TICKS IDENTIFICATION OF A DOMESTIC CAT AND MOLECULAR RESEARCH OF RICKETTSIA SPP. BACTERIA IN THE ARTHROPODS

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RESUMO

Introduction: Ticks are vectors for many pathogens and are involved in the epidemiological chain of several diseases of animals and humans. Although not common, perhaps due to self-grooming habits, domestic cats can be infested by these arthropods. This study aimed to identify the tick species from a domestic cat and to detect the presence of *Rickettsia* spp., etiological agent of spotted fever, in the tick specimens collected. **Methodology:** A total of 20 partially fed larvae were manually detached from a mixed breed domestic male cat (*Felis catus*) at a veterinary clinic in the municipality of Nova Iguaçu, State of Rio de Janeiro, Brazil. The most relevant symptoms in the animal were weakness and a high tick infestation burden. The tick genus was identified using a dichotomous key for Brazilian ticks. Tick DNA was extracted by a phenol-chloroform protocol and was used for PCR detection of *Rickettsia* spp. by conducting amplification of the *rickettsial gltA* gene. **Results:** All tick larvae were identified as belonging to *Amblyomma* spp. No detection of *Rickettsia* spp. *in the tick DNA samples was observed. Reports about tick infestations in domestic cats in Brazil are scarce. Until now a case of Amblyomma spp. ticks infesting a cat in* spotted fever-endemic area *in the State of São Paulo had been the unique documented report* in southeastern Brazil. ***Conclusion:*** Through this research, it was possible to report the occurrence of *Amblyomma* spp. ticks infesting a domestic cat in the State of Rio de Janeiro although any *Rickettsia* spp. was detected.

PALAVRAS-CHAVE: Amblyomma spp., Felis catus, PCR

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