

## **Prevalence of anti-*Toxoplasma gondii* antibodies in patients diagnosed with schizophrenia**

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*Toxoplasma gondii* is a protozoan of worldwide distribution, with a high serological prevalence, being able to reach on average 70% of Brazilians and in countries like the United States, on average, 22.5% of a population older than 12 years. Humans can acquire the infection through ingestion of food contaminated with cysts or oocysts, blood transfusion, organ transplantation and congenital transmission. Serological diagnosis of toxoplasmosis is based on the detection of anti-*T. gondii* antibodies. Studies demonstrating the involvement of *T. gondii* congenital infection in the etiology of schizophrenia report the detection of high levels of anti-*T. gondii* IgG in patients with the first manifestation of schizophrenia. There is a three to five fold increase in the incidence of *T. gondii* infection in hospitalized psychiatric patients than in people who do not have mental disorders, suggesting that some psychiatric symptoms may be caused by this infection. The objective of the study was to evaluate the seroprevalence of Toxoplasmosis in patients diagnosed with schizophrenia (F 20), and to analyze the behavioral / cognitive function of these patients comparing the results between individuals with negative serology and those with positive serology. For the case-control study, 50 patients previously diagnosed with schizophrenia and treated at the Euripides Barsanulfo Spiritist Hospital in Goiânia, Goiás, Brazil. In the control group 50 volunteers without any mental disorder participated. The research was carried out from December 2015 to March 2016. The methodology used to search for antibodies of the IgG and IgM classes was the Elisa technique using the SERION ELISA classic® Kit. All the tests were carried out at the Laboratory of the Host- Parasitic Relation of the Tropical Pathology and Public Health Institute of the Federal University of Goiás. The prevalence of patients with schizophrenia and anti-*T. gondii* antibodies of the IgM (+) class was 8% and the IgG (+) class 74%. In the control group the results found were IgM (+) 6% and IgG (+) 30%. There were no significant differences when comparing the cognitive evaluation of patients who were diagnosed with schizophrenia and presented with IgG (+). It was not statistically significant that the patient had cats and were seropositive. The serology for toxoplasmosis in people with mental illness presented a high prevalence in the group studied.