

Age-Associated Seroprevalence of *Toxoplasma gondii* in 10892 Pregnant Women in Senegal between 2016 and 2019

Authors : Ndiaye Mouhamadou, Seck Abdoulaye, Ndiaye Babacar, Diallo Thierno Abdoulaye, Diop Abdou, Seck Mame Cheikh, Diongue Khadim, Badiane Aida Sadikh, Diallo Mamadou Alpha, Kouedvidjin Ekoué, Ndiaye Daouda

Abstract : Background: Toxoplasmosis is a parasite disease that presents high rates of gestational and congenital infection worldwide and is therefore considered a public health problem and a neglected disease. The aim of this study was to determine the seroprevalence of toxoplasmosis in pregnant women referred to the medical biology laboratory of the Pasteur Institute of Dakar (Senegal) between January 2014 and December 2019. Methodology: This was a cross-sectional, descriptive, retrospective study of 10892 blood samples from pregnant women aged 16 to 46 years. The Architect toxo IgG/IgM from Abbot Laboratories, which is a chemiluminescent microparticle immunoassay (CMIA), was used for the quantitative determination of antibodies against *Toxoplasma gondii* in human serum. Results: In total, over a period from January 2014 to December 2019, 10892 requests for toxoplasmosis serology in pregnant women were included. The age of the patients included in our series ranged from 16 to 46 years. The mean age was 31.2 ± 5.72 years. The overall seroprevalence of *T. gondii* in pregnant women was estimated to be 28.9% [28.0-29.7]. In a multivariate logistic regression analysis, after adjustment for a covariate such as a study period, pregnant women aged 36-46 years were more likely to carry IgG antibodies to *T. gondii* than pregnant women younger than 36 years. Conclusion: *T. gondii* seroprevalence was significantly higher in pregnant women older than 36 years, leaving younger women more susceptible to primary *T. gondii* infection and their babies to congenital toxoplasmosis. There will be a need to increase awareness of the risk factors for toxoplasmosis and its different modes of transmission in these high-risk groups, but this should be supported by epidemiologic studies of the distribution of risk factors for toxoplasmosis in pregnant women and women of childbearing age.

Keywords : toxoplasmosis, pregnancy, seroprevalence, Senegal

Conference Title : ICPVM 2023 : International Conference on Parasitology and Veterinary Medicine

Conference Location : Paris, France

Conference Dates : May 11-12, 2023