Serum nonelectrolytes in Iranian horse breeds. (Torkman & Arab)

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Objective: The objective of this study was to determine the serum nonelectrolytes levels in Iranian horses.

Design: Quntitative type of study.

Animals: 95 Arab breed and 24 torkman breed of horse was used for blood sampling (to totaling 119 samples).

Procedure: Samples taken were divided according to sex, breed and age (1-36 months, 37-72 months, 73-144 months, 145 months and over). serum was used for Glucosc, Triglyceride, Uric Acid, Cholesterol, total Bilirubin as direct and indireet, Creatinine and blood nitrogen urea (BUN) determination, by Ependorph Autoanalyser and different relevant techniques.

Statistical analysis: All collected data was used for analysis of variance (ANAOVA) least square and t-test.

Results: Acording to the obtainig data, tables was produced showing the different levels of non electrolytes of serum of these two breeds.

Conclusion: Respectively The results obtained from the statistical analysis of serum nonelectrolytes in Iranian horses showed that there are significant difference ($P<0.05$) in amount of bilirubin (tatal, direct and indirect), in different ages. There was also significant differences ($P<0.05$) between two sexes conceding the bilirubin (total, direct and indirect) and creatinine, which all of the mentioned parameters are much more in Stallion than mare.

There was also significant differences ($P<0.05$) in serum Uric acid, Glucose and Cholestrol, between Arab and Torkman breeds and the leveles of all these nonelectrolytes in Torkman breed are much more than Arab breed horses.

Key words: blood serum nonelectrolytes, horse, Arab and Torkman breeds.