SUMMARY OF THESIS*


EVALUATION OF THE EFFICACY OF HYPERIMMUNE BOVINE COLOSTRUM ON Cryptosporidium parvum EXPERIMENTAL INFECTION OF RODENTS

Cryptosporidium parvum is a protozoan that was initially associated with AIDS. Afterwards, several waterborne cryptosporidiosis outbreaks were reported. No drug was found to be effective on this infection’s control. Some studies reported the efficiency of colostrum from cows hyperimmunized against C. parvum. Several mice and rats were inoculated with $2 \times 10^7$ C. parvum oocysts. The hyperimmune bovine colostrum used in the experiment was positive till the 1:500,000 dilution. Two immunosuppressed murine models – C57BL/6 knock out of CD4+ and BALB/c nude did not develop the infection until the 18th day post-inoculation. The results evidenced that newly born C57BL/6 mice and 344 Fischer rats (F344) are susceptible to the infection with this parasite. In both strains the hyperimmune colostrum decreased the number of C. parvum oocysts. Nevertheless, when treated with the product, only the F344 rats evidenced greater preserving of the intestinal mucosa’s architecture. The F344 strain proved to be an adequate and promising experimental model for the study of C. parvum infection.

*This thesis is available at the Library of the Instituto de Medicina Tropical de São Paulo