

Results of polymerase chain reaction analysis for toxoplasmosis in amniotic fluid samples

Cassiano LA, Andrade JQ, Andrade LSBC, Francisco RPV SAO PAULO UNIVERSITY, SAO PAULO, Brazil

Objective

To evaluate pregnant women with suspected acute infection by Toxoplasma gondii (T. gondii) who underwent amniocentesis due to suspected fetal infection.

Methods

A cross-sectional study was carried out with a non-probabilistic sample, in the Fetal Medicine Sector of the Hospital das Clínicas of the Faculty of Medicine of the University of São Paulo (Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo - HCFMUSP), from January 2013 to December 2019, including patients with serologies (positive IgG and IgM with low avidity of positive IgG and/or IFI-IgM) or with ultrasound changes suggestive of fetal infection. For the analysis of the quantitative variables, the minimum and maximum values, and the calculation of means and standard deviations were determined, and for the qualitative variables (presence or not of a certain parameter) the absolute and relative frequencies were calculated.

Results

47 pregnant women and 48 samples of amniotic fluid were evaluated. Eight samples (16.6%) were positive and four (8.3%) were inconclusive. The mean gestational age at first serology suspicion was 14 weeks and the mean on admission to HCFMUSP was 24 weeks. Among the ultrasound changes that indicated the procedure, ventriculomegaly was the most frequent, 11 fetuses (22.9%) and the result was positive in 6/11 (54.5%) of the amniotic fluid samples.

Conclusion

Fetal infection by T. gondii occurred in 16.6% of the cases referred to this Service and if it is impossible to exclude it, fetal treatment must be prescribed immediately.