Ocular fundoscopic and serological evaluation in patients with *Toxoplasma gondii* infection

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Toxoplasmosis is a highly widespread zoonosis, asymptomatic in most cases, seropositive in up to 70% of the world's population, and can present with complications associated with various systems and organs, including the eye. *Toxoplasma gondii* is the causative agent, an obligate intracellular protozoan that affects humans and animals. Ocular toxoplasmosis most commonly manifests with a condition of posterior uveitis, characterized by a lesion of necrotizing retinochoroiditis and associated inflammation, and may present recurrent episodes. The aim of this study was to evaluate and characterize the clinical and laboratorial aspects of patients with suggestive diagnosis of ocular toxoplasmosis in the city of Três Lagoas (MS), as well as to perform serology using the ELISA method (EUROIMMUN, Germany). Retinal examinations and retinography were performed to characterize fundoscopic lesions. Serological diagnosis was performed using commercial ELISA kits (EUROIMMUN, Germany) for the detection of anti-*T. gondii* antibodies. The participants were divided, after all tests were performed, into 3 groups: (G1; n=33) patients with other eye diseases (toxoplasmosis negative; control group); (G2; n=8) patients with TO (toxoplasmosis positive) with active eye lesion and; (G3; n=27) patients with TO (toxoplasmosis positive) with scarring eye lesion (inactive). For G1, the mean age and standard deviation were (42.4 ± 15.8) and (34.3 ± 16.6) and (48.8 ± 20.2) for groups 2 and 3 respectively. The age range between groups was: (G1= 85 and 12; G2= 68 and 12 and G3=88 and 12). There were a greater number of female patients in all groups compared to males, with the exception of group 2, which had an equal number (G1= 19 vs 14; G2= 4 vs 4 and G3= 18 vs 9). The individuals from the control group when compared to the patients with cicatricial lesion did not show statistically significant differences in mean age ($P< 0.1737$; $t=1.3773$; $gl=58$), which also applies when comparing the control group to the patients with active lesion ($P< 0.2050$; $t= 1.28893$; $gl=39$) and also between the groups with active and cicatricial lesion ($P< 0.0795$; $t= - 1.8094$; $gl=33$). As for serology, it was observed that in 67 patients, 55 had a positive diagnosis for IgG antibody and 12 had a negative diagnosis. For the IgM antibody only 1 had a positive serology. The partial results indicate a high occurrence of ocular toxoplasmosis, which highlights the importance of awareness programs in public health in order to provoke greater knowledge about the means of transmission of the infection.

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