INITIAL DEVELOPMENT IN VITRO AND MIGRATORY LARVAE BEHAVIOR OF THE *TOXOCARA CANIS* IN BALB/C MICE

Camparoto, M.L[1], Colli, C.M[2], Paludo, M.L[2], Falavigna-Guilherme, A.L[2], Gomes, M.L[2], Ribeiro, L. de F.C[3], Tavares, J[3], Fernandez, M.A[1]; [1]Departamento de Biologia Celular e Genética; [2]Departamento de Análises Clínicas, Universidade Estadual de Maringá; [3]Centro de Ciências Médicas e Farmacêuticas, Universidade Estadual do Oeste do Paraná, Cascavel, Paraná, Brazil.

Toxocara canis, the most common dog roundworm, is a parasite of high incidence in zoonotic focus. *T. canis* can also infect a wide range of unusual hosts as mice, rabbits, monkeys and humans. The aims of this study were the in vitro culture of *T. canis* eggs and the quantification of recovered larvae from BALB/c mice infected organs. For the culture 10 adult females collected from infected dogs were used. On the first day, equivalent quantities of ova in both interphase and mitosis were observed. On the seventh day, 45% of the embryonated ova were observed and 55% after 32 days. BALB/c mice were infected with embryonated ova, whose larvae showed a preference for the brain in the two tested doses. The samples obtained from different infected organs have been used to construct Open Reading Frame Expressed Sequence Tags (ORESTES) cDNA libraries. These results will it make possible to develop new approaches on *T. canis* biology, as well on the migratory behavior of larvae in experimental model. *T. canis* transcriptome analysis and improvement of in vitro culture can become a valuable tool to comparative studies on nematodes genomes.

Keywords: *Toxocara canis*, toxocariasis, in vitro development, migratory larvae

Supported by: CNPq; FINEP and Complexo de Centrais de Apoio a Pesquisa, COMCAP-UEM.