Leptospira interrogans IN HEALTHY AND SICK HORSES OF THE UNIVERSIDADE FEDERAL DE UBERLÂNDIA – UFU

(Leptospira interrogans EM EQUINOS HÍGIDOS E DOENTES DA UNIVERSIDADE FEDERAL DE UBERLÂNDIA – UFU)

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According to the Sociedade Brasileira de Infectologia, leptospirosis is an infectious disease transmitted to humans mainly during periods of heavy rainfall and due to its high mortality rate is an important public health problem. This study aims to demonstrate that the serovar icterohaemorrhagiae, suggested in the literature as the most prevalent in horses, it is also the most prevalent in the studied horses. Furthermore, to identify the presence of antibodies against serovars icterohaemorrhagiae, pomona, wolffi, hardjo and canicola and relate possible changes in serum biochemistry with Leptospira interrogans. Blood samples were drawn from 17 healthy and 8 sick horses belonging to the UFU. None of these animals was clinically suspected of having leptospirosis. The serum-antigen mixtures were examined under a dark field microscope for agglutination (Microscopic Agglutination Test, MAT) and subsequent titration of positive samples. Serum biochemistry analyses were performed to determine the concentrations of urea, cholesterol, creatinine, total protein and albumin, the activity of liver enzymes aspartate aminotransferase-AST, gamma glutamyl transferase-GGT and alkaline phosphatase-AP. The results showed that 20% of the horses were positive for Leptospira interrogans. The horses had serum agglutination positive for hardjo, autumnalis, pomona, pyrogenes, canicola and tarassovi. The results of serum biochemical analysis varied with respect to the normal ranges suggested by the literature, but no difference (P<0.05) was found regarding the origin of the animal or between positive and negative animals. We conclude that the serovar icterohaemorrhagiae is not the most common in the equine species; however, hardjo, pomona and canicola are common in horses while changes in serum biochemistry of the animals could not be related to infection with Leptospira interrogans.