

APPLICATION OF CELLS MEMBRANE IMMUNOFLUORESCENCE (MIF) METHOD FOR AUTOIMMUNE HAEMOLYTIC ANEMIA (AIHA) DIAGNOSTIC IN DOGS AND COMPARISON OF MIF WITH COOMB'S AGGLUTINATION TEST

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Summary. Autoimmune diseases are relatively frequent complex of diseases, which occur when the body's immune system attacks internal organs, affecting approximately 5–7% of human population. After cardio-vascular diseases and cancer they are third in mortality. The diagnosis of AIHA provides few difficulties since the introduction of the popular Coomb's test: at the last years clerisies find the disadvantage of low sensitivity routinely used Coomb's test.

The objective of the present work was to appropriate cells membrane immunofluorescence (MIF) test in AIHA diagnostic and to compare it with Coomb's agglutination.

Twenty six anemic dogs were investigated (experimental group) and 13 clinically healthy dogs were used as a control. Our results demonstrated that cell's floucytometric analysis is precise, reliable and two times more sensitive method for detecting of RBC-boud autoantibodies compared to Coomb's agglutination test. The results have shown that IgG and IgM were the most frequent autoantibodies in anemic dogs: 53% of tested dogs (n=26) were positive to goat antiserum according to dog IgG HL chain in MIF test, whereas using Coomb's agglutination with the same antiserum positive were only 26% of tested dogs. Similar difference between two tests (MIF and Coomb's) was shown with goat antidog antibodies to IgM, when 50% and 3.8% of dogs, respectively, were positive. Interestingly the percentage of females positive to MIF and Coomb's tests was higher compared to males.

Keywords: Autoimmune heamolytic anaemia (AIHA), Coomb's agglutination, cells membrane immunofluorescence (MIF).