IMPORTANCE OF HAEMATOLOGICAL CHANGES IN DIAGNOSING CANINE BABESIOSIS

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Abstract. Over the past ten years, canine babesiosis spread widely in Lithuania. In this retrospective study during 2003–2012, blood of 300 dogs with babesiosis was investigated at the Veterinary Academy of Lithuanian University of Health Sciences (LUHS) and Dr. L. Kriaučeliūnas Small Animal Clinic. Morphological changes (RBC, HCT, Hb, PLT, WBC, leukogram and core shift) of blood were tested searching for regularities, which may be enough to reasonably suspect that the dog is suffering from babesiosis. Blood tests were carried out in 300 dogs: 186 dogs with haematological abnormalities and 114 dogs with normal haematological findings. This study shows that babesiosis can be characterized by marked thrombocytopenia (30.90 ± 4.97 x 10^9/l, $P<0.05$), neutrophilic leukogram profile change to lymphocytic-plasmocytic and monocytosis (16.20 ± 1.30 %, $P<0.05$). Also there is often a tendency to anemia and leukopenia. Haemolysis of erythrocytes often cause renal failure and azotemia develops (UREA 29.32 ± 3.75 mmol/l, $P<0.05$). Complication such as renal failure is of particular importance in predicting epicrisis. Less common babesiosis is accompanied by liver failure.

Keywords: dogs, babesiosis, diagnostics, haematological investigation.