

Prevalence and Risk Factors of Toxoplasma gondii Infection among Pregnant Women in Hormozgan Province, South of Iran

Seyedeh Zahra KHADEMI 1,2, *Fatemeh GHAFARIFAR 1 , Abdolhosein DALIMI 1 , Parivash DAVOODIAN 3 , Amir ABDOLI

Abstract Background: Toxoplasmosis can cause miscarriage or complications in the fetus. Diagnosis and treatment of this disease by anti-parasitic drugs especially in early pregnancy can help to prevent fetal infection and its complications. This study aimed to determine T. gondii infection in pregnant women, evaluate risk factors in the transmission of the disease and congenital toxoplasmosis. Methods: Overall, 360 sera of pregnant women from 5 cities in the Hormozgan Province in southern Iran with different climate were evaluated from 2015-2016 for T. gondii infection by using ELISA method and positive cases of IgM and IgG were tested again using Avidity IgG ELISA. All cases were evaluated according to climate, acute and chronic of toxoplasmosis, number of pregnancy and abortion, epidemiological factors and food habits. Results: Among 360 specimens T. gondii IgG + IgM antibodies were found positive in 0.8% subjects and also 27% of samples had IgG seropositivity. A significant relationship was observed between age, sampling place, consumption of raw and half cooked meat, history of contact with cats, abortion history, number of children, and parity with IgG positive. In Avidity IgG ELISA test, 13 people with low avidity, 3 people with borderline avidity were reported. Conclusion: 72.2% of the population had no antibody against the disease that this could be a warning to the people and requires education of preventive and prenatal care and routine screening of women at childbearing age.