

**Table (1):** Hemogram of rams at 1<sup>st</sup> and 2<sup>nd</sup> weeks post s/c administration of ivermectin (0.2mg kg<sup>-1</sup>) or Rafoxanide (3mh kg<sup>1</sup> and their combinations (n=5) .

Parameters group	Control group	(Ivermectin treated group)		(Rafoxanide treated group)		(Ivermectin + rafoxanide treated group)	
		1 <sup>st</sup> week	2 <sup>nd</sup> week	1 <sup>st</sup> week	2 <sup>nd</sup> week	1 <sup>st</sup> week	2 <sup>nd</sup> week
<b>WBCs (10<sup>3</sup>/μl)</b>	7.71±0.381ab	7.53±0.03 <sup>abc</sup>	7.75±0.107 <sup>a</sup>	6.08±0.266 <sup>d</sup>	5.67±0.054 <sup>fg</sup>	5.69±0.227 <sup>ef</sup>	5.93±0.27 <sup>de</sup>
<b>RBCs (10<sup>6</sup>/μl)</b>	7.84±0.233 <sup>a</sup>	4.27±0.177 <sup>def</sup>	4.55±0.100 <sup>c</sup>	4.05±0.034 <sup>fg</sup>	4.32±0.049 <sup>cde</sup>	5.87±0.140 <sup>b</sup>	4.48±0.282 <sup>cd</sup>
<b>Hb (g/dl)</b>	11.05±0.07 <sup>a</sup>	10.5±0.089 <sup>cde</sup>	10.71±0.01 <sup>abc</sup>	10.51±0.325 <sup>bcd</sup>	8.3±0.894 <sup>g</sup>	9.48±0.219 <sup>f</sup>	10.9±0.045 <sup>ab</sup>
<b>PCV (%)</b>	34.41±0.515 <sup>a</sup>	13.55±0.649 <sup>cdef</sup>	14.23±0.169 <sup>cde</sup>	12.85±0.096 <sup>efg</sup>	13.69±0.217 <sup>ecd</sup>	18.96±1.45 <sup>b</sup>	14.29±1.01 <sup>c</sup>

Mean bearing different letters superscripts differ significantly ( p >0.05 )

**Table (2):** Blood indices of rams at 1<sup>st</sup> and 2<sup>nd</sup> weeks post s/c administration of ivermectin (0.2mg kg<sup>-1</sup>), Rafoxanide (3m kg<sup>-1</sup> and their concurrent use. ( n=5 )

Parameters group	Control group	(Ivermectin treated group)		(Rafoxanide treated group)		(Ivermectin + rafoxanide treated group)	
		1 <sup>st</sup> week	2 <sup>nd</sup> week	1 <sup>st</sup> week	2 <sup>nd</sup> week	1 <sup>st</sup> week	2 <sup>nd</sup> week
MCV( $\mu\text{m}^3$ )	39.51±0.515 <sup>a</sup>	37.58±0.136 <sup>c</sup>	38.55±0.353 <sup>b</sup>	36.64±0.02 <sup>g</sup>	37.00±0.298 <sup>e</sup>	36.86±0.206 <sup>ef</sup>	37.32±0.196 <sup>d</sup>
MCH ( pg )	14.58±0.558 <sup>a</sup>	11.21±0.21 <sup>ef</sup>	11.11±0.39 <sup>efg</sup>	11.67±1.88 <sup>bcde</sup>	11.85±0.09 <sup>bc</sup>	12.13±0.399 <sup>b</sup>	11.84±0.8 <sup>50bcd</sup>
MCHC ( % )	37.19±0.356 <sup>g</sup>	30.25±1.1 <sup>a</sup>	29.05±1.02 <sup>g</sup>	31.87±0.51 <sup>bc</sup>	31.83±0.173 <sup>bcd</sup>	32.75±1.1 <sup>b</sup>	31.71±0.579 <sup>cde</sup>

Means in the same rows bearing different letters superscripts differ significantly ( p >0.05 )

**Table (3):** Biochemical changes in serum of rams at 1st and 2nd weeks post s/c administration of ivermectin (0.2mg kg<sup>-1</sup>) or Rafoxanide (3mg kg<sup>-1</sup> and their combinations (n=5).

	Parameters group	Control group	(Ivermectin treated group)		(Rafoxanide treated group)		(Ivermectin + rafoxanide treated group)	
			1 <sup>st</sup> week	2 <sup>nd</sup> week	1 <sup>st</sup> week	2 <sup>nd</sup> week	1 <sup>st</sup> week	2 <sup>nd</sup> week
	ALT (iu/l)	23.6±0.245 <sup>g</sup>	25.6±0.600 <sup>e</sup>	37.6±0.51 <sup>b</sup>	27.00±0.447 <sup>e</sup>	24.6±0.678 <sup>g</sup>	34.2±0.538 <sup>c</sup>	47.6±0.748 <sup>a</sup>
	◊AST (iu/l)	19.8±1.16 <sup>g</sup>	23.8±0.860 <sup>f</sup>	67.1±0.927 <sup>b</sup>	32.4±0.678 <sup>d</sup>	27.8±0.663 <sup>e</sup>	44.7±0.539 <sup>c</sup>	77.20±0.800 <sup>a</sup>
	Albumin (g/dl)	4.96±0.033 <sup>a</sup>	4.87±0.137 <sup>a</sup>	4.85±0.06 <sup>a</sup>	4.9±0.02 <sup>a</sup>	4.97±0.104 <sup>a</sup>	4.97±0.009 <sup>a</sup>	4.98±0.092 <sup>a</sup>
	Blood urea nitrogen (mg/dl)	7.4±0.398 <sup>a</sup>	7.43±0.304 <sup>a</sup>	7.41±...0.006 <sup>a</sup>	7.66±0.172 <sup>a</sup>	7.56±0.153 <sup>a</sup>	7.5±0.02 <sup>a</sup>	7.63±0.195 <sup>a</sup>
	Creatinine (mg/dl)	0.72±0.037 <sup>a</sup>	0.71±0.033 <sup>a</sup>	0.68±0.037 <sup>a</sup>	0.68±0.009 <sup>a</sup>	0.73±0.008 <sup>a</sup>	0.70±0.045 <sup>a</sup>	0.69±0.04 <sup>a</sup>
	Cholesterol (mg/dl)	66.96±0.934 <sup>ef</sup>	67.7±0.767 <sup>e</sup>	66.24±0.425 <sup>efg</sup>	75.42±0.694 <sup>d</sup>	94.78±1.22 <sup>ab</sup>	86.6±1.03 <sup>c</sup>	96.00±1.09 <sup>a</sup>
	Triglycerides (mg/dl)	147.5±4.31 <sup>ab</sup>	148.2±1.068 <sup>a</sup>	145.4±0.400 <sup>abc</sup>	124.7±2.04 <sup>d</sup>	123.23±1.87 <sup>de</sup>	122.6±1.66 <sup>edf</sup>	115.6±1.5 <sup>g</sup>
	HDL-c (mg/dl)	33.19±1.09 <sup>a</sup>	33.37±0.194 <sup>a</sup>	33.22±0.216 <sup>a</sup>	33.4±0.141 <sup>a</sup>	33.12±0.201 <sup>a</sup>	33.34±0.12 <sup>a</sup>	33.18±0.097 <sup>a</sup>
	LDL-c (mg/dl)	24.28±0.425 <sup>efg</sup>	25.26±0.405 <sup>e</sup>	24.71±0.645 <sup>ef</sup>	37.8±0.860 <sup>b</sup>	36.62±0.767 <sup>c</sup>	36.3±0.860 <sup>cd</sup>	39.7±1.24 <sup>a</sup>

Mean bearing different letters superscripts differ significantly ( p >0.05 )