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ABSTRACT #9

MYCOPLASMA INFECTION IN ANAEMIC AND NON ANAEMIC DOGS IN GERMANY. J Huebner¹, TW Vahlenkamp², E Müller¹, I Langbein-Detsch¹ 1. LABOKLIN, Bad Kissingen, Germany. 2. Federal Research Institute for Animal Health Greifswald-Isle of Riems, Germany.

Mycoplasma haemocanis infections of dogs are well documented with a world wide distribution. First thought this red blood cell bacterium causes only disease in immunosuppressed or splenectomized dogs, it is now known to be one of the main infectious agents in canine immunhaemolytic anaemia (IMHA). Most of these animals are presented with severe haemolytic anaemia with a PCV often below 10%. Performing a Coombs' test 80 to 85% of these cases are positive for anti-erythrocyte-antibodies. Some dogs deteriorate quickly and the infection can be fatal. To differentiate between the variety of parasites and bacteria that can be responsible for the clinical picture of IMHA like *Babesia canis*, *Ehrlichia canis* and *Anaplasma phagozytophilum* PCR test should be performed. Especially under the aspect of treatment a distinct diagnosis is essential.

To get an overview and reveal the prevalence of *Mycoplasma* in Germany we performed a study in the year 2005 in our laboratory with randomised samples of 976 dogs using real-time PCR. A highly conserved region of the 16 smRNA gene specific for *Mycoplasma haemocanis* and *Candidatus Mycoplasma haemominutum* was used. Results showed that 167 dogs (17%) were positive for *Mycoplasma*. None of these dogs showed noticeable signs of anaemia or changes in their differential white blood profile.

Further investigations of 116 blood samples from dogs with anaemia were added to this study. These samples were send in for an anaemia screening, including a blood profile, reticulocyte count, total protein, iron and PCR tests for *Babesia canis*, *Ehrlichia canis* and *Mycoplasma*. Results show that 20 (18%) of these dogs were positive for *Mycoplasma*, whereas only 2 (2%) for *Babesia canis* and 8 (7%) for *Ehrlichia*.

All of these dogs were from Germany and had never left the country. This shows the wide distribution of these infectious agents in Middle Europe and the importance to test for *Mycoplasma* in the anaemic dog. Furthermore it shows that nearly as much asymptomatic dog carry *Mycoplasma*. These are important facts in kennel management or blood donation.