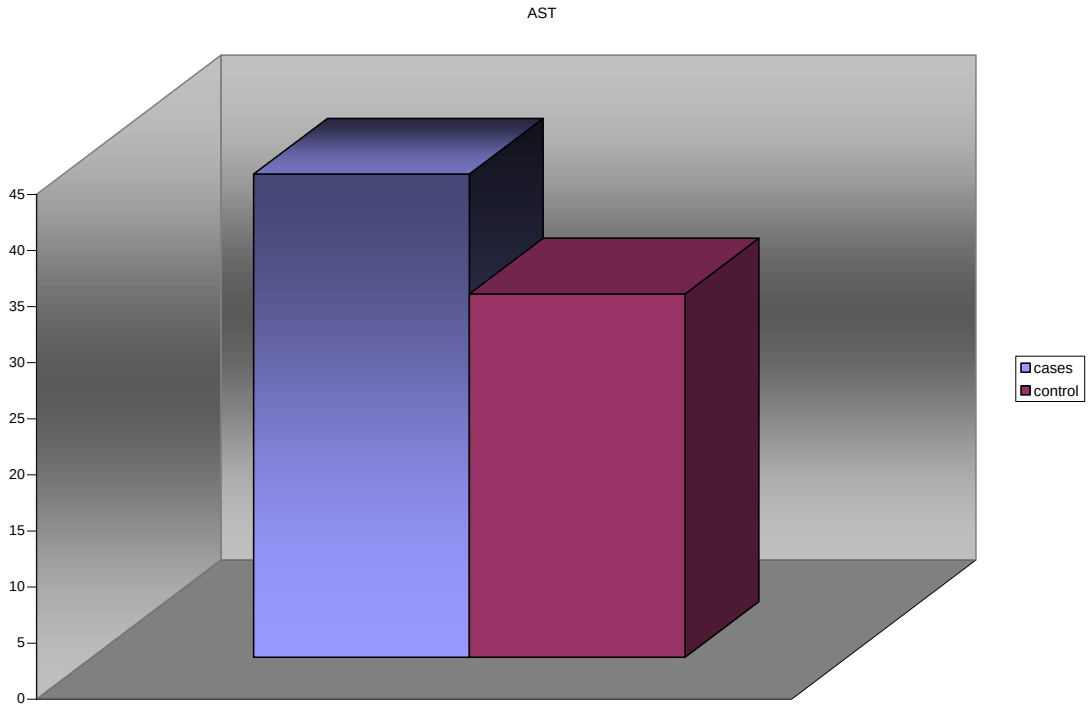

Fig. (8): Comparison between Serum Aspartate aminotransferase (AST) in cases group in comparison with the control group.

Table (9): Comparison between cases and control groups as regard to serum Alanine aminotransferase (ALT).

	Serum Alanine aminotransferase (ALT)	
	Control	**Cases**
Range	30 – 41	23 - 112
Mean	38.20	57.63
± SD	4.185	18.240
t. test	3.3	
p. value	<0.05	

The table shows that there is statistical significant difference between serum Alanine aminotransferase (ALT) in cases group in comparison with the control group.

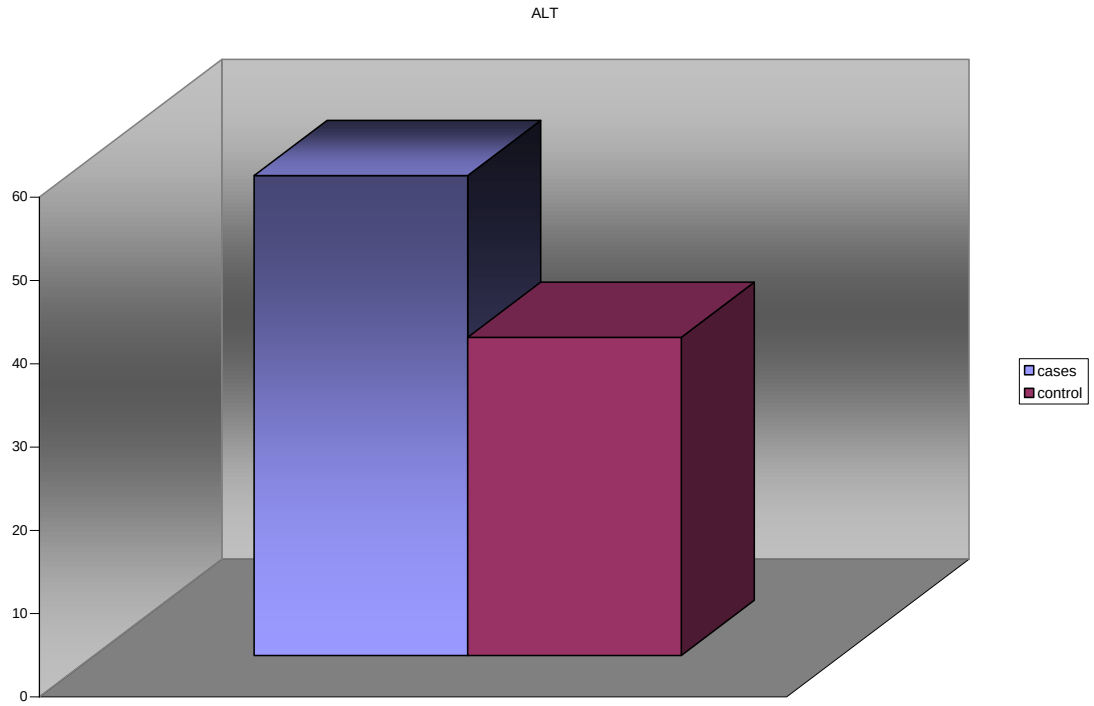

Fig. (9): Comparison between serum Alanine aminotransferase (ALT) in cases group in comparison with the control group.

Table (10): Comparison between the studied groups as regard to arterial blood gases.

	N	Range	Mean	Std. Deviation	t	p
PH	Cases (40)	6.90 – 7.26	7.14	.100	7.3	<0.05
	Control(10)	7.35 – 7.41	7.37	.025		
PO2	Cases (40)	59 – 90	76.68	7.885	4.7	<0.05
	Control(10)	80 – 96	88.90	4.725		
PCO2	Cases (40)	8.20 – 30.8	22.73	6.212	7.1	<0.05
	Control(10)	35 – 40	37.10	2.025		
HCO3	Cases (40)	6 – 30	10.91	5.542	6.4	<0.05
	Control(10)	21 – 25	22.40	1.578		

The table shows statistical significant reduction in cases in comparison with the control group as regard to arterial blood gases.

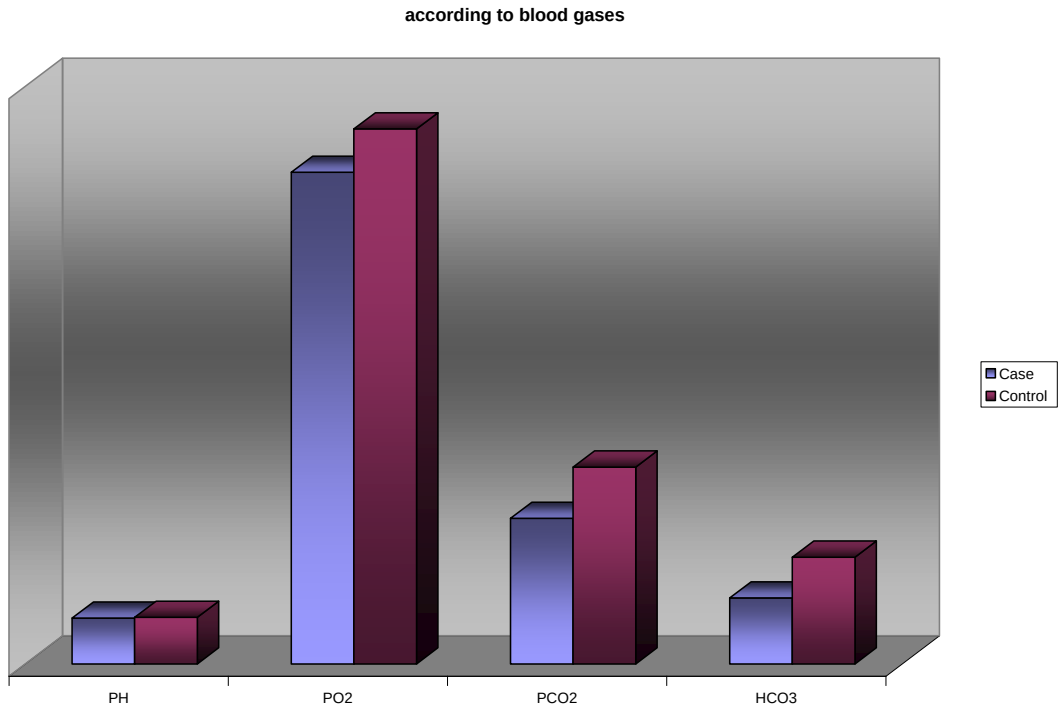

Fig. (10): Comparison between the studied groups as regard to arterial blood gases.

Table (11): Correlation between serum ammonia levels with gestational age.

	r	P-value
Gest. Age	-0.127	>0.05

The table shows negative correlation of serum ammonia level with gestational age.

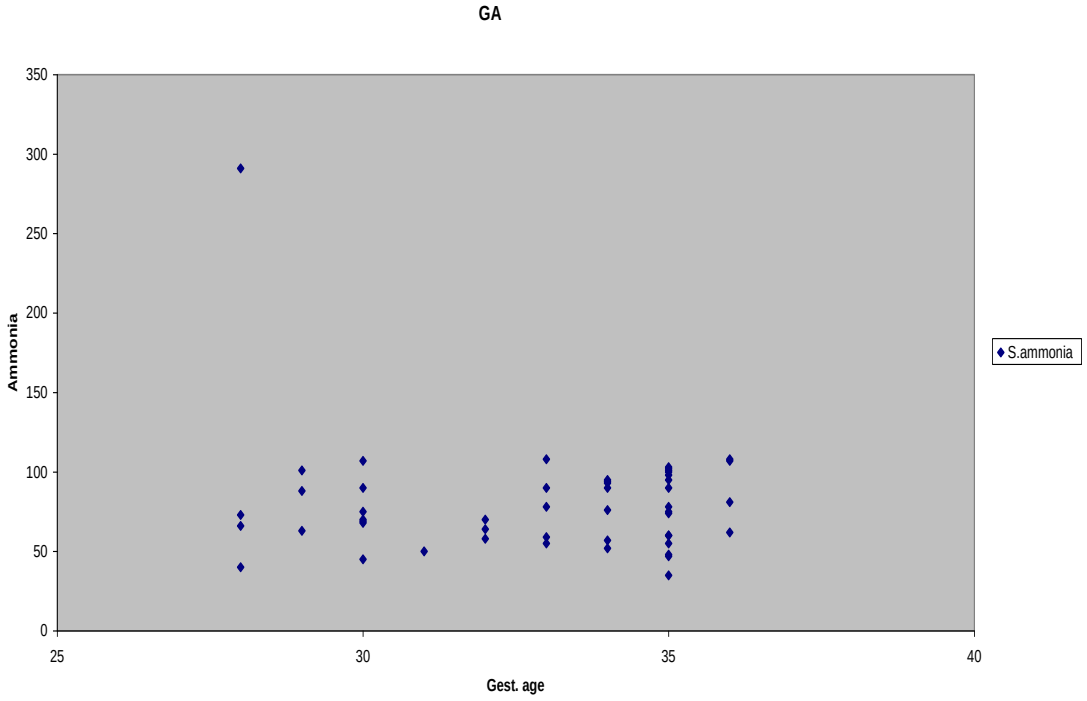

Fig.(11): Shows no statistical significant correlation between the serum ammonia level and gestational age.

Table (12): Correlation between serum ammonia levels with birth weight.

	r	P-value
Birth weight	-0.122	>0.05

The table shows negative correlation of serum ammonia level with birth weight.

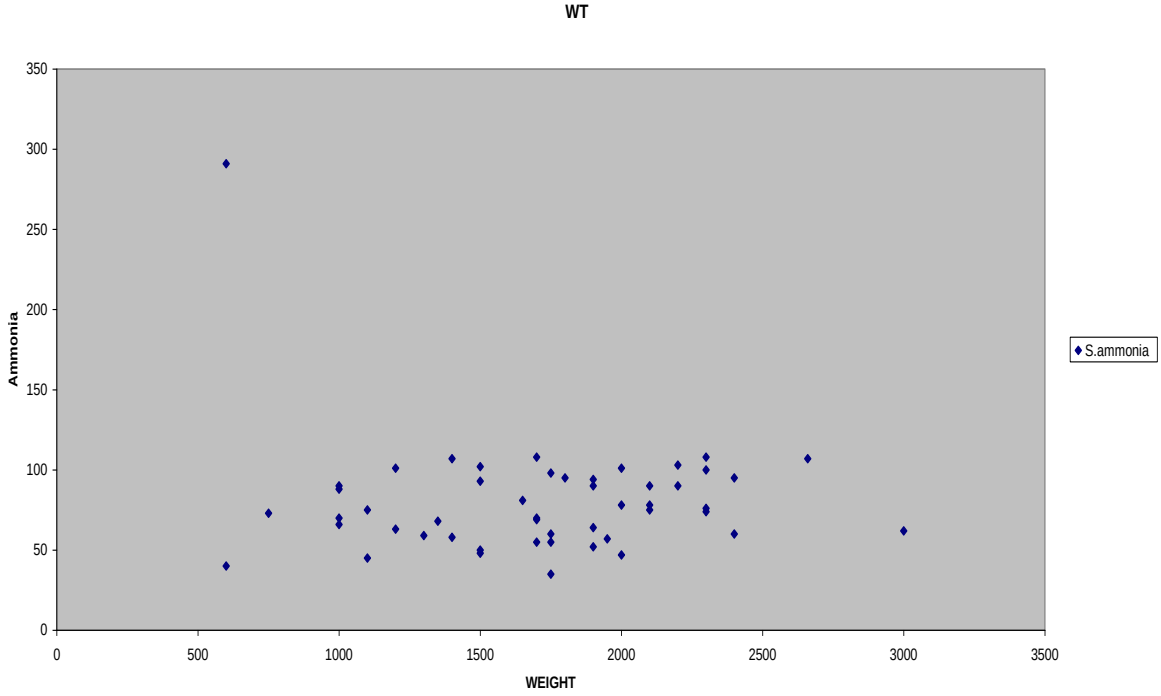

Fig. (12): Shows no statistical significant relation between the serum ammonia level and birth weight.

Table (13): Correlation between serum ammonia levels with Apgar score at 1 min.

	r	P-value
apgar score at 1 min	-0.098	>0.05

The table shows negative correlation of serum ammonia level with Apgar score at 1 min.

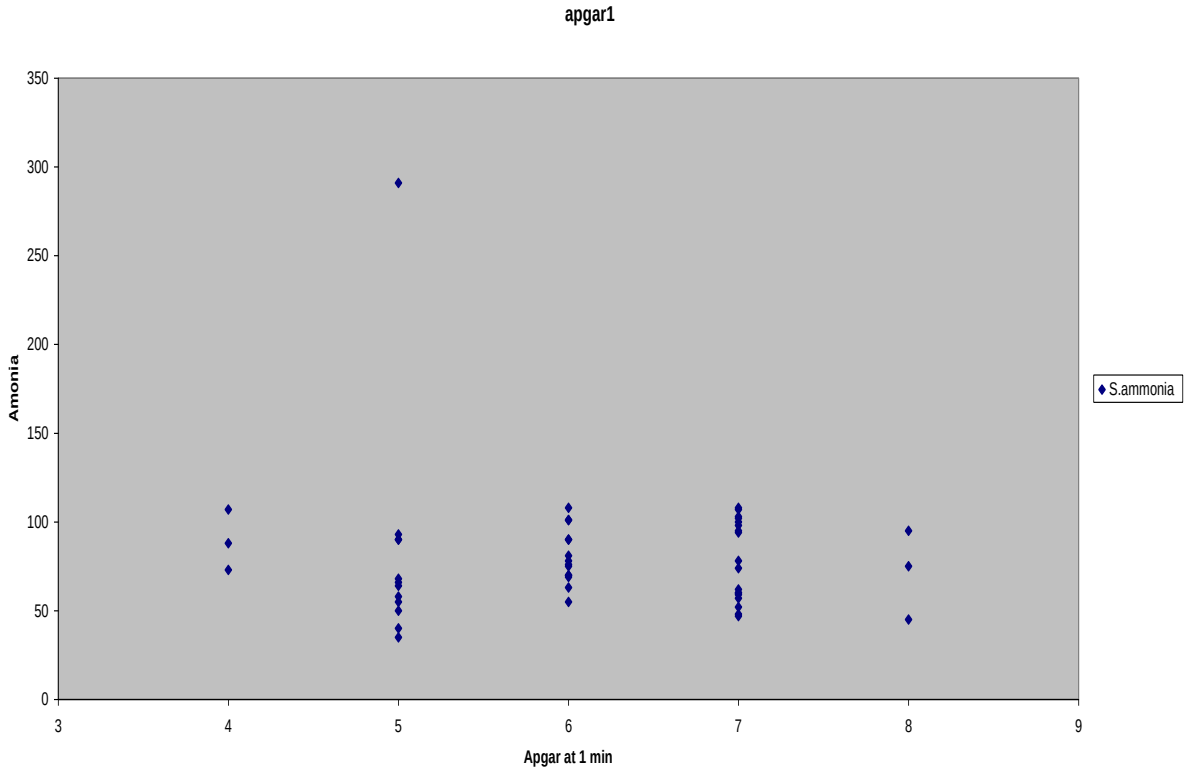

Fig. (13): Shows no statistical significant relation between serum ammonia level and Apgar score at 1 min.

Table (14): Correlation between serum ammonia levels with Apgar score at 5 min.

	r	P-value
apgar score at 5 min	-0.094	>0.05

The table shows negative correlation of serum ammonia level with Apgar score at 5 min.

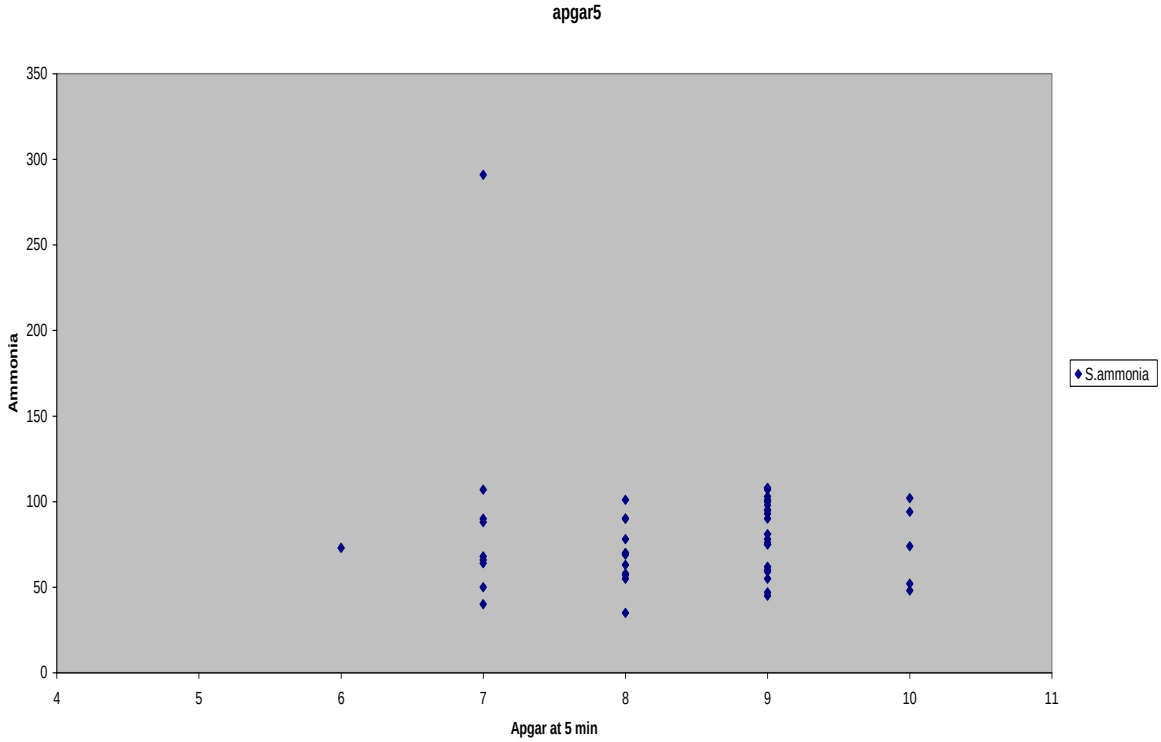

Figure (14): Shows no statistical significant relation between the serum ammonia level and Apgar score at 5 min.

Table (15): Correlation between serum ammonia levels with CRP.

	r	P-value
CRP	0.833	<0.05

The table shows positive correlation of serum ammonia level with CRP.

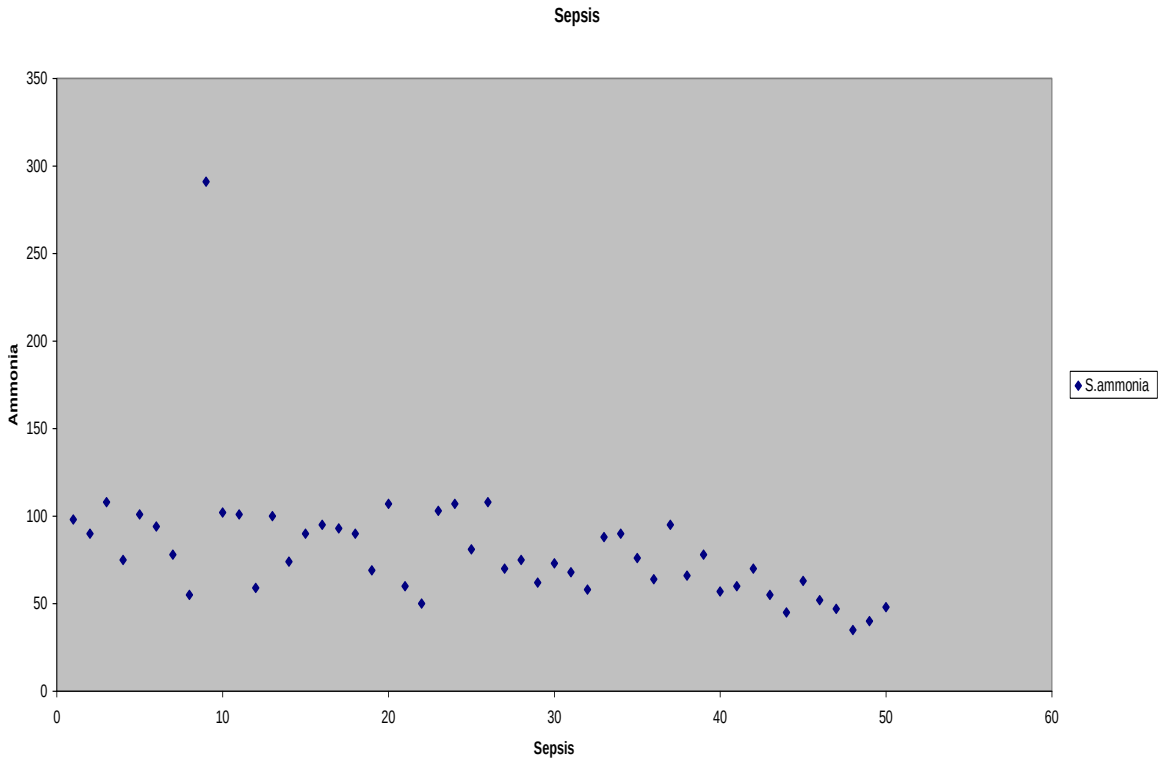

Fig. (15): Shows statistical significant relation between the serum ammonia level and CRP.

Table (16): Correlation between serum ammonia levels with Serum Aspartate aminotransferase (AST).

	r	P-value
AST	0.652	>0.05

The table shows positive correlation of serum ammonia level with Serum Aspartate aminotransferase (AST).

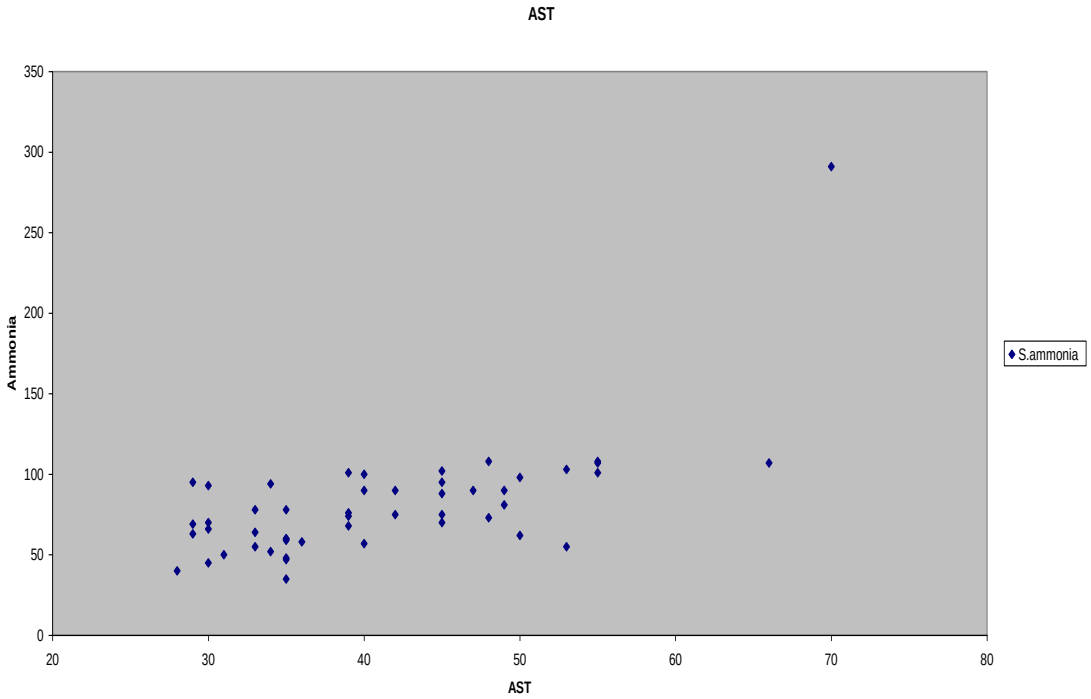

Fig. (16): Shows statistical significant relation between the serum ammonia level and AST.

Table (17): Correlation between serum ammonia levels with Serum Alanine aminotransferase (ALT).

	r	P-value
ALT	0.687	>0.05

The table shows positive correlation of serum ammonia level with Serum Alanine aminotransferase (ALT).

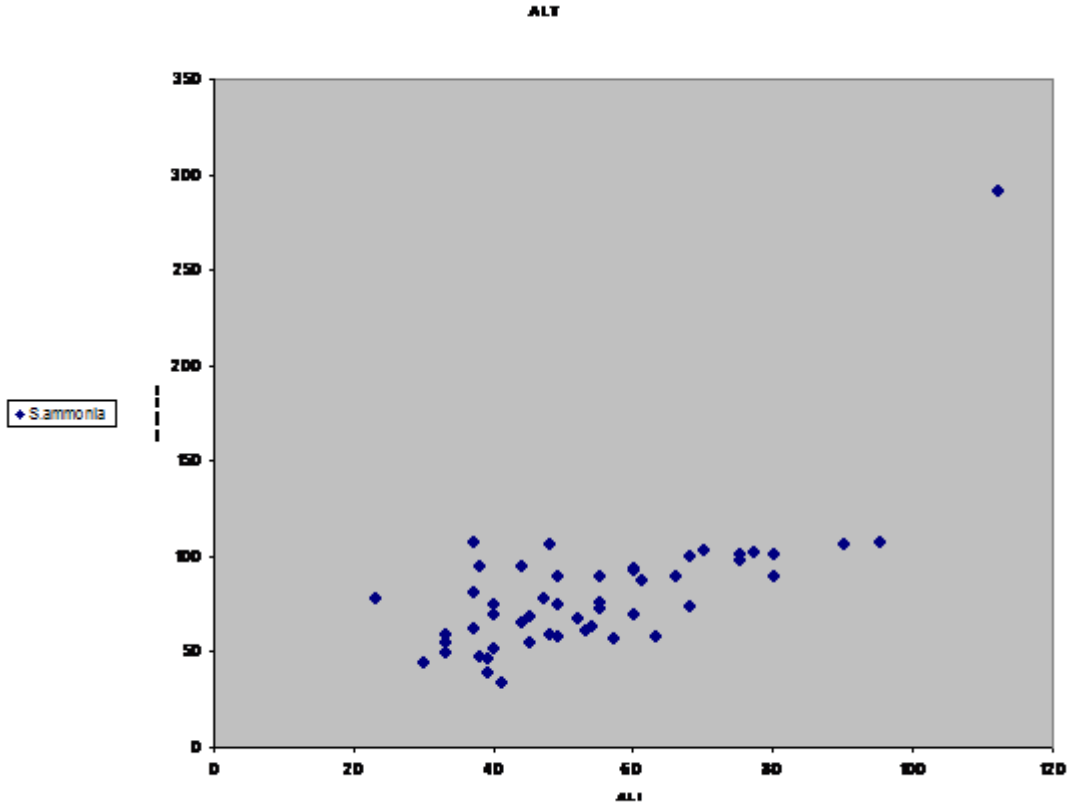

Fig. (17): Shows statistical significant relation between the serum ammonia level and ALT.

Table (18): Correlation between serum ammonia levels with degree of respiratory distress.

degree of respiratory distress	Grade II	Grade III	Grade IV	r	p
	74.1±12.1	80.8±20.5	127.2±92.4	3.3	>0.05

The table shows positive correlation of serum ammonia level with degree of respiratory distress.

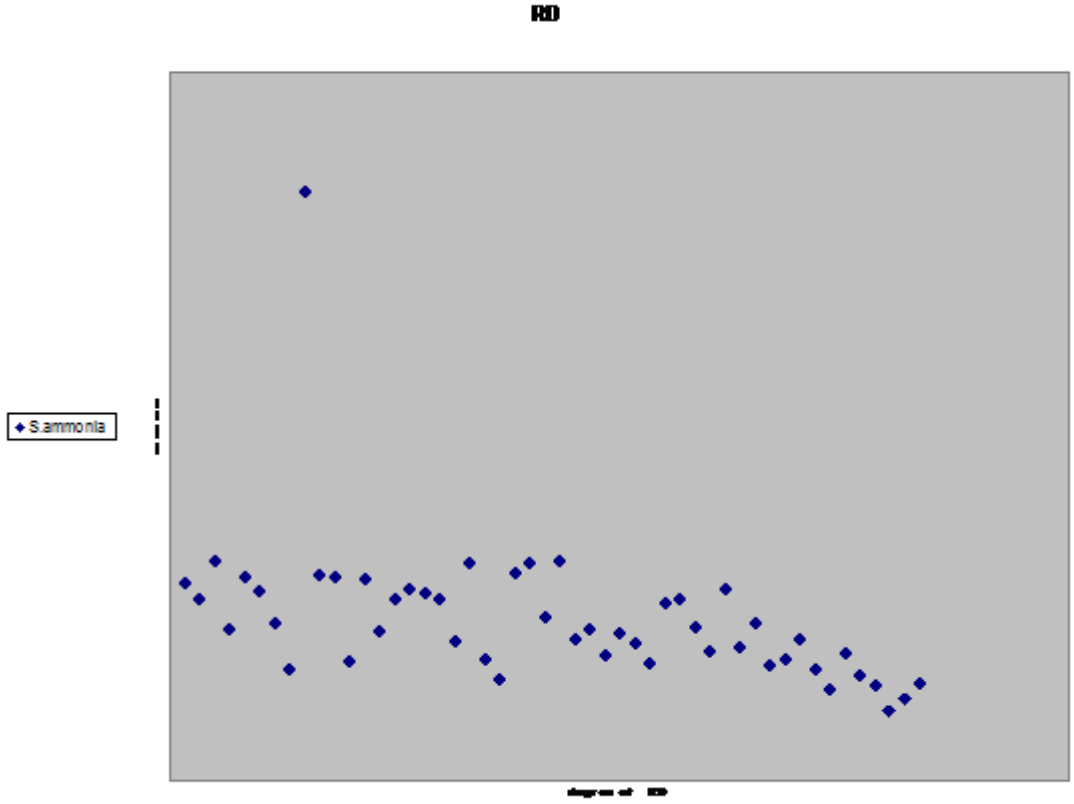

Fig. (18): Shows no statistical significant relation between the serum ammonia level and degree of respiratory distress.