29th ECCMID
Amsterdam, Netherlands
13 – 16 April 2019
The congress of ESCMID

P0196 A new rapid test on whole blood for toxoplasmosis screening in pregnancy

Valeria M.V. Meroni*[1,2], Guglielmo Ferrari[2], Riccardo Albertini[3], Francesca Genco[1]

[1] Laboratory of Parasitology, Structure of Microbiology and Virology, San Matteo Hospital Foundation, Pavia, Italy, [2] Department of Internal Medicine and Medical Therapy, University of Study of Pavia - Italy, [3] Fondazione I.R.C.C.S. Policlinico San Matteo, Pavia, Italy

Background:. In Italy the screening for toxoplasmosis in pregnancy, although not mandatory, is free of charge and recommended by Italian guidelines for the physiological pregnancy (2010/11). The screening includes a first test anti-Toxoplasma IgG and IgM antibodies at the beginning of pregnancy and monthly follow-up for seronegative women. During the last years many studies have demonstrated the effectiveness of such a screening (mandatory in France and in Austria)but the decrease in seroprevalence of toxoplasmic infection, recorded almost everywhere in Europe, has brought forward the cost-benefit ratio of screening itself. With this study we wanted to evaluate the diagnostic efficacy of a new rapid test (ICT wb -TOXOPLASMA ICT IgG-IgM LDBIO Diagnostic Lyon France) on whole blood taken by finger puncture after the approval of Fondazione IRCCS Policlinico San Matteo Ethic Committeee .

Materials/methods: All the pregnant women screened for toxoplasmosis at the Centro Unico Prelievi and at the Outpatient of Infectious Diseases department of the Fondazione IRCCS Policlinico San Matteo Pavia, were asked to take part to the study. At the same time they undervent the sampling for routine test: LIAISON® XL Toxoplasma IgG and IgM and in case IgG Avidity (Diasorin, Saluggia, Italy) VIDAS Toxo IgG II, IgG avidity and ISAGA IgM (Biomerieux - Mercy l'Etoile - France).

Results: To date, 119 patients out of the 270 necessary for statistic evaluations were enrolled to define the specificity and sensitivity of the test: 41 were positive with ICT wb and the positivity was confirmed by routine tests. As for 74 the negative tests, in 3 cases the result of routine tests was positive. In 4 cases the test was considered invalid, but repeated gave a correct result; 11 patients refused to perform the test. The test had sensitivity 94.9% and specificity 98.7%.

Conclusions: These preliminary data suggest that the use of the rapid test can be an alternative to traditional tests for ease of execution, rapid response, reduced cost. The test is easily accepted by patients, but all positive cases must always be tested with routine tests to discriminate between different antibody classes and date the infection