

PREVALENCE AND RISK FACTORS OF *TOXOPLASMA GONDII* IN HIV/AIDS PATIENTS; A CURRENT SITUATION IN ALBANIA

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Toxoplasma gondii is a single-celled parasite that causes the disease known as toxoplasmosis. In immunosuppressed (AIDS) patients, this infection can develop into fatal toxoplasmic encephalitis (TE). The study aim was to evaluate the seroprevalence of toxoplasmosis and also to identify risk factors associated with Toxo-seropositive in immunosuppressed patients. A prospective human serosurvey for toxoplasmosis was conducted at the HIV clinic in the University Hospital Center "Mother Theresa" from March 2010 to January 2017. Patients enrolled in the antiretroviral (ARV) treatment programme were invited to participate. Patient's sera were analysed for anti-*T. gondii* IgG and IgM antibodies by NovaLisa *Toxoplasma gondii* ELISA (from NovaTec, Germany). Results were analyzed with the aid of the software SPSS 20.0. Confidence interval (CI) 95% and adjusted odd ratio (OR) were calculated. The prevalence

of infection with *T. Gondii* varies from 3.93% for recently acquired infection (anti-Toxo IgM) to 43.3% for past infection (anti-Toxo IgG). The average age was 39.38 ± 24.4 years with min 18 to maximum 72 years old. Multivariate analysis showed that gender difference (OR = 3.579, 95% CI [1.58 to 8.04] p value = 0.0021) and presence of cats in their house (OR = 6.11, 95% CI [2.70 to 13.80] p value < 0.0001) were the only factors associated with *Toxoplasma gondii* infection. The seropositivity of these infection HIV-infected patients were very higher and could be at high risk of developing clinical evidence of severe toxoplasmosis. So, the screening of this community it is necessary to introduce primary behavioral practices to prevent *Toxoplasma* infection among HIV-infected patients.

Biography

Erjona Abazaj is currently working as a Biologist/Parasitologist in the Laboratory of Parasitology, Institute of Public Health (IPH), Tirana, Albania where he has continued his research. She has been Graduated from 2002 as Biologist, with Diploma in Microbiology from the University of Tirana, Faculty of Natural Science, Tirana, Albania. Later in 2005 she has completed her Master's Degree from the same faculty with subjects with gastrointestinal diseases and in 2009 she has completed her PhD with research focus centered on the recognition of *Toxoplasma gondii* in the Albania population by using immunological and molecular methods. Presently she is working at the at the University of Medicine in Tirana, Albania as the lecturer.

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