

## P1386 Seroprevalence of *Toxoplasma gondii* in Iranian HIV Infected Patients

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**Background:** *Toxoplasma gondii* (*T. gondii*) is an obligate intracellular protozoan which causes toxoplasmosis in animals and human. Cell-mediated immunity will be developed after *T. gondii* acute infection and infection is controlled but not eradicated. In this latent phase of infection, the organisms persist in the tissues of infected cases such as brain, skeletal muscle and heart. In human immunodeficiency virus (HIV) infected patients, symptomatic disease usually occurs as a result of reactivation of latent infection. *T. gondii* is an important opportunistic agent in HIV patients and can cause significant morbidity and mortality in them such encephalitis, focal brain lesions, coma and death. Hence, detection of anti-*Toxoplasma* antibodies has a great importance in HIV cases and in recent years, detection of anti-*Toxoplasma* antibodies have become a great concern in HIV infected subjects. The aim of this study was to determine the seroprevalence of *T. gondii* in Iranian HIV infected patients.

**Materials/methods:** In this cross-sectional study, 93 HIV positive patients from Iranian Research Center for HIV/AIDS, Tehran, Iran were enrolled. *T. gondii* IgG and IgM antibodies were detected by ELISA. Positive samples for anti-*Toxoplasma* IgG were also tested for IgG avidity using a standard ELISA kit.

**Results:** A total of 93 HIV-infected cases were included in the study. 42(45.16%) patients were seropositive for *T. gondii* IgG and 3(3.2%) for *T. gondii* IgM. Two IgM positive cases had IgG simultaneously. IgG avidity test was reported <40%, between 40-60% and >60% in 2, 2 and 38 cases with positive anti-*Toxoplasma* IgG respectively. So 4.3% of our subjects had a newly acquired *Toxoplasma* infection.

**Conclusions:** This study showed relatively high prevalence of latent toxoplasmosis in HIV infected patients. As toxoplasmosis reactivation is very important among this high risk population, we

emphasized the importance of routine surveillance for *T. gondii* infection in HIV cases and the need of prevention efforts among them.

Also, some of our cases had a newly acquired *Toxoplasma* infection, so hygienic precautions to minimize the contamination with oocysts need to be included in counseling package of patients. Public educations also need to create good awareness about *T.gondii* transmission.