EVALUATION OF LIVER AND KIDNEY BIOCHEMICAL PROFILES OF Cerdocyon thous (CRAB EATING FOX) SEROPOSITIVE TO LEPTOSPIRA SPP. IN BRAZILIAN TERRITORY

(AVALIAÇÃO DOS PERFIS BIOQUÍMICOS HEPÁTICO E RENAL EM CERDOCYON THOUS (CACHORRO DO MATO) SORORREAGENTES A LEPTOSPIRA SPP. NO TERRITÓRIO BRASILEIRO)

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Leptospirosis is a zoonosis that affects wild and domestic animals, as well as humans. It affects multiple organs and cause severe renal and hepatic dysfunction. This study aims to evaluate the liver and kidney biochemical profiles of Cerdocyon thous (crab-eating fox), free-living and seroreacting to the serovars of Leptospira spp. We collected blood samples from 16 free-living animals from different regions in Brazil, of which the seropositive samples were referred to the biochemical analysis of aspartate aminotransferase (AST), alanine aminotransferase (ALT), gamma-glutamyl (GGT), urea (UV), creatinine and albumin. According to the parameters proposed by Santos (1999), the mean values of ALT (59.32 U/L) and AST (79.03 U/L) can be considered high. The increase of ALT in the serum indicates hepatic injury of inflammatory, degenerative or toxic nature. The ALT levels are increased depending on the degree and duration of the injury, with higher concentrations found in acute cases (SANTOS, 1999). The average serum concentrations of albumin were lower (1.82 g/dL). Albumin levels may be present at reduced levels as a result of decreased production, which happens in cases of chronic liver failure or increased loss when glomerulonephritis is present (SANTOS, 1999). One animal had altered serum urea (138 mg/dL) and another in GGT (122.4 U/L). According to Wohl (1996), increased liver enzymes, urea and creatinine may be due to liver and kidney disorders. Further studies are needed on this disease in wildlife, contributing to conservation projects, as well as, management, prevention and control of this zoonosis. Moreover, in the literature there is a lack or very few available data about the serum biochemical parameters for wildlife.

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