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Evaluation of Biochemical Parameters in the Blood of Dromedary (Camelus Dromedarius)

Authors : M. Titaouine, T. Meziane, K. Deghnouche

Abstract : The purpose of this study was to determine reference serum biochemistry values from dromedary (Camelus dromedarius) in Algeria and to evaluate potential sources of physiological variability such as the sex, age and season on serum data. Usual serum biochemistry values were determined in blood samples from 26 apparently healthy dromedaries, 11 males and 15 females, divided into 3 lots (ender 4years), (between 5 and 10 years), (up 10 years). Parametric reference ranges and physiological variations are determined for calcium (Ca), organic phosphate (P), magnesium (Mg), natrium (Na), potassium (K), iron (Fe), glucose, triglycerides (TG), cholesterol, urea, creatinine, total proteins and albumin. The results demonstrate: * Values which agreed with literature * Significant statistically differences (Anova test, $p < 0.05$) depending on: -the sex for Na, glucose, TG, cholesterol, urea, creatinine, albumin, -the age for Ca, P, K, Mg, glucose, TG, b and g globulin, -and season for Fe, urea, total proteins, TG, cholesterol and glucose. These reference ranges for serum biochemical analysis can be used for metabolic and nutritional disorders detection in dromedary.

Keywords : age, biochemistry, dromadery, season, sex
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