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Seroprevalence of Toxoplasmosis in Goat in Baghdad governorate

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Abstract

Infections by the protozoan parasite *Toxoplasma* gondii are widely prevalent in humans and animals worldwide. Toxoplasmosis is a disease that causes abortions, weak kids, stillbirths, birth defects, and mummification of

fetuses in pregnant does (doe). Contaminated grain, grass, or hay by infected cat feces are the source of infection for the goats. This study intends to investigate the seroprevalence of goat's toxoplasmosis by using serological tests (Latex agglutination test and indirect ELISA). One hundred goat sera (78 females and 22 males) were collected from Baghdad city during the period 1/10/2015 until 31/3/2016. The results showed that the females had a high Toxoplasmosis infection rate than males. In Latex agglutination test and ELISA, the infection rate was 64.10% and 87.32 % in female respectively and 45.45% and 71.42% in male respectively, meanwhile the infection rates were increased with the age of the animals. Moreover, the infection rate by latex agglutination test was 54.16% and 61.84% in animals under 2 years and over 2 years age respectively. In addition, the infection rate in ELISA was 75% and 86.76% in animals under 2 years and over 2 years age respectively. In conclusion, this study approved the seroprevalence of toxoplasmosis in goats. Moreover, the latex agglutination test and ELISA have the ability to determine the toxoplasmosis in goats. The authors recommend using these tests to diagnose the toxoplasma infection in flocks of the goat.

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