PROTHROMBOTIC STATUS IN ACTIVE- AND ACUTE STAGES OF CANINE MONOCYTIC EHRlichiosis

Adnan Ayan1*, Kerem Ural2

1Department of Genetics, Faculty of Veterinary Medicine, Van Yuzuncu Yil University, Tusba, Van, Turkey; 2Department of Internal Medicine, Faculty of Veterinary Medicine, Adnan Menderes University, Isikli, Aydin, Turkey;

*Corresponding Author, Adnan AYAN, e-mail: adnanayan@yyu.edu.tr

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ABSTRACT

Biomarkers in an attempt to determine prothrombotic condition alterations, for the vast majority by use of D-dimer, has long been elucidated retrospectively. D-dimer, a well known breakdown/degradation product of cross-linked fibrin, has been the subject of several researches. On the other hand to the present authors knowledge, to those of different stages of Canine Monocytic Erlichiosis (CME), D-dimer levels have not been analyzed, which should thoroughly effect therapeutic scenario. The aim of this study was to measure D-dimer concentrations and assess their value in the diagnosis of CME. Therefore D-dimer analyses by use of Wondfo Finecare Fluorescent Immunoassay were performed in four groups of dogs; (i) 8 dogs with acute CME, ii) 9 dogs with active CME infection, iii) exposed dogs (n=8) then were compared to those of healthy dogs (n=9 dogs as iv) control group. The D-dimer range in clinically healthy dogs was <0.1 mg/L. In the present study D-dimer levels were detected as follows: 0.06±0.10, 3.20±3.05, 4.04±3.94 and 0.06±0.07 mg/dl for control, acute infected, active infected and exposed dogs with a statistical significance (p˂0.01) as shown in table In both infected groups, D-dimer levels increased with clinical evidence of disease. D-dimer concentration may be considered as an indicator for disease activity during acute/active disease condition and may be useful as a potential biochemical marker.

Keywords: Acute stages, Canine Monocytic Ehrlichiosis, Prothrombotic status.