

Table1: Descriptive range of biochemical parameters

Variables	COUNT	MEAN ± SD	MIN	MAX	Quantities of percentages		
					25%	50%	75%
Cholinesterase (x10 <sup>12</sup> /l)	89.00	345.72 ± 151.56	-206.00	738.00	272.00	332.00	428.00
Triglyceride (mmol/l)	89.00	0.95 ± 0.73	0.01	2.92	0.37	0.83	1.53
Total Cholesterol (mmol/l)	89.00	0.91± 0.39	0.00	1.83	0.66	0.86	1.14
HDLP Cholesterol (mmol/l)	89. 00	0.29 ± 0.16	-0.01	0.70	0.17	0.24	0.39
LDLP Cholesterol (mmol/l)	89.00	0.24 ± 0.10	0.00	0.50	0.16	0.21	0.29
Glucose (g/l)	89.00	7.75 ± 2.67	1.16	12.49	6.35	8.43	9.58
Urea (mmol/l)	89.00	8.13 ± 2.88	-0.71	13.42	6.02	8.42	10.11
Immunoglobulin (g/l)	89.00	0.15 ± 0.13	0.00	0.58	0.06	0.13	0.24
Total Protein (g/l)	89.00	37.30 ± 10.18	1.23	65.45	31.83	39.31	44.04
Albumin (g/l)	89.00	8.59 ±7.90	4.08	1.97	6.14	1.16	1.55
Alkaline Phosphatase (x10 <sup>6</sup> / <sub>mm</sub> <sup>3</sup> )	89.00	1.82 ±7.29	-23.90	19.00	-2.00	1.00	7.00
Hydroxybutyrate dehydrogensae (U/l)	89.00	628.95 ± 150.66	19.14	907.00	531.00	661.00	738.00
Calcium (mmo/l)	89.00	1.66 ± 0.12	1.20	1.97	1.60	1.64	1.77
Magnesium (mmo/l)	89.00	0.05 ± 0.07	-0.11	0.22	0.03	0.07	0.10
Inorganic phosphorus (mmo/l)	89.00	2.61 ± 1.00	1.23	7.25	2.01	2.50	3.01

- SD= standard deviation, minimum and maximum values.

Table 2: Descriptive ranges of physiological parameters

Variables	COUNT	MEAN ± SD	MIN	MAX	Quantities of percentages		
					25%	50%	75%
Total WBC (x10 <sup>9</sup> / <sub>l</sub> )	40.00	2.46 ± 0.84	1.10	4.50	1.97	2.50	2.85
Lymphocyte Ratio (x10 <sup>9</sup> / <sub>l</sub> )	40. 00	18.59 ± 3.89	12.10	29.80	16.27	17.95	20.70
Intermediate (x10 <sup>9</sup> / <sub>l</sub> )	40.00	16.49 ± 8.12	7.70	35, 100	11.17	13.30	18.07
Granulocyte (x10 <sup>9</sup> / <sub>l</sub> )	40.00	64.90 ± 10.93	42.20	79.10	59.52	67.65	71.90
Cholinesterate (x10 <sup>12</sup> /l)	40.00	338.29 ± 111.66	-22.00	535.00	276.50	334.00	424.75
Triglyceride (mmol/l)	40.00	0.79 ± 0.74	0.01	2.80	0.21	0.46	1.24

<b>Total Cholesterol (mmol/l)</b>	40.00	0.90 ± 0.46	0.00	1.83	0.59	0.72	1.25
<b>HDLP Cholesterol (mmol/l)</b>	40.00	0.28 ± 0.18	-0.01	0.70	0.17	0.19	0.43

SD= standard deviation, minimum and maximum values.

Table 3. Comparison of biochemical parameters of female and male

Variable	Female		Male		P-value
	n	Mean ± SD	n	Mean ± SD	
<b>Cholinesterase (x10<sup>12</sup>/l)</b>	50	36.66 ± 34.332	36	52.056 ± 58.931	0.1311
<b>Triglyceride (mmol/l)</b>	50	0.76 ± 0.483	36	1.238 ± 0.914	<b>**0.0024</b>
<b>Total cholesterol (mmol/l)</b>	50	0.89 ± 0.345	36	1.027 ± 0.413	0.0888
<b>HDLP Cholesterol (mmol/l)</b>	50	0.27 ± 0.154	36	0.338 ± 0.176	0.0766
<b>LDLP Cholesterol (mmol/l)</b>	50	0.23 ± 0.095	36	0.276 ± 0.108	<b>*0.0241</b>
<b>Glucose (g/l)</b>	50	8.24 ± 2.156	36	7.446 ± 2.916	0.1522
<b>Urea (mmol/l)</b>	50	8.73 ± 2.693	36	7.964 ± 2.206	0.1628
<b>Immunoglobulin (g/l)</b>	50	0.15 ± 0.145	36	0.178 ± 0.127	0.3752
<b>Total protein (g/l)</b>	50	39.66 ± 16.621	36	39.218 ± 8.123	0.8818
<b>Albumin (g/l)</b>	50	24.60 ± 6.246	36	23.633 ± 6.676	0.4943
<b>Alkaline phosphatase (x10<sup>6</sup>/mm<sup>3</sup>)</b>	50	5.22 ± 16.621	36	31.167 ± 136.371	0.1856
<b>Hydroxybutyrate dehydrogenase (U/l)</b>	50	652.46 ± 196.890	36	631.806 ± 136.371	0.5895
<b>Creatine kinase (umol/l)</b>	50	740.56 ± 348.729	36	501.639 ± 225.249	<b>***0.00053</b>
<b>Calcium (mmo/l)</b>	50	-1.67 ± 0.098	36	-1.673 ± 0.135	0.9476
<b>Magnesium (mmo/l)</b>	50	0.05 ± 0.084	36	-0.203 ± 1.681	0.2858
<b>Inorganic phosphorous (mmol/l)</b>	50	2.54 ± 1.141	36	2.629 ± 0.632	0.6707

SD=standard deviation values, n=number of samples, t-test P-value (\*p<0.05, \*\*P<0.001, \*\*\*P<0.0001)

Table 4. Comparison of physiological/hematological parameters of female and male

Variable	Female		Male		P-Value
	n	Mean ± SD	n	Mean ± SD	
<b>Total white blood cells (x10<sup>9</sup>/l)</b>	18	2.48 ± 0.91	21	2.38±0.78	0.7067

Lymphocyte ratio (x10 <sup>9</sup> /l)	18	19.51 ± 4.46	21	18.03±3.19	0.2386
Intermediate cell ratio (x10 <sup>9</sup> /l)	18	16.15 ± 8.12	21	17.21±8.25	0.6894
Granulocyte ratio (x10 <sup>9</sup> /l)	18	64.33± 10.12	21	64.76±10.00	0.8963
Lymphocyte (x10 <sup>9</sup> /l)	18	0.49 ± 0.24	21	0.41±0.13	0.1915
Intermediate cell (x10 <sup>9</sup> /l)	18	0.36 ± 0.17	21	0.39 ±0.24	0.6628
Granulocyte (x10 <sup>9</sup> /l)	18	1.63 ± 0.67	21	1.58±0.60	0.7987
Total Number of red blood cells (x10 <sup>12</sup> /l)	18	6.60 ± 1.70	21	6.93±1.16	0.4765
Hemoglobin (g/l)	18	151.33±42.63	21	157.43±30.51	0.6070
Hematocrit (%)	18	73.59± 13.32	21	79.49±8.86	0.1073
Average red blood cell volume (10 <sup>12</sup> /mm <sup>3</sup> )	18	123.42± 3.80	21	120.82±3.28	<b>0.0277*</b>
Hemoglobin content (g/l)	18	22.74 ± 1.03	21	22.59 ±0.88	0.6293
Hemoglobin concentration (g/l)	18	182.33± 8.11	21	184.76±6.80	0.3154
Red blood cell distribution width SD (x10 <sup>12</sup> /l)	18	52.97 ± 3.09	21	53.00±3.40	0.9754
Red blood cell distribution width CV(x10 <sup>12</sup> /l)	18	15.56 ± 0.69	21	15.84±0.87	0.2667
Total number of platelets (x10 <sup>9</sup> /l)	18	1089.72±282.94	21	1203.14±205.20	0.1563
Average platelet volume (x10 <sup>9</sup> /l)	18	8.02 ± 0.46	21	8.29±0.54	0.0986
Platelet distribution width (x10 <sup>9</sup> /l)	18	5.02 ± 0.83	21	4.97 ±0.34	0.7810
Platelet pressure (x10 <sup>9</sup> /l)	18	0.88 ± 0.26	21	1.00 ±0.19	0.1021
Platelet large cell ratio (x10 <sup>9</sup> /l)	18	0.92 ± 0.17	21	0.99 ±0.19	0.2461

SD=Standard deviation values, n=samples size, t-test P-value (\*p<0.05)

Table 5: Comparison of biochemical parameters of Newborn Saiga antelope with published data on the horses.

Variables	Newborn Saiga antelope (n=36)	Equus Przewalski (n=20)	Ergebinese dei (n=39-78)	Equus horse (n=4)	Light horse (n=4)
Total protein (g/l)	39.218 ± 8.123	69 ± 1	64 ± 6	71 (64-81)	64 ± 5
Albumin (g/l)	23.633 ± 6.676	NA	33 ± 3	36 (33-37)	31 ± 2
Glucose (g/l)	7.446 ± 2.916	6.22 ± 1.17	8.27± 3.4	NA	4.55±0.52
Creatine kinase (umol/l)	501.639 ± 225.249	99.01 ± 25.64	106.01 ± 17.68	141.44 - 265.2	115 ± 18
Urea (mmol/l)	7.446 ± 2.916	4.13 ± 2.75	5.92 ± 1.35	4.9 - 11.32	NA
Total Cholesterol (mmol/l)	1.027 ± 0.413	NA	2.44 ± 0.43	2.28(2.18-2.36)	2.25 ± 0.34
Calcium (mmol/l)	-1.673 ± 0.135	3 ± 0.1	2.8 ± 0.23	2.38 (1.8-3.05)	2.98 ± 0.13
Magnesium (mmol/l)	-0.203 ± 1.681	NA	NA	NA	0.82±0.04

NA=not available, n=samples size

Table 6: Comparison of physiological parameters of Newborn Saiga antelope with published data on the horses.

Variables	Newborn Saiga antelope (n=18)	Equus Przewalski (n=20)	Ergebinese dei (n=39-78)	Equus horse (n=4)	Light horse (n=44-55)
Hemoglobin (g/l)	151.33 ± 42.63	155 ± 1.7	154 ± 2	163 (14.3–20)	146 ± 16.5
Lymphocytes (x10 <sup>1</sup> /l)	0.49 ± 0.24	2.8 ± 0.81	NA	NA	3.10 ± 0.75
Hematocrit (l/l)	73.59 ± 13.32	43.7 ± 3.7	0.42 ± 0.07	0.47(0.38–0.50)	0.40 ± 0.04
Total WBC (x10 <sup>1</sup> /l)	2.48 ± 0.91	8.26 ± 1.68	8.3 ± 2.5	9.6 (8.4–10.8)	7.45 ± 1.28
Total RBC (x10 <sup>1</sup> /l)	6.60 ± 1.70	8.9 ± 0.9	NA	8.6 (8.4–10.8)	8.8 ± 0.95

NA=not available, n=samples size

Fig 1 below compares range of closely related parameters of Triglyceride, Cholinesterate, HDLP and LDLP

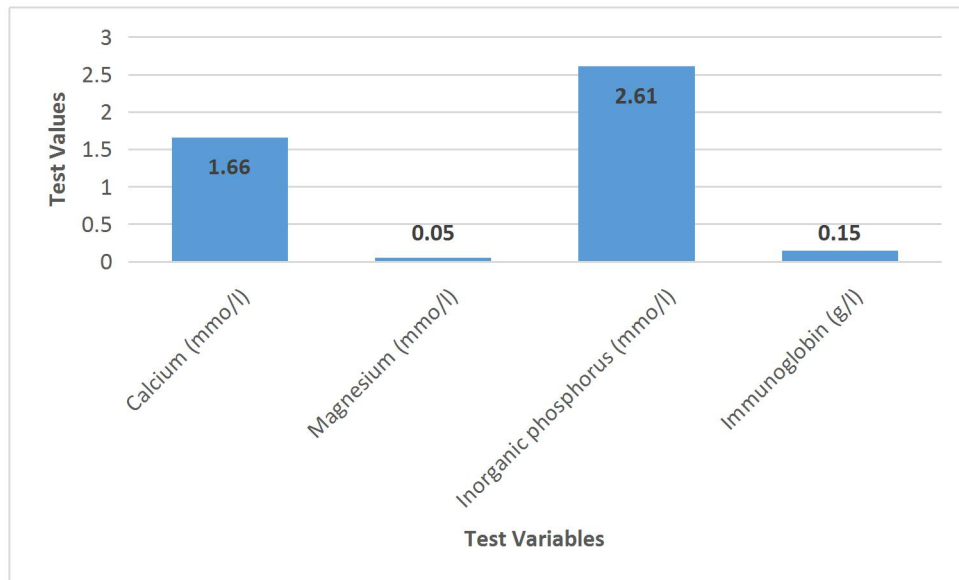


Fig 1: Comparison of closely related biochemical parameters

Fig 2. below sets out the comparison among parameters of calcium, magnesium, phosphorous and immunoglobulin.

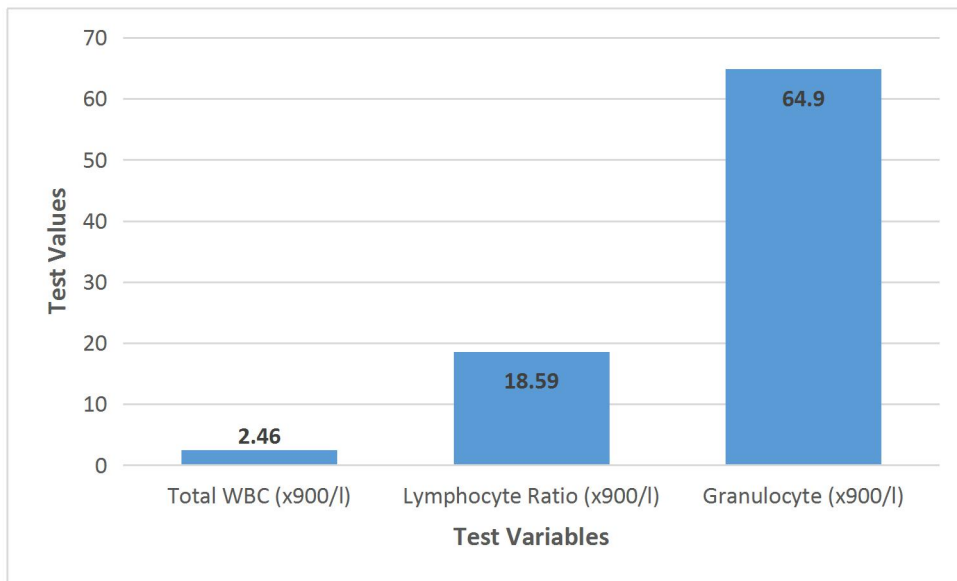


Fig 2: Comparison of closely related biochemical parameters

Fig 3. explains comparison among parameters of total WBC, lymphocyte ratio and granulocyte. All these have been compared base on ranges but not statistically.

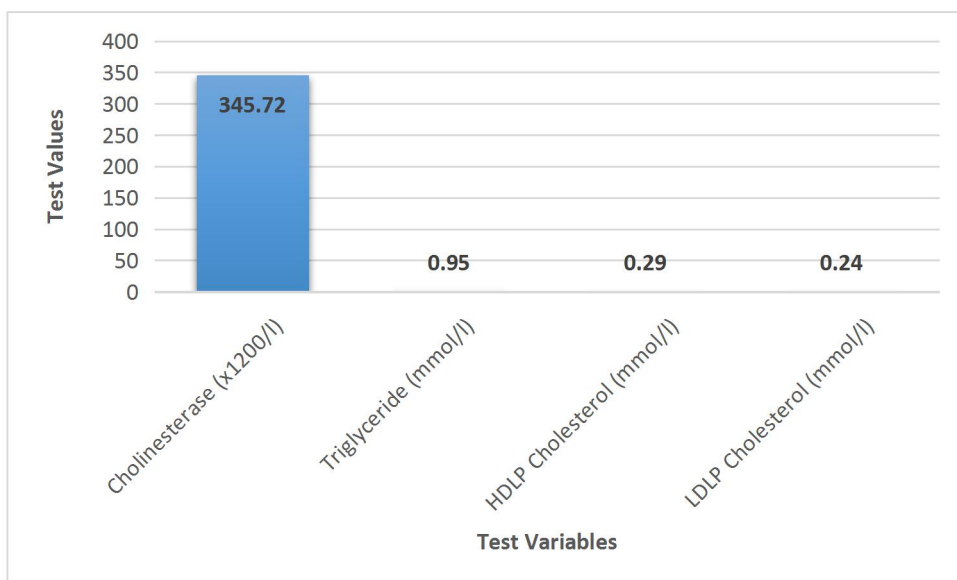


Fig 3: Comparison of closely related physiological parameters