Prevalence of zoonotic diseases in clinically healthy dogs detected by pre-surgical examination

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Introduction & Objective: Diseases transmitted by canine vectors (CVBD) have become a major concern for dog and human public health. The objective of the study described here is to demonstrate the importance of performing pre-surgical studies in high and low prevalence zones, as well as to add epidemiological data to look for the presence of four pathogens responsible for CVBD, specifically, anaplasmosis, borreliosis, dirofilariasis and ehrlichiosis in dogs, apparently healthy that will undergo surgery. The state of Guanajuato was considered a zone free of heartworm, Anaplasma and borreliosis as well as with low incidence of Ehrlichia. However we have found positive cases, although the geographical conditions do not favor the development of these diseases.

Method: The study was conducted at the Pet Hospital Veterinary Hospital of Celaya Gto. rapid diagnostic tests were performed on SNAP® 4DX® from IDEXX® Laboratories in 478 apparently healthy dogs, scheduled for surgery that lived both inside and outside the home, from 2009 to 2016.

Results: Of a total of 478 evaluated 43 were positive to any of the 4 diseases (8.9%) in total, 36 positive to Dirofilaria immitis (7.5%), 6 positive to Ehrlichia canis (1.2%), 1 positive to Borrelia burgdorferi (0.2%) and 0 positive to Anaplasma (0%). From the patients diagnosed, none was treated against heartworm and developed respiratory and cardiac signs in the following 3-6 months. The positive patients to E. canis were treated with dicloxacillin, resolving satisfactorily the 6 cases.

Conclusions: Pre-surgical studies for the detection of diseases in prevalence areas should be an obligation for the veterinarians in order to prevent the spread of these diseases and at the same time reduce risks in the evolution of their patients.

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