Abstract:

Toxoplasmosis is a common infectious disease between humans and warm blood animals that is present all over the world and can cause a lot of economic and economic losses to the affected countries. In order to study the parasite of Toxoplasma for the first time in camels of Sistan and Baluchestan Province as one of the provinces with the highest camel population, a cross-sectional study was conducted from August of 2017 to May 2018 to evaluate and compare the seroprevalence of *Toxoplasma* gondii infection in camel herds of Sistan and Baluchestan province. Therefore, from the cities with the highest population of camels, 184 blood samples were taken randomly. After serum isolation, the prevalence of IgG anti-parasite toxoplasma antibodies in the samples collected by ELISA was evaluated. In this study, risk factors such as age, sex, geographical location, season, abortion rate and the presence of domestic cats and rodents in the site were investigated. The results of this study showed that the prevalence of Toxoplasma gondii anti-parasitic antibodies in camels in the studied regions was about 11.96% (22 out of 184 samples). The prevalence of parasite antibodies in males (13%) was higher than that of females (10.7%), but this difference was not statistically significant (p = 0.634); the number of positive cases in Khash city (20%) And Zabol (10.7%) were higher than the other counties in Mirjaveh 6.7% and 5 % in Zahedan, respectively. The statistical analysis did not show a significant difference between the number of positive cases and the risk factors. In addition, in the results, the prevalence of antibodies in the range of 1 to 3 years was higher, which was not statistically significant (P> 0.05). Also, there was no significant relationship between the prevalence of *Toxoplasma gondii* and the abortion history and the presence of domestic cats and rodents (P> 0.05). According to the results, Toxoplasma gondii was observed in the camels of this province, so health measures and necessary warnings should be placed on the agenda of health centers.

Keywords: Camel, *Toxoplasma gondii*, Sistan and Baluchestan, ELISA.



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The Thesis Submitted for the Degree of Doctor of Veterinary Medicine (DVM)

Serological evaluation of *Toxoplasma gondii* infection in camels of Sistan and Baluchestan Provinces

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