

Validation of Sorological Test for Toxoplasmosis with Filter Paper

Murilo Barros Silveira¹, Sarah Ribeiro de Oliveira², Karen Ribeiro de Oliveira², Hânstter Hállison Alves Rezende³, Ana Maria de Castro⁴, e Juliana Boaventura Avelar⁵.

1-Biomédico Residente em Infectologia pelo Hospital de Doenças Tropicais, 2 Graduandas do curso de Biomedicina, Pontifícia Universidade Católica de Goiás, 3 Docente da Faculdade de Medicina, Universidade de Rio Verde, 4 Docente da Universidade Federal de Goiás, 5 Doutora pelo programa de Medicina Tropical e Saúde Pública da UFG

Toxoplasmosis is a zoonotic disease worldwide, caused by the protozoan *Toxoplasma gondii*, where it is estimated that 70 to 95% of the population is infected, with Brazil ranging from 40 to 80%. It is usually asymptomatic with great concern in congenital transmission; therefore immunological tests are considered the best methodology for diagnosis. The use of filter paper has been widely used because of the ease of collecting, storing and transporting the samples. In this prospective study, 1,006 blood samples were collected in pregnant women in the city of Goiânia and in the metropolitan region. All pregnant women who agreed to participate in the study signed a Free and Informed Consent Form. Serological profile evaluation was performed using ELISA (immunoenzymatic assay), with serum and filter paper samples, to investigate anti - *Toxoplasma gondii* antibodies of the IgM and IgG classes, and the kit used is not standardized for the research of IgM antibodies on the filter paper. Statistical analysis was performed in the database of the EpiInfo® version 3.2.1 program which evaluated the prevalence of seropositivity, frequency of serum positivity, frequency of positivity in the filter paper, sensitivity, specificity, positive predictive value, negative predictive value and index The kappa. Serum analysis yielded 421 samples positive for IgG class antibodies and three samples positive for IgM class antibodies. In the filter paper, we obtained 443 positive for IgG class antibodies and one positive for IgM class antibodies. The study allowed identifying the similarity of positive samples both with the use of serum and in the filter paper for IgG class antibodies. However, for serum IgM antibodies, the use of serum was more sensitive when compared to the test performed with the filter paper.