RESULTS

Table (3): Comparison between cases and control as regard Age.

	Group	N	Mean	Std. Deviation	t	p
Age	Cases	40	8.00	3.987	0.1	>0.05
	control	20	8.15	3.924		

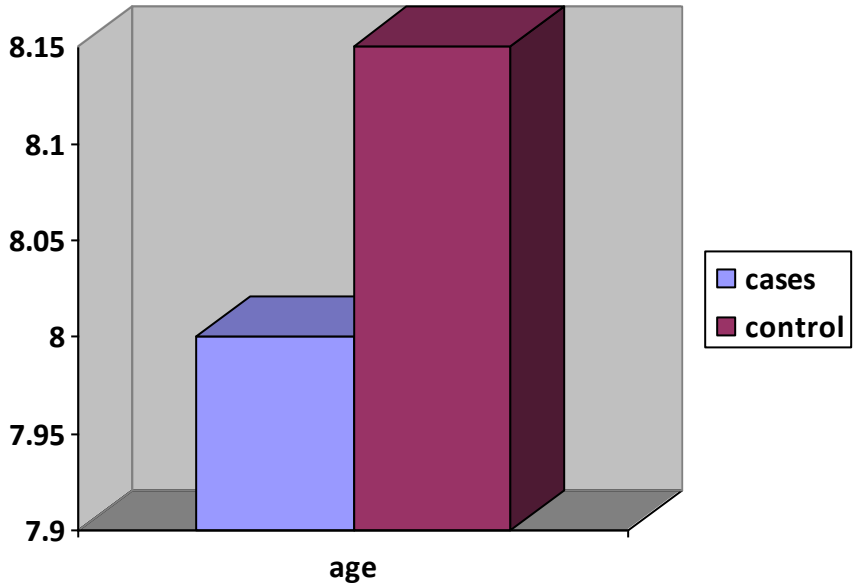


Figure (6)

Table (3) and Fig. (6) show no significant statistical difference between septic and control groups as regards age (days) (p>0.05).

Table (4): Comparison between cases and control as regard Gestional age

	Group	N	Mean	Std. Deviation	t	p
Gestional age	Cases	40	37.22	2.412	0.3	>0.05
	control	20	37.45	2.585		

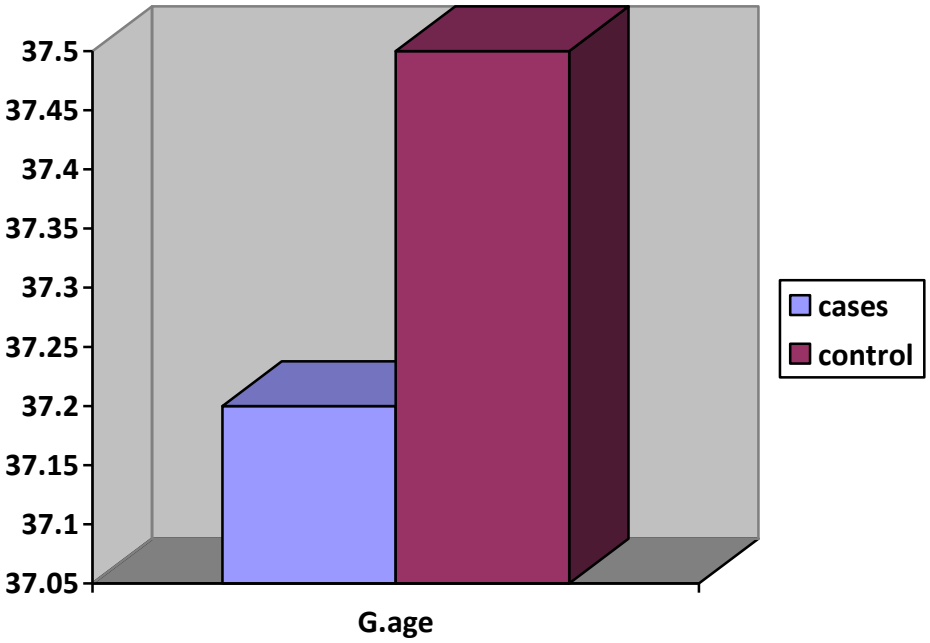


Figure (7)

Table (4) and Fig. (7) show no significant statistical difference between septic and control groups as regards gestational age (weeks) (p> 0.05).

Table (5): Comparison between cases and control as regard Weight

	Group	N	Mean	Std. Deviation	t	p
Weight	Cases	40	2.899	.5256	1.2	>0.05
	control	20	3.072	.5981		

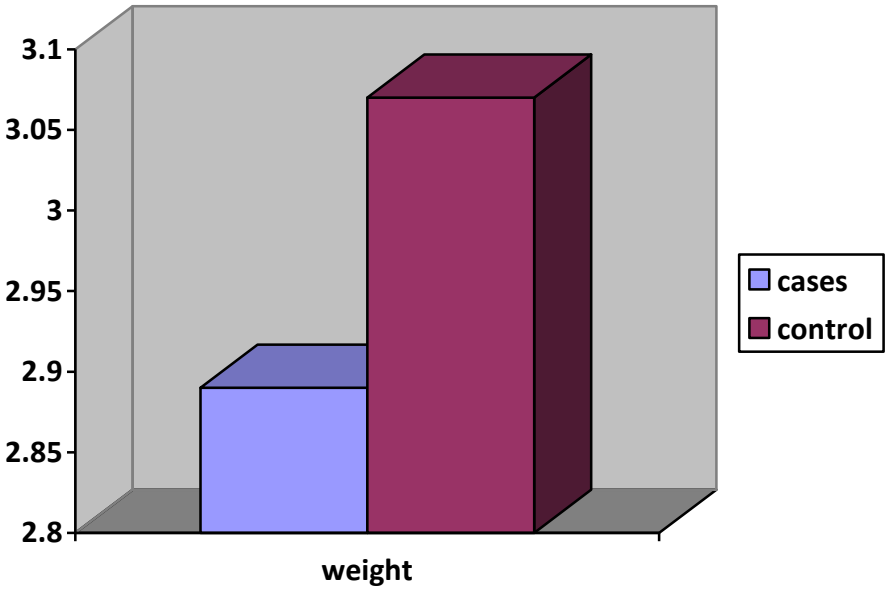


Figure (8)

Table (5) and fig.(8) show no significant statistical difference between patient and control groups as regards body weight (grams) (p>0.05).

Table (6): Clinical data of septic neonates.

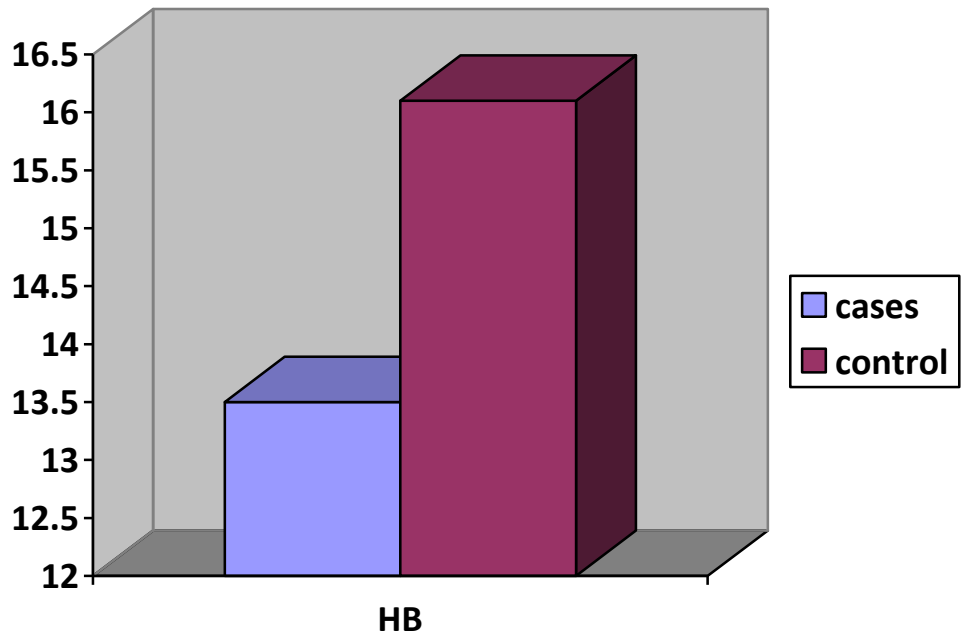
	Septic Neonates	
	No.	*%*
Weak Suckling	38	95%
Lethargy	30	75%
Weak Moro	30	75%
Temperature Instability	18	45%
Respiratory distress	30	75%
Apnea	8	20%
Cyanosis	6	15%
Jaundice	14	35%
Pallor	14	35%
Poor perfusion	16	40%
Abdominal distension	10	25%
Diarrhea	8	20%
Vomiting	4	10%
Hepatosplenomegaly	10	25%
Convulsions	4	10%
Hypotonia	10	25%
Umbilical sepsis	4	10%
Mottling	14	35%
Sclerema	4	10%
Bleeding tendency	8	20%

Table (6) shows that:

- Weak suckling was the most frequent clinical finding 95%.
- Weak Moro, lethargy and respiratory distress, each of them was 75%.
- Apnea 20%, cyanosis 15%,both pallor and jaundice were 35%.

Table (7): Comparison between cases and control as regard blood picture

	Group	N	Mean	Std. Deviation	t	p
HB%	Cases	40	13.478	2.3807	5.2	<0.05
	control	20	16.060	1.4325		
TLC	Cases	40	15.087	8.2130	1.9	>0.05
	control	20	12.240	3.4605		
PLT	Cases	40	230.80	88.385	0.6	>0.05
	control	20	244.70	65.254		



Figure(9)

Table (7) and fig. (9) show significant difference between patients and control groups as regards Hb level ($p<0.05$).

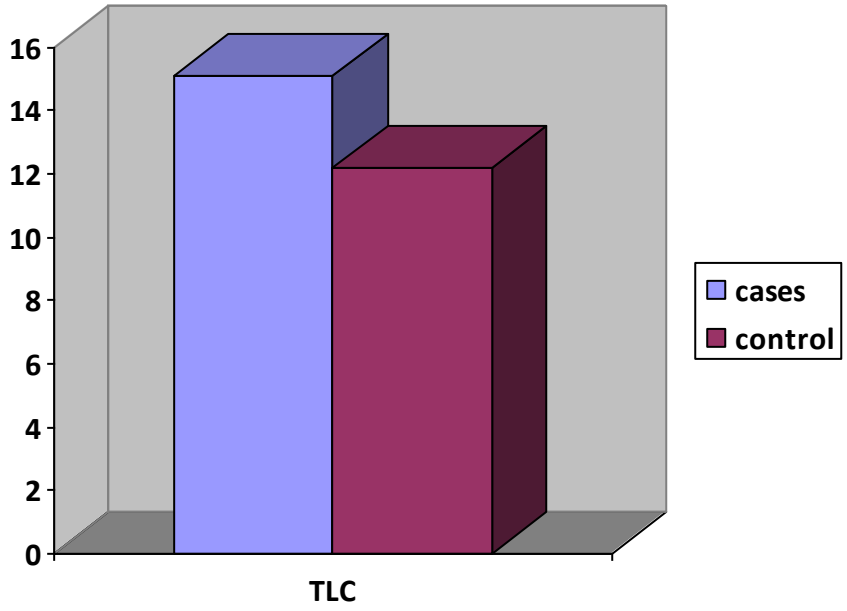


Figure (10)

Table (7) and Fig.(10) Show no significant statistical difference between both groups and regards total leukocytic count (TLC) ($p>0.05$).

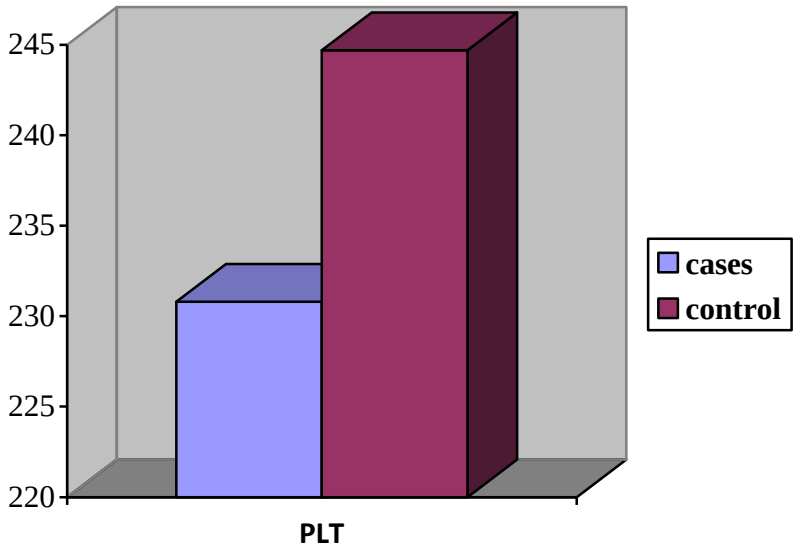
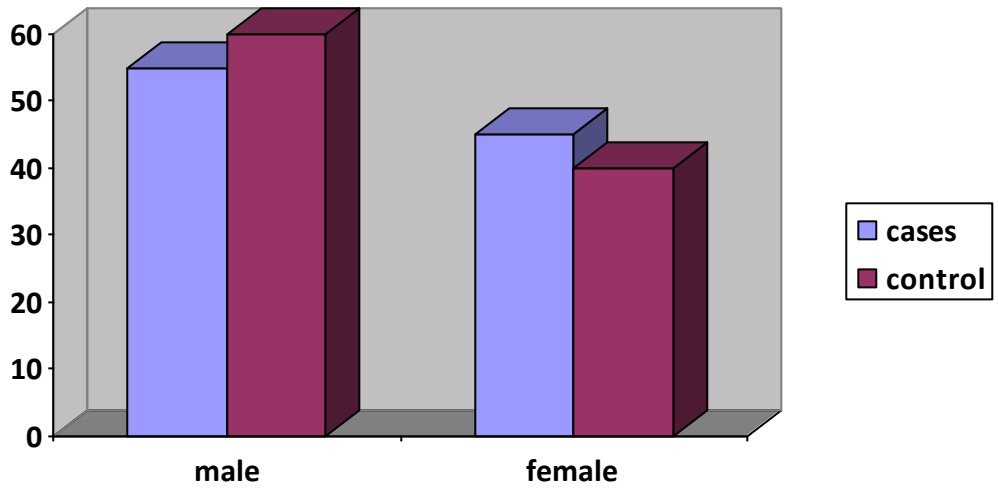


Figure (11)

Table(7) and Fig.(11) Show no significant difference between patients and control groups as regards total leukocytic count (p>0.05).

Table (8): Comparison between cases and control as regard sex:

		group						X^2	p
		Cases		Control		Total			
		No.	%	No.	%	No.	%		
Sex	Female	18	45.0%	8	40.0%	26	43.3%	0.1	>0.05
	Male	22	55.0%	12	60.0%	34	56.7%		
	Total	40	100.0%	20	100.0%	60	100.0%		



Figure(12)

Table (8) and Fig.(12): Show no significant statistical difference between patients and control group as regards sex (p>0.05).

Table (9): Comparison between cases and control as regard mode of delivery:

		group						X^2	p
		Cases		Control		Total			
		No.	%	No.	%	No.	%		
MOD	C.S	10	25.0%	4	20.0%	14	23.3%	0.2	>0.05
	NVD	30	75.0%	16	80.0%	46	76.7%		
	Total	40	100.0%	20	100.0%	60	100.0%		

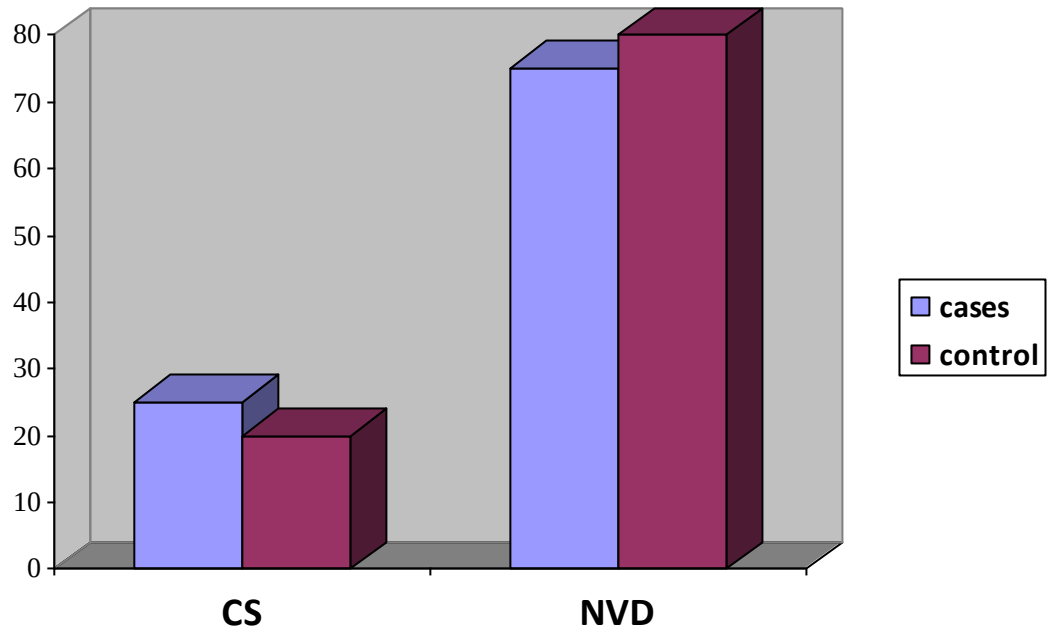


Figure (13)

Table (9) and Fig.(13) Show no significant statistical difference as regards mode of delivery (p>0.05).

Table (10): Comparison between cases and control as regard St total:

		group						X^2	p
		Cases		Control		Total			
		No.	%	No.	%	No.	%		
St total	<0.2	12	30.0%	20	100.0%	32	53.3%	23.5	<0.05
	>0.2	28	70.0%	0	.0%	28	46.7%		
	Total	40	100.0%	20	100.0%	60	100.0%		

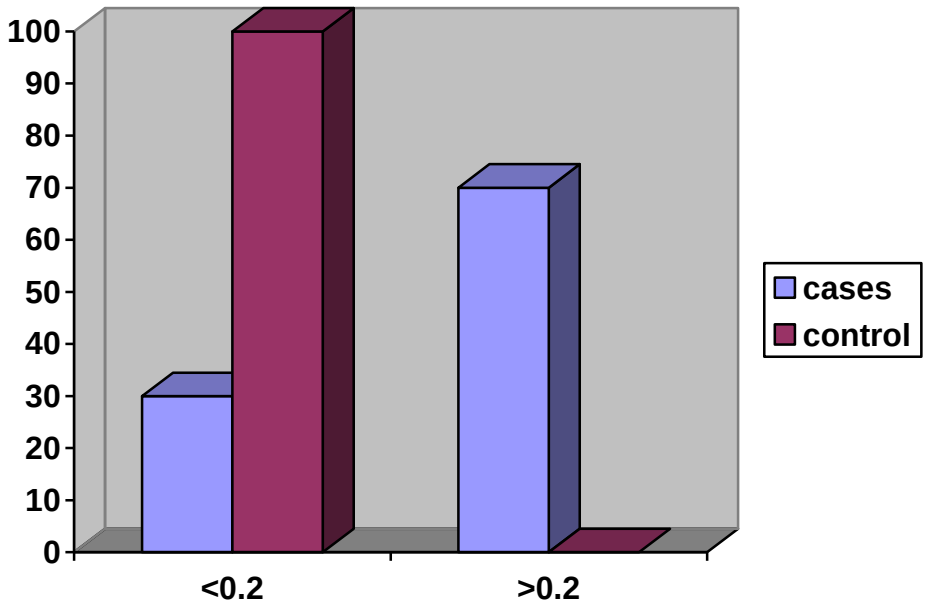


Figure (14)

Table (10) and Fig.(14): Show significant statistical differnce between patients and control group as regards I/T ($p<0.05$).

Table (11): Study group according to risk factors

	cases	
	No.	**%**
Antipartum Hemorrahage	2	5.0%
Difficult Labour	6	15.0%
Fever	10	25.0%
PROM	18	45.0%
Twin	4	10.0%
Total	40	100.0%

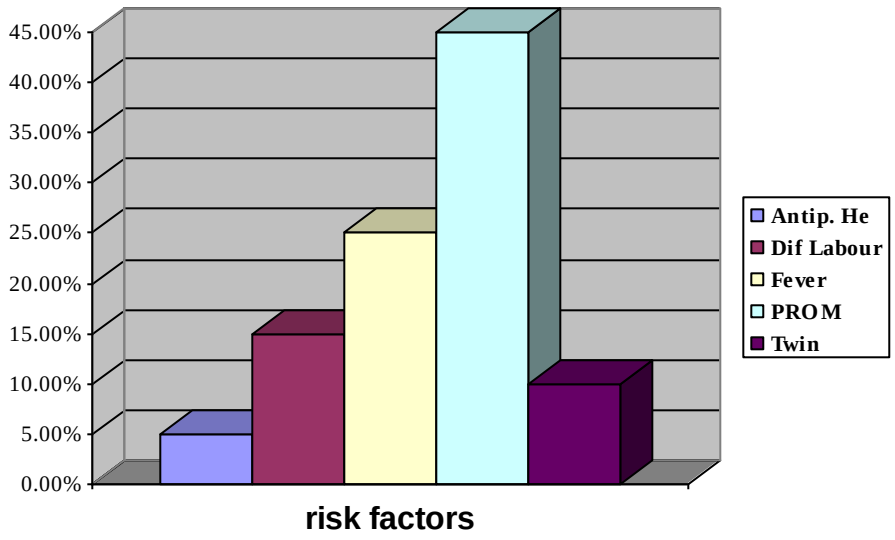
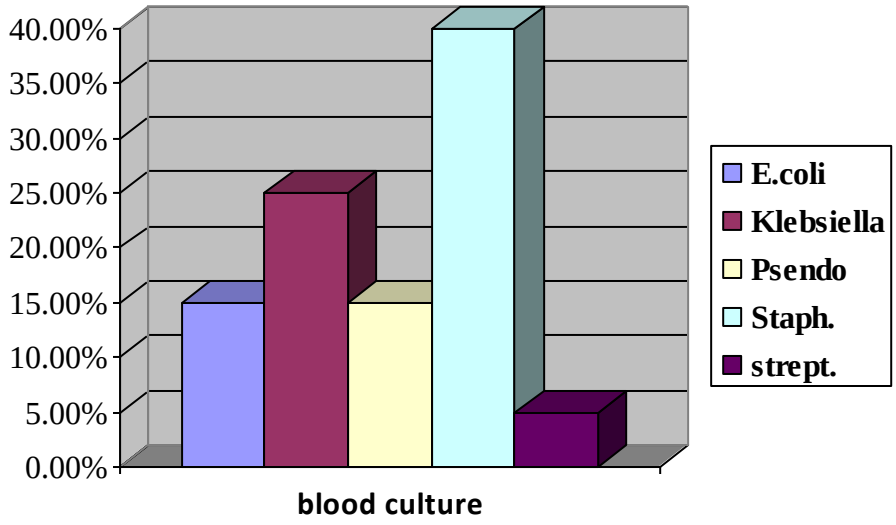


Figure (15)

Table (11) and Fig.(15): Show that PROM is the most common risk factor for neonatal sepsis (45%), followed by intrapartum fever (25%), difficult labour (15%), twins and antipartum hemorrhage (5%).

Table (12): study group according to Bl.culture

		Cases	
		No.	%
Bl.culture	E.coli	6	15.0%
	Klebsiella	10	25.0%
	Psendo	6	15.0%
	Staph.	16	40.0%
	strept.	2	5.0%
	Total	40	100.0%



Figure(16): Frequency of isolated organisms from blood culture in septic neonates

Table (12) and Figure (16) Show isolated organisms from blood cultures in septic neonates staphylococci 40%, Klebsiela 25%, E-coli 15%, preudo monous 15%, E-coli 15%, pseudo monous 15% and streptococci 5%.

Table (13): comparison between cases and control as regards CRP

		group						X^2	p
		cases		control		Total			
		No.	%	No.	%	No.	%		
CRP	Negative	6	15.0%	16	80.0%	22	36.7%	21.5	<0.001
	Positive	34	85.0%	4	20.0%	38	63.3%		
	Total	40	100.0%	20	100.0%	60	100.0%		

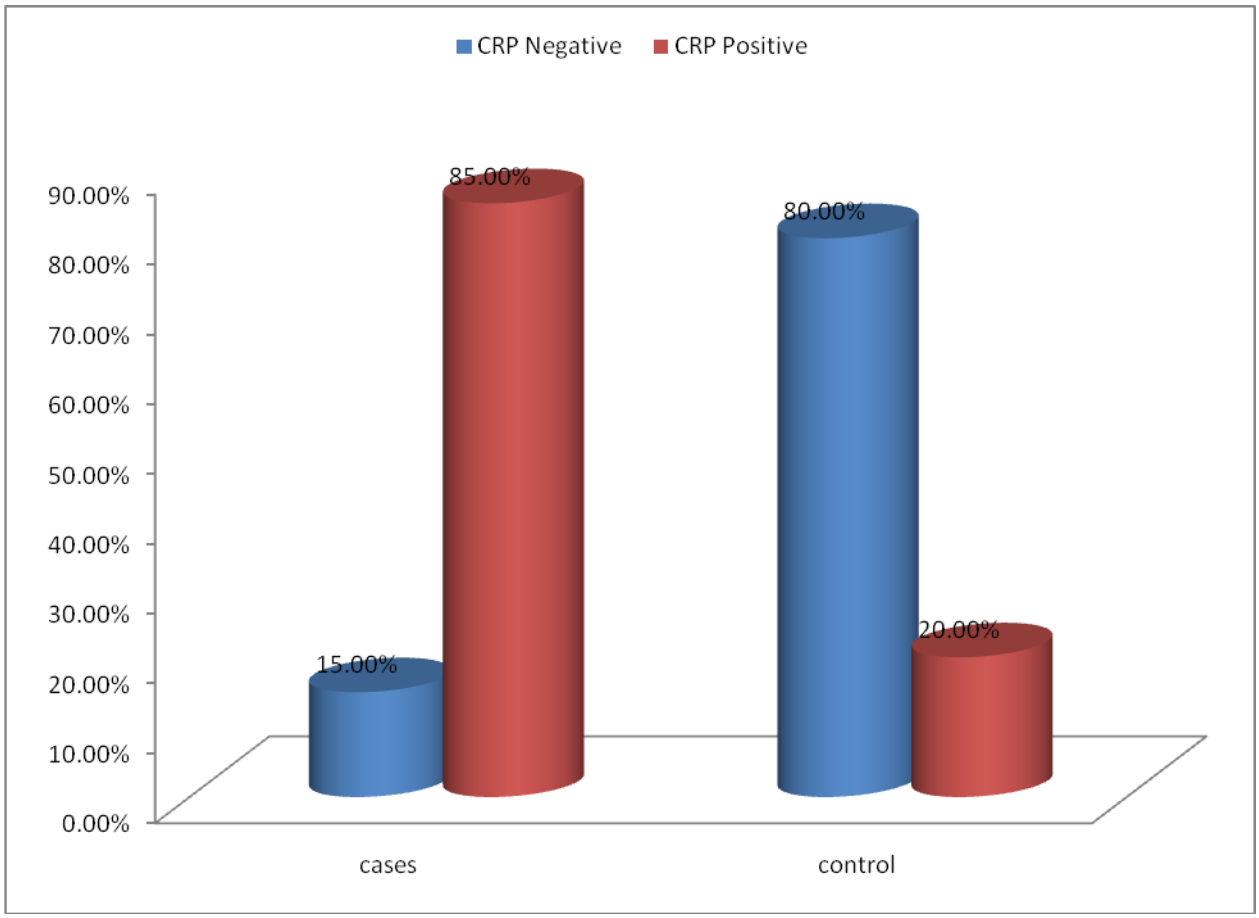


Figure (17)

Table(13) and fig.(17) show highly significant statistical difference between patient and control groups as regarding CRP ($p<0.001$) .

Table (14): comparison between cases and control as regards α1 AGP

	group	N	Mean	Std. Deviation	t	p
α1 AGP	cases	40	322.28	207.007	6.9	<0.001
	control	20	92.25	21.344		

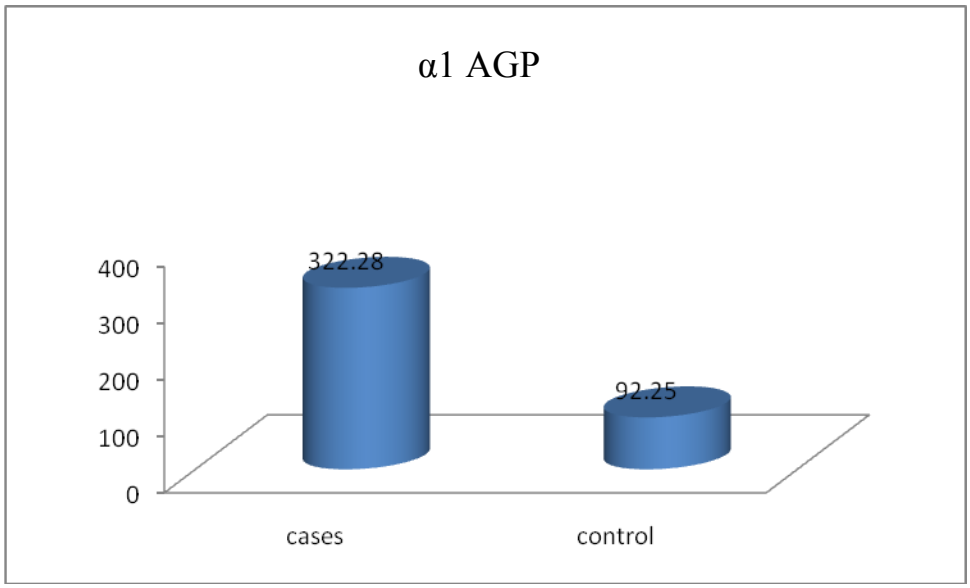


Figure (18)

Table (14) and fig.(18) show highly statistical difference between patients and control group as regarding (p<0.001).

Table (15): sensitivity, specificity, PPV, NPV of CRP:

		cases	control	Total
CRP	Negative	6	16	22
	Positive	34	4	38
	Total	40	20	60

Sensitivity = 85%
Specificity = 80%
PPV = 72.7%
NPV = 89.5%

Table (16): sensitivity, specificity, PPV, NPV of a1 AG1

		cases	control	Total
α1 AGP	Negative	10	18	28
	Positive	30	2	32
	Total	40	20	60

Sensitivity = 75%
Specificity = 90%
PPV = 64.3%
NPV = 93.7%

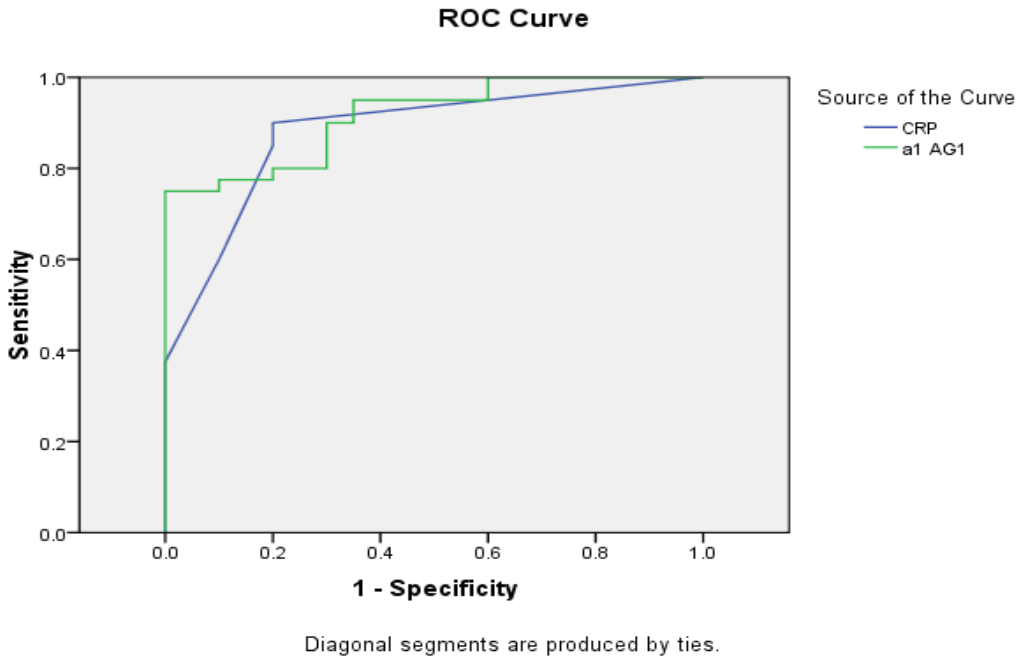


Figure (19)

Table(17)*Area Under the Curve

Test Result Variable(s)	Area
CRP	0.881
α1 AGP	0.915

*The more the area under the curve the better the test

ROC curve analysis shows that α1 AGP is better than CRP in early detection of neonatal sepsis .