

## SUMMARY

### **Prevalence of *Ehrlichia canis* and *Babesia canis* Infections in Thrombocytopenic Dogs**

In the present study the aim was to investigate the prevalence of *Ehrlichia canis* and *Babesia canis* infections in thrombocytopenic dogs, and to determine the relation among those aforementioned diseases, and diagnostic role of thrombocytopenia in the latter infections.

Blood samples were collected from 224 dog of different ages and of both sexes. Samples were separated to three groups according to their thrombocyte counts (thrombocyte counts higher than 201.000 $\mu$ /L; thrombocyte counts between 101.000–200.000 $\mu$ /L, thrombocyte counts below 101.000). In blood samples, *E. canis* was determined using IFAT and *B. canis* was detected using a molecular diagnostic method, PCR. Data gathered from the dogs were examined using SPSS software program using Chi-Square test

Eighty one (36,2%) of 224 dogs were positive to *E. canis* and 4 (1,8%) were *B. canis* positive. Sixty nine of 143 trombocytopenic dogs (48,3%) and 12 of 81 non-trombocytopenic dogs (14,8%) were *E. canis* positive, respectively. A statistically significant difference was found among the degree of thrombocytopenia and *E. canis* prevalence, however there was insignificant importance between the severity of thrombocytopenia and *B. canis* infection.

In conclusion, it was suggested that as the degree of thrombocytopenia elevates the incidence of *E. canis* infection increases and thrombocyte counts could not be evaluated specifically for *E. canis* infection, therefore could be used for sureveillance test for experiencing forward diagnostic applications. Increase in the degree of thrombocytopenia causes increase the conincide of *E. canis* infection and determination of the thrombocyte

numbers could not be a specific test for the possible diagnosis of *E canis* infection but could be referred a transision for these tests.

**Key words:** *Ehrlichia canis*, *Babesia canis*, dog, thrombocytopenia