

SEROEPIDEMIOLOGY OF *Toxoplasma gondii* AND *Neospora caninum* IN CANINE HOSPITAL POPULATION IN SOUTHERN MINAS GERAIS, BRAZIL

(SOROEPIDEMIOLOGIA DE *Toxoplasma gondii* E *Neospora caninum* EM UMA POPULAÇÃO CANINA HOSPITALAR NO SUL DE MINAS GERAIS, BRASIL)

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Toxoplasma gondii (Apicomplexa: Sarcocystidae) is a protozoan parasite that causes toxoplasmosis, a zoonosis of major relevance to public health. Although canine toxoplasmosis can cause neurological disorders, infection in this species has epidemiological relevance due to the fact that dogs act as sentinels to the risk of infection of the human population. *Neospora caninum*, protozoan Apicomplexa (Sarcocystidae), is responsible for neosporosis, cosmopolitan parasitic disease that can cause severe neuromuscular disorders in dogs. Furthermore, currently, it stands out as one of the main causes of miscarriage and stillbirth in cattle without evidence of zoonotic potential so far. This observational sectional study aimed to determine the frequency of dogs infected with *T. gondii* and *N. caninum* and to associate the serostatus to some epidemiological variables. Serum samples were collected from 158 dogs, of both sexes of various ages and breeds, treated at the hospital of the Universidade Federal de Lavras/MG, between September 2011 and March 2012, regardless of what had motivated the hospital visit. To calculate the true prevalence, and the 95% confidence interval, we considered the sensitivity (SE) and specificity (SP) of the IFA (Indirect Fluorescent Antibody) with a cutoff 1:64 for *T. gondii* (SE = 80.4%, SP = 91.4%) and 1:50 for *N. caninum* (SE = 99%, SP = 99%). In the statistical analysis, the chi-square test was used for the selection of variables used in the multiple logistic regression model, at 5% significance level. The frequency of seropositive dogs was 15.3 % (7.5% to 24.9%) for *T. gondii* and 11.9 % (7.3% to 18.3%) for *N. caninum*. The results showed that weight loss was the only variable associated with the final logistic regression models while dogs that presented weight loss also had increased risk for seropositivity to *T. gondii* ($p = 0.003$, OR = 5.2, CI95%=1.7 to15.7).

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