

Oral Presentation

Evaluation of red cell distribution with in dogs with parvoviral enteritis: a retrospective study

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Abstract

Canine parvoviral enteritis is a contagious viral disease which is very common all over the world and can progress with high mortality and morbidity even when diagnosed at an early stage. Red cell distribution width (RDW) is a parameter which shows the change in volume and size of erythrocytes and also important in the interpreting of conditions such as inflammation and anemia. The aim of this study is to compare the RDW value in healthy animals and animals with parvoviral enteritis and also examine correlation between other hemogram parameters. We included dogs diagnosed with parvoviral enteritis (n=42) and healthy (n=29) ones which were applied to Istanbul University-Cerrahpasa Faculty of Veterinary Medicine, Internal Medicine Department Small Animal Clinic between January'21 to December'21. Parvoviral enteritis was diagnosed by anamnesis, clinical examination and rapid parvavirus test. Healthy animal group was created from the animals which applied our faculty clinic for vaccination, sterilization and general control. RDW was found to have a moderately positive correlation with RBCs and a low negative correlation with MCV. And no difference was observed in the RDW comparison between sick and healthy animals. The differences between %RETIC, RETIC, %NEU, %EOS, EOS were found to be significant in both groups. In conclusion, the RDW value in dogs with parvoviral enteritis is similar to healthy dogs and RDW could not be interpreted as a biomarker of this type of acute inflammatory infection. More studies are needed on the changes of RDW in different diseases in animals and to understand the clinical significance of this value.

Keywords: RDW, parvoviral enteritis, canine