



## Seroepidemiological aspects for *Toxoplasma gondii* infection in women of Qadisiyah province, Iraq.

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**Abstract:** *Toxoplasma gondii* intracellular parasite infected large proportion of the world population, but mostly without visible clinical signs in immunocompetent patients. The present study was performed on 125 aborted women as case group and 30 healthy women (15 non pregnant and 15 pregnant women) as control groups in Women's and children Hospital in Qadisiyah province, Iraq from December / 2015 till March / 2016 to investigate *Toxoplasma* infection in women with abortion or not and assess the association between *T. gondii* and some variables such as age, chronic diseases, abortion time, children and frequency of abortions. Five ml of venous blood sample was obtained from each woman under sterile condition. The study involved the measurement of *Toxoplasma* antibodies (IgG & IgM) in the sera of aborted and normal pregnant women by Elisa test. The outcomes demonstrated the seroprevalence of IgG (latent infection) and IgM (recently acquired infection) anti-*Toxoplasma* antibodies were positive in 55/125 cases (44%) and 5/125 cases (4%) respectively. However the Overall Seroprevalence of anti- *T.gondii* antibodies in aborted women was 48%. Mixed seropositive for IgG and IgM were didn't recorded in this study, whereas the healthy women were 0% for all antibodies, the total seroprevalence of all antibodies in both groups were positive in 60/155 cases (38.7%) and 35.4% for IgG and 3.2% for IgM. Significant relationship ( $P < 0.05$ ) was found between the seroprevalence of *T. gondii* chronic infection and age of the aborted women, several chronic diseases and abortion time, the results showed no statistically significant association between *Toxoplasma* infection and the ability of women to have children and frequency of abortions.

Keywords: Seroepidemiological, *Toxoplasma gondii*, Qadisiyah province.