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oral presentations

CANINE BABESIOSIS IN DIFFERENT SEASONS - A FERTILE GROUND FOR MULTIPLE QUESTIONS

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Background: Canine babesiosis is a disease with a seasonal character. We have previously observed that in Belgrade, the capital of the Republic of Serbia, 60% of cases with the acute-phase response (APR) give a notable maximum between mid-February and May, the so-called “high season”. The other two peak seasons with less pronounced maxima are in winter, from January to mid-February, and in autumn, from October to December. **Objectives:** Based on clinical observations, we postulate that dogs infected with *B. canis* in the “high season” develop a more intense APR than dogs in the other two seasons. **Material and Methods:** To test this hypothesis, we compare the relative parasite load and the level of acute-phase proteins and reactants, their indexes (calculated as a combination of concentrations of fast and slow positive, and fast and slow negative acute phase reactants), as well as the concentration of coagulation factors, complete blood count, and biochemistry among dogs that developed the disease in the autumn, winter, and “high season”. **Results:** The relative parasite load is the lowest, and APR Indexes are the highest in dogs infected in “high season”. These findings are accompanied by relatively low creatinine and urea, implying that dogs in “high season” had hemodilution, thus further suggesting short incubation. Unlike other acute-phase proteins, fibrinogen showed the lowest concentration in “high season”. **Conclusion:** Future research will help unveil the connection between more intense APR and relatively low parasite load and fibrinogen concentration.



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Keywords: *Babesia canis*, Acute-phase response, Acute phase indexes, Parasite load

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