BLOOD PARAMETERS OF DEWORMED AND NOT DEWORMED WEANING FOALS

Rafael Henrique Prado SILVA*1, Adalgiza Souza Carneiro de REZENDE1, Eduardo BASTIANETTO1, Marina de Souza Luz da CUNHA1, Fabiola FARINELLI1, Anderson Pereira de ABREU1, Marília Martins MELO1, Sarah Lucille RALSTON2

*corresponding author: rafaelsilvazootecnista@gmail.com
1Universidade Federal de Minas Gerais, Belo Horizonte, Minas Gerais, Brasil
2State University of New Jersey, New Jersey, USA

The foals undergo an intense body development in the first year of life and in this period are more susceptible to infection by different species of helminths. The objective was to evaluate the effects of deworming weaning foals on the blood parameters. On a horse farm in Northern Minas Gerais, were used 14 Mangalarga Marchador weaning foals at six months old, divided into two groups: D and ND. The foals were kept until 9 months of age in two separated paddocks (3.5 animal unit ha−1) of Cynodon nlemfuensis cv. African Star Grass and receiving pre-dried hay of Cynodon dactylon cv. Tifton 85 ad libitum and 1.5 kg 100 kg−1 of body weight (BW) in concentrated. The foals of the Group D were dewormed (0.02 mg kg−1 BW ivermectin + 2.5 mg kg−1 BW praziquantel) whenever eggs per gram of feces (EPG) was ≥500. Tests of EPG of foals were realized monthly. Were evaluated: Hematocrit; Red Blood Cells; Hemoglobin; Mean Corpuscular Volume (MCV); Medium Corpuscular Hemoglobin (MCH); Medium Corpuscular Hemoglobin Concentration (MCHC); Total serum proteins (T_Prot); Basophils; Monocytes; Leukocytes; Lymphocytes; Eosinophils; AST: Aspartate Aminotransferase. Fisher test were used for comparison among groups for blood parameters using R statistical program. Group ND was infested mainly by small strongyles (6000 EPG) and group D had a minimal infestation (<50 EPG). The MCH and basophils were significant (p <0.01) for the Shapiro-Wilk normality test and were analyzed by the Mann-Whitney test. Among all blood parameters, only T_Prot and basophils differed between groups (p<0.05), being higher in the group ND, that could be indicating, respectively, a higher dehydration and more intense immunological processes of group ND than group D, but averages are within of the reference values for equines (T_Prot: 5.5 to 8.0 g dL−1; Basophils: 0 to 100 μL−1). As regards blood parameters of both groups, hematocrit, red blood cells, hemoglobin, MCV, HCM, CHCM, AST, monocytes and leukocytes were no difference (p>0.05) between groups, being within equine reference values. Although there was no difference (p>0.05) between groups, lymphocyte and eosinophil levels, defense cells associated with the presence of endoparasites, were above the reference values (Lymphocytes: 700 to 2900 μL−1, eosinophils: 0 to 100 μL−1) in groups D (Lymphocytes: 5393 μL−1; eosinophils: 307 μL−1) and ND (Lymphocytes: 4628 μL−1; eosinophils: 316 μL−1). High cyathostomin infestation affected the total serum proteins and basophil levels in weanling foals raised extensively in Northern Minas Gerais.

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