

## **BLOOD SERUM PROTEIN PROFILES IN DOGS WITH EXPERIMENTALLY INDUCED ACUTE INFLAMMATION**

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### ***Abstract***

*The aim of the present study was to define changes in concentrations of total proteins, albumin (as a negative acute phase protein), globulins (Glb), total protein and albumin/globulin ratio (A/G) in dogs with experimentally induced acute inflammation.*

*The study was induced in 15 mongrel male dogs at the age of two years and body weight 12-15 kg. The animals were divided in two groups: experimental group (n=9) and control group (n=6). The inflammation was reproduced by inoculation of 2 ml turpentine oil subcutaneously in lumbar region while control dogs were injected with saline solution. Blood samples were collected into heparinized tubes before inoculation (hour 0) then at hours 6, 24, 48, 72 and on days 7, 14, 21. At the same time was taking blood and from controls.*

*The concentration of Alb statistically significant decreased in the experimental group from at 72<sup>nd</sup> h to days 14. These results confirm that the concentrations of albumin may be considered as a negative acute phase protein. By contrast, the level of globulins rose from the 72<sup>nd</sup> h to days 21. The A/G ratio slightly decreased-on days 7 and 14. During the whole post inoculation period the TP levels remain unchangeable. Strong positive correlations were observed between proteinemia and albumin concentrations or A/G ratios. The A/G ratios were also negatively coupled to globulin concentrations as well as we reported negatively association between Alb and Glb and strong positively correlation between Alb and A/G ratio.*

**Key words:** acute inflammation, A/G ratio, albumin, dogs, globulins, total protein.

# CLINICAL SCIENCES

