

Table (3): Haemogram picture of diarrhoic calves due to bacteria or cryptosporidia either alone or mixed infection before and 10,20 and 30 days post treatment (n=7).

parameter	healthy	Bacterial				Cryptosporidia				Mixed infection			
		Pre-treatment	Post treatment(days)			Pre-treatment	Post treatment(days)			Pre-treatment	Post treatment(days)		
			10	20	30		10	20	30		10	20	30
RBCs	7.04±	9.12±	8.89±	8.29±	7.49±	9.07±	8.80±	8.21±	7.54±	9.74±	9.02±	8.69±	8.07±
106/c.mm	0.53	0.76*	0.47*	0.62	0.57	0.51*	0.48*	0.64	0.61	0.63**	0.56*	0.52*	0.72
HB	7.42±	9.83±	9.58±	8.76±	7.82±	9.96±	9.02±	8.41±	7.58±	10.16±	9.41±	8.73±	7.61±
g m %	0.42	0.64**	0.49**	0.43*	0.72	0.75*	0.59*	0.51	0.82	0.54**	0.62*	0.72	0.82
PCV	26.62±	33.83±	31.89±	29.04±	27.18±	33.28±	30.21±	28.92±	26.42±	33.97±	30.62±	28.93±	27.04±
%	1.57	1.63**	0.83*	0.79	0.84	0.62**	0.60*	0.68	0.51	1.02**	0.60*	0.73	0.82

* significant at P < 0.05

** Significant at P < 0.01

Table(4): Leukogram picture of diarrhoic calves due to bacteria or cryptosporidia either alone or mixed infection before and 10,20 and 30 days post treatment (n=7).

parameter	healthy	Bacterial				Cryptosporidia				Mixed infection			
		Pre-treatment	Post treatment(days)			Pre-treatment	Post treatment(days)			Pre-treatment	Post treatment(days)		
			10	20	30		10	20	30		10	20	30
leukocytes (10³/cmm)	8.61± 0.33	9.89± 0.34*	9.59± 0.25*	9.26± 0.91	8.47± 0.79	9.82± 0.27*	9.02± 0.80	8.51± 0.69	8.32± 0.98	10.33± 0.52*	9.82± 0.37*	9.74± 0.8	8.73± 0.9
lymphocytes (10 ³ /cmm)	4.42± 0.53	4.78± 0.83	4.65±0.69	4.61± 0.81	4.31± 0.66	6.0± 0.24*	5.26± 0.42	4.63± 0.30	4.29± 0.38	5.71± 0.32*	5.41± 0.47	5.35± 0.72	4.49± 0.49
neutrophil (10³/cmm)	2.91± 0.74	3.62± 0.63	3.58±0.58	3.42± 0.92	3.05± 0.51	3.05± 0.32	3.00± 0.29	2.97± 0.18	2.90± 0.37	3.60± 0.55	3.28± 0.49	3.18± 0.38	2.95± 0.84
monocytes (10³/cmm)	0.61± 0.12	0.29± 0.06*	0.30±0.09	0.40± 0.08	0.52± 0.07	0.33± 0.12	0.37± 0.09	0.41± 0.08	0.50± 0.10	0.31± 0.06*	0.47± 0.08	0.53± 0.06	0.61± 0.08
eosinophils (10³/cmm)	0.35± 0.06	0.63± 0.09*	0.58±0.14	0.46± 0.07	0.30± 0.06	0.25± 0.04	0.22± 0.04	0.25± 0.04	0.33± 0.05	0.43± 0.06	0.40± 0.09	0.37± 0.05	0.30± 0.06
basophils (10³/cmm)	0.32± 0.04	0.57 ± 0.12	0.48± 0.08	0.37± 0.09	0.29± 0.05	0.19± 0.03	0.17± 0.03	0.25± 0.04	0.30± 0.06	0.28± 0.04	0.26± 0.05	0.31± 0.04	0.38± 0.08

Table (5): Proteinogram of diarrhoic calves due to bacteria or cryptosporidia either alone or mixed infection before and 10,20 and 30 days post treatment (n=7).

parameter	healthy	Bacterial				Cryptosporidia				Mixed infection			
		Pre-treatment	Post treatment(days)			Pre-treatment	Post treatment(days)			Pre-treatment	Post treatment(days)		
			10	20	30		10	20	30		10	20	30
T.Protein (mg/dl)	8.42±	6.12±	6.83±	7.05±	8.15±	6.03±	6.42±	6.91±	7.82±	5.92±	6.03±	6.91±	7.85±
	0.65	0.27**	0.39*	0.16*	0.53	0.54*	0.41*	0.39	0.68	.42**	0.48*	0.31*	0.72
Albumin (mg/dl)	3.92±	2.31±	2.72±	2.84±	3.72±	2.51±	2.91±	3.09±	3.62±	2.40±	2.68±	3.08±	3.84±
	0.63	0.36 *	0.21	0.14	0.26	0.15*	0.26	0.62	0.51	0.29*	0.39	0.52	0.63
Globulin (mg/dl)	4.50±	3.81±	4.11±	4.21±	4.43±	3.52±	3.51±	3.82±	4.20±	3.52±	3.35±	3.83±	4.01±
	0.27	0.11*	0.27	0.52	0.58	0.31*	0.42	0.51	0.72	0.38*	0.62	0.43	0.62
A/Gratio	0.87±	0.60±	0.66±	0.68±	0.84±	0.71±	0.59±	0.81±	0.86±	0.68±	0.79±	0.75±	0.96±
	0.15	0.08	0.09	0.11	0.18	0.13	0.12	0.19	0.18	0.12	0.16	0.11	0.21

* ignificant at P < 0.05

** Significant at P < 0.01

Table (6): Liver enzymes of diarrhoic calves due to bacteria or cryptosporidia either alone or mixed infection before and 10,20 and 30 days post treatment (n=7).

parameter	healthy	Bacterial				Cryptosporidia				Mixed infection			
		Pre-treatment	Post treatment(days)			Pre-treatment	Post treatment(days)			Pre-treatment	Post treatment(days)		
			10	20	30		10	20	30		10	20	30
AST	57.21±	76.38±	70.38±	72.87±	62.85±	74.93±	68.93±	62.93±	59.06±	81.04±	75.81±	69.04±	61.94±
(U/L)	3.62	3.51**	1.85**	3.99*	3.84	2.75**	1.78*	0.64	0.72	2.43***	2.92**	2.72*	2.53
ALT	28.42±	41.63±	37.13±	32.98±	29.06±	43.15±	37.07±	32.13±	26.63±	46.14±	40.83±	35.65±	29.04±
(U/L)	1.89	2.53**	1.92*	2.63	2.84	2.98**	1.69**	1.63	1.93	2.62***	2.51**	1.98*	1.79
Alk..Ph	78.92±	91.57±	87.73±	83.09±	79.16±	92.62±	86.93±	82.18±	76.62±	97.37±	88.57±	84±	79.03±
.(I.U/ml)	4.18	2.82*	2.63	1.94	1.89	2.72*	1.64*	1.54	0.79	3.01**	2.01*	1.98	2.74

*ignificant at P < 0.05

* * Significant at P < 0.01

*** Significant at P < 0.001

Table (7): Some biochemical parameters of diarrhoic calves due to bacteria or cryptosporidia either alone or mixed infection before and 10,20 and 30 days post treatment (n=7).

parameter	healthy	Bacterial				Cryptosporidia				Mixed infection			
		Pre-treatment	Post treatment(days)			Pre-treatment	Post treatment(days)			Pre-treatment	Post treatment(days)		
			10	20	30		10	20	30		10	20	30
Urea (mg/dl)	23.58± 2.46	36.72± 2.54**	32.12± 2.41*	28.21± 1.63	24.81± 1.68	34.61± 1.63**	31.06± 1.28*	28.93± 1.32	25.83± 1.83	38.85± 2.41**	34.61± 2.85*	30.63± 1.53*	26.98± 1.49
Creatinine (mg/dl)	1.28± 0.26	2.51± 0.36*	2.17± 0.23*	1.92± 0.21	1.43± 0.17	2.37± 0.21**	2.07± 0.16*	1.84± 0.12	1.29± 0.15	2.64± 0.23**	2.40± 0.43*	2.18± 0.52	1.43± 0.28
Glucose (mg/dl)	71.29± 3.21	49.32± 4.83**	57.12± 3.82*	65.72± 1.06	70.31± 3.94	51.23± 3.97**	57.23± 3.84*	64.09± 1.63	69.51± 3.79	48.93± 3.82***	55.73± 2.64**	61.92± 2.93*	67.82± 2.91
Calcuim (mg /dl)	9.27± 1.03	6.43± 0.43*	6.90± 0.38*	7.39± 0.57	8.46± 0.83	6.92± 0.40*	7.83± 0.69	8.52± 0.93	9.04± 0.66	6.04± 0.59*	6.84± 0.36*	7.83± 0.64	8.93± 0.53
Inorg.phosp (mg/dl)	4.94± 0.94	2.59± 0.43*	2.81± 0.38*	3.62± 0.57	4.72± 0.63	2.35± 0.59*	2.78± 0.40*	3.92± 0.73	4.69± 0.96	2.51± 0.63*	2.82± 0.36*	3.79± 0.94	4.06± 0.78
Magneisum (mg/dl)	2.54± 0.12	1.32± 0.48**	1.59± 0.43*	1.96± 0.47	2.43± 0.64	1.41± 0.48*	1.86± 0.22*	2.04± 0.36	2.63± 0.63	1.29± 0.42*	1.69± 0.34*	2.03± 0.41	2.57± 0.36
sodium (mEq/L)	132.02± 3.21	109.24± 4.51**	114.41± 2.94**	121.62± 2.92*	129.61± 3.59	112.53± 2.99**	116.41± 2.83**	124.32± 4.42*	131.69± 3.62	108.53± 3.62***	115.73± 2.79**	121.93± 2.59*	127.52± 3.67
potassium (mEq/L)	4.73± 0.37	6.82± 0.51**	6.32± 0.45*	5.72± 0.49	4.82± 0.44	6.21± 0.39**	5.93± 0.31*	5.38± 0.37	4.92± 0.33	6.89± 0.32***	6.02± 0.34*	5.81± 0.34*	5.03± 0.47

*** Significant at P < 0.001

* ignificant at P < 0.05

** Significant at P < 0.01

