Prevalence of cats carrying asymptomatic *Giardia* spp. in the municipality of Londrina, Paraná, Brazil

Luiz Roberto Santos Aoki[1], Fernando de Souza Rodrigues[2], Giovanna Aoki[2], Lethicia Nino[2], Mateus Pyler[2], Michel dos Santos Pinto[3], João Alfredo Biagi Camargo[3], Alex Akira Nakamura[3], Katia Denise Saraiva Bresciani Bresciani[3], Gustavo Felippelli[3], Marcos Franke Pinto[3]

[1]Centro Universitário de Tecnologia de Curitiba, UNIFATEC, Paraná, Brasil.
[2]Universidade Estadual de Londrina, UEL, Londrina, Paraná, Brasil.
[3]Universidade Estadual Paulista, Unesp, Faculdade de Medicina Veterinária, Araçatuba, São Paulo, Brasil.

Giardia duodenalis complex is a protozoan that parasitizes the intestinal tract of various hosts (animals and humans), making it a zoonosis of public health relevance. This study investigated the occurrence of asymptomatic cats carrying *Giardia duodenalis* in the municipality of Londrina/PR, to establish a preventive approach considering its implications for veterinary medicine and public health. A total of 272 fecal samples were collected from felines in various locations in Londrina, divided into kittens and adults, domiciled or not (strays or belonging to non-governmental organizations - NGOs), exclusively asymptomatic and who had not received giardicide treatment in the last three months. The techniques selected for evaluation were immunochromatography (rapid test) and the modified Faust methodology. Cats that tested positive for either technique were considered positive. All cats that tested positive using the zinc sulfate centrifugation method (Faust) also tested positive using immunochromatography. This resulted in a 96% agreement between the rapid test (immunochromatography) and Faust. The fact that only a single sample was positive corroborates the literature, in which felines tested positive on the first day. In this study, the rates of asymptomatic cats for *Giardia* spp. were estimated at 41.18% (domestic cats) and 84.80% (non-domestic cats), and there was a statistical difference ($P<0.05$) between adult cats and kittens, non-domestic cats and domestic cats. Therefore, adopting preventive measures to minimize the risk of transmission to other susceptible hosts is necessary. Immunochromatography can be recommended and implemented as a complementary test to the Faust technique, optimizing diagnosis, especially in asymptomatic cats, since it can eliminate and transmit genotypes F and A (zoonotic) in greater quantity and also genotypes C and B to a lesser extent. It is an important water and food borne protozoan.

Keywords: felines, domiciled, SNAP Test.