

Prevalence of *Toxoplasma gondii* Parasite and Associated Risk Factors Among The Population in Al Baha Province, Saudi Arabia: A Retrospective Study

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ABSTRACT

Toxoplasmosis is a parasite infection that presents a significant public health issue in Saudi Arabia. Retrospective research was undertaken in a tertiary hospital in Al-Baha to determine the prevalence of *Toxoplasma gondii* infection in patients from January 2017 to June 2023. Revealing an incidence rate of 22%. The study's results revealed a significant disparity in the portrayal of females and males. Females constituted a greater percentage, with 73.4%, while males comprised 26.6%. The resulting p-value was 0.02, indicating a statistically significant result. The positive cases had an older age distribution, with a mean age of 23.27 years. Conversely, the group with negative results had an average age of 15.54 years. The p-value for this comparison was 0.001, indicating a statistically significant outcome. The research also found a positive association between seropositivity and many pregnancies, namely 4 pregnancies (52.83%), as well as a history of abortion (75.5%). In addition, our study emphasizes many clinical presentations, such as developmental delay (10.5%), congenital anomalies (7.3%), seizure (5.6%), epilepsy (4%), IUGR (3.2%), and Autism (2.4%). The study suggests that healthcare authorities should contemplate the adoption of screening programs that specifically target individuals with a higher risk. Furthermore, it suggests the implementation of educational initiatives to enhance awareness, particularly among susceptible demographics.

Keywords: Toxoplasmosis; *Toxoplasma gondii*; Seroprevalence; Congenital infection

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