

LETTER TO THE EDITOR

**Seroprevalence of *Toxoplasma gondii* and associated risk factors
in *Felis catus* in Havana**

**Seroprevalencia de *Toxoplasma gondii* y factores de riesgo asociados en *Felis catus*
en La Habana**

Dear Sir,

In the framework of the investigation Seroprevalence of *Toxoplasma gondii* and associated risk factors in *Felis catus* in Havana, this causal agent of toxoplasmosis, a re-emergent and cosmopolitan zoonosis that affects mammal and birds as intermediate hosts and felines as definitive hosts, was approached. In Cuba, a high seroprevalence of *T. gondii* in humans was reported in the capital; however, to date, the prevalence in the feline species (*Felis catus*) in Havana is unknown, mainly due to the absence of diagnosticians on the veterinary network and the complexity in sampling. For the above arguments, it was decided to determine the seroprevalence of *T. gondii* and to identify the risk factors associated with the presence of anti-*T. gondii* antibodies in *Felis catus*.

Validation of an immunoenzymatic system of inhibition (ELISA/i) was the initial step required for the serologic diagnosis of this parasite in this species with a commercial system of agglutination with latex as reference. For this, 300 serum samples collected from domestic cats in the 15 municipalities of La Habana province were used. These samples were also used in the determination of the seroprevalence and identification of the associated risks factors.

The validation of the assay showed elevated values of sensibility (99.5%), specificity (98.9%) and Kappa (0.98). The processed serums evidenced a high seroprevalence (70%) in the animals evaluated, and the risk factors associated with the presence of anti-*T. gondii* antibodies in *Felis catus* which were identified were: adult category (75%), aged ≥ 5 years (89%) and 2-4 years (73%), predation of rodents, birds and amphibians (76%), consumption of raw meat (75%) and the presence of insects and rodents at homes (75%).

The seroprevalence of *T. gondii* determined in *Felis catus* in Havana was high, which was associated with the category, age, feeding and presence of vectors. ELISA/i validated for the first time in Cuba demonstrated excellent results for the diagnosis of *T. gondii* in *Felis catus*.

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