Survey of the occurrence of *Leishmania* spp. in horses from the state of São Paulo, Brazil

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Currently, the participation of horses in the zoonotic cycle of leishmaniasis is totally understood. However, they can act as reservoirs of the protozoan and an important source of infection, since they attract sandflies to feed on their blood. Therefore, this study aimed to investigate the occurrence and perform the molecular characterization of *Leishmania* spp. in horses from the northwest region of the state of São Paulo, Brazil. A total of 185 horses of different ages, sexes, breeds and functions were investigated in this study. Blood, serum and conjunctival swab samples were collected and stored at -20ºC. Antibodies against *Leishmania* spp. were detected using the Enzyme Linked Immuno Sorbent Assay (ELISA). Whole blood samples and ocular conjunctival swabs were subjected to genomic DNA extraction and then nested PCR of the 18S rRNA gene to amplify a fragment of ~355 bp of *Leishmania* spp. The analysis of the results consisted of interferential statistics using the Chi-square test to verify the positivity and negativity of the animals with each of the variables, such as sex, age group, breed and function. Of the 185 serum samples submitted to ELISA, 42 were reactive, resulting in a prevalence of 22.70% of horses with antibodies against *Leishmania* spp. However, through nested PCR in the whole blood and swab samples, there was no amplification of the genetic material of the aforementioned protozoan, all being considered negative. Regarding the statistical analysis, we observed a significantly higher occurrence of females with anti-*Leishmania* spp. antibodies. compared to males, with no significance in relation to the other variables (age group, function and breed). Thus, we found antibodies against *Leishmania* spp. in 22.70% of the horses in the Northwest region of the state of São Paulo, Brazil, and we did not detect the agent through nested PCR.

Key words: diagnosis, equines, protozoosis