

ANTIBODIES AGAINST *TOXOPLASMA GONDII* IN PLASMA OF DOGS SEEN AT THE UEL VETERINARY HOSPITAL

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Due to the lack of data of the toxoplasmatic infection in dogs naturally infected plasma, the present work has the aim of verifying the application of the plasma as a second material for the analysis of the parasite by Indirect Immunofluorescence (IFA) and verify the occurrence of toxoplasmosis in dogs seen at the Veterinary Hospital. By this way we evaluated the dissimulation of the infection in the environment and in the way of living between dog and man. Were analysed 312 canine plasma samples by IFA. The animals were grouped according to the diet, sex, age and breed. There were 73 (23,40%) positive and 239 non-reacting samples. Of the reactor dogs: 18,96% ate commercial diets, 27,36% ate homemade food and 18,07% ate commercial diets and homemade food. Of the affected dogs, 25,83% were females and 23,08% males; and 16,56% of the animals were purebred dogs, whereas 31,20% were mongrel dogs.

INTRODUCTION

Toxoplasmosis is an infection caused by *Toxoplasma gondii*, an intestinal coccidia of cats that affects several species of animals, including human beings. Toxoplasmosis is an important zoonosis, infecting mainly pregnant women and immune deficient individuals. The *T.gondii* can be transmitted in any of its evolutive phases: tachyzoites, bradyzoites or oocyst (Dubey, 1986). Due to the lack of data of the toxoplasmatic infection in dogs naturally infected plasma, the present work has the goal of verifying the application of the plasma of the second material for the analysis of the parasite by Indirect Immunofluorescence and verify the occurrence of toxoplasmosis in dogs seen at the Veterinary Hospital, and this way evaluate the dissimulation of the infection in the environment and in the way of living between dog and man.

MATERIAL AND METHOD

Were analysed 312 canine plasma samples by Indirect Immunofluorescence (Camargo, 1964) using the anti-IgG conjugated canine "SIGMA CHEMICAL". Title equal or superior than 1:16 were considered positive.

RESULTS AND DISCUSSION

The animals were grouped according to the diet, sex, age and breed. There were 73 (23,40%) positive and 239 non-reacting samples. The title distribution was: 1:16 in 27(36,99%) dogs, 1:64 in 27(36,99%) dogs, 1:1024 in 6(8,22%) dogs, and 1:4096 in 7(9,60%) dogs. Of the reactor dogs: 18,96% ate commercial diets, 27,36% ate homemade food and 18,07% ate commercial diets and homemade food. Of the affected dogs, 25,83% were females and 23,08% males; and 16,56% of the animals were purebred dogs, whereas 31,20% were mongrel dogs. The X^2 test showed a significant higher incidence ($P \leq 0,05$) in mongrel dogs, agreeing with Duran et al, 1995. The higher percentage of reactors occurred in animals from ages 1 to 7 ($P \leq 0,05$), this suggests a bigger susceptibility in the youngest animals (Germano et al, 1985 and Freire et al, 1992). There was no statistical difference due to sex of the affected animals. It wasn't evaluated if the homemade diet offered to the animals was prepared using raw meat or not well-cooked meat. The presence of cysts in the meat may have consisted in an important way of transmission of the *T.gondii*.

BIBLIOGRAPHY

- Camargo M.E., 1964. Improved technique of Indirect Immunofluorescence for serological diagnosis of toxoplasmosis. Rev.Inst.Med.Trop. 6., 117-118.
Dubey J.P., 1986. Toxoplasmosis. J.Am.Vet.Med.Assoc. 189(2), 166-170.
Duran F.P.et al, 1995. Frequência de anticorpos anti-*Toxoplasma gondii* em cães clinicamente sadios da cidade de Uberlândia-MG.Rev.Bras.de Parasitol.Vet. IX Seminário Bras.de Parasitol. Vet.
Freire R.L. et al,1992. Prevalência de anticorpos anti-*Toxoplasma gondii* em cães atendidos no Hospital Veterinário da Uel-Pr. Semina:Ci.Agr.13(1),66-69.
Germano P.M. et al,1985. Estudo sorológico da toxoplasmose canina, pela prova de Imunofluorescência Indireta, na cidade de Campinas. Rev.Fac.Med.Vet.Zoot.USP 22, 53-58.

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