TITLE: HEMATOLOGICAL AND EPIDEMIOLOGICAL ASPECTS OF DOGS NATURALLY INFECTED WITH EHRLICHIA SPP. AND ANAPLASMA SPP. IN THE CITY OF JATAÍ, GOIÁS.

AUTHORS: SCHIMMUNECH, M. S.¹; BANNWART, P. F.¹; STELLA, A. E.¹ INSTITUTION: 1. FEDERAL UNIVERSITY OF JATAÍ (UFJ)

ABSTRACT: In Brazil, hemoparasites infections represent one of the major causes of a search for veterinary assistance in dogs. Infections by bacteria from the order Rickettsiales that include Ehrlichia sp. and Anaplasma sp. have a large participation. The objective of this study was to characterize hematological and epidemiological aspects of the infection caused by the bacteria of the genus Ehrlichia sp. and Anaplasma sp. among dogs. The data of this study were based on blood samples from healthy and sick animals from the Veterinary Hospital of the Federal University of Jataí in Jataí, Goiás between 2005 and 2017. The microscopic observation of the presence of Ehrlichia sp. and Anaplasma sp. morulae was used as a criterion to be positive. 5.015 animals were attended during this period and 691 (13,78%) of them were positive for the presence of hemoparasites. Among these animals, 9,23% (463/5015) had Ehrlichia spp. morulae, 4,37% (219/5015) had Anaplasma spp. morulae and 0,18% (9/5015) had morulae from both species. Females represented 57,89% (400/691) of positive animals and males 42,11% (291/691). 35,02% (242/691) of animals were less than 1 year of life, 54,13% (374/691) were between 1 and 8 years, and 10,85% (75/691) were older than 8 years. Females animals younger than 1 year infected with Ehrlichia spp. and Anaplasma spp. had the most significant change on hematological aspects average, hematocrit (29%), red cells count (3 millions/mm3), platelets count (40.000/mm) and total leukocytes count (16.000 mil/mm3), evidencing anemia and thrombocytopenia. Animals infected with Anaplasma spp. and Ehrlichia spp., at the same time, presented the most intense thrombocytopenia, evidenced in males between 1 and 8 years old (30.000/mm). Anaplasma spp. infections caused a severe decrease in red cells count average, evidenced in females younger than 1 year (3,79 millions/mm3) and males younger than 1 year (3 millions/mm3). These aspects confirm the importance of these infections, as well as the study and control of the biological vector.

Keywords: Ehrlichiosis, morulae, tick.