

**The role of TNF- $\alpha$ , IL-1 $\beta$  and IL-10 gene polymorphisms in resistance to toxoplasmosis infection among aborted women in Sulaimania city****Latif O Mohammed**

University of Sulaimania, Iraq

*Toxoplasma gondii* is one of an obligate intracellular parasite that causes toxoplasmosis. Cytokines have a role in its pathogenesis. The single nucleotide polymorphisms (SNPs) of each cytokine have been suggested to have role in etiologic. So the aim of the presented study is to investigate the association between the SNPs of mentioned interleukins and toxoplasmosis in 50 toxoplasmosis-aborted women admitted to maternity teaching hospital in Sulaimania governorate during the period Jan 2017 Mar 2017 to finish their pregnancy. SNPs were ascertained by PCR-SSP (Polymerase chain reaction-sequence specific priming) method. In addition, 40 apparently healthy women (University staff and health staff) were taken as control. Both Latex agglutination test and Enzyme linked immunosorbent assay for IgG and IgM observed that 34% of case were positive for IgG and IgM anti- *Toxoplasma* antibodies. This study showed that the single nucleated polymorphisms (SNPs) of TNF- $\alpha$ , IL-10 and IL-1 $\beta$  demonstrated no significant positive or negative association with toxoplasmosis in the samples of aborted women in Sulaimania province/north of Iraq.

latif.mohammed@univsul.edu.iq