

3rd International

Veterinary Congress

August 18-20, 2016 London, UK

Hematological changes in the hydatidised male sheep after experimental inoculation of *Echinococcus granulosus* eggs

M Younus¹, Muhammad Shafique M Athar Khan², Tanveer Akhtar² and Aman Ullah Khan¹¹University of Veterinary & Animal Sciences, Pakistan²University of Punjab, Pakistan

A total of 48 apparently healthy weaning sheep lambs (*Ovis aries*) of 8-10 weeks old weighing within the range of 7-10 Kg were purchased from the contractors maintained in the experimental station of University of the Punjab, Quaid-e-Azam Campus (New Campus) at Lahore, Pakistan. They were deformed against nematodes (Round worms) with levamisol (ICI) at the dose rate of as per the direction of the manufacturers. The fecal examination was tested against the parasitic eggs no helminthes ova were seen. All the 48 sheep lambs (kids) were divided into two groups i.e., group A & group B. Group "A" was comprising of 40 sheep and kept as infected groups whereas group "B" was comprising of eight (8) sheepes & kept as new infected control group. Each sheep kid of infected group A was given 3-4 fresh gravid segments contains 2-3 thousands eggs of *Echinococcus granulosus* which were collected from experimentally infected dogs by feeding fresh hydrated cysts collected from liver & lungs of sheep after slaughtering process. Each sheep kid of infected dog was fed fresh gravid segments for a total period of 5 days or each alternate day. Coagulated blood was collected before the start of oral administration of infection and after every month by jugular phlebotomy of each sheep kid before the infected & new infected control group. One sheep lambs each from rejected & now infected group was slaughtered at the end of each month for the presence of macroscopic hydrated cyst in the visceral and abdominal cavity. After 180 days of the experiment the hydrated cysts were confirmed in the abdominal cavity. Hematological parameters or zero day i.e., just before the administration of the gravid segments to the lambs and then at the end of every month revealed that there was a gradual increase (PL 0.05) in the White Blood Cell (WBC), Mean Corpuscular Volume (MCV), Mean Corpuscular Hemoglobin Concentration (MCHC) and Erythrocyte Sedimentation Rate (ESR). The increasing trend was probably due to inflammatory response and lytic effect of the newly developing *E. granulosus* hydrated cysts. The Red Blood Cell (RBC), Hemoglobin (HB), Packed Cell Volume (PCV) and Mean Corpuscular Hemoglobin (MCH) infected groups were decreased significantly as compared to the control group (PL 0.05). The experiment was terminated at the end of the 7th month.

Biography

M Younus is currently working at Directorate of Advance Studies and Research, University of Veterinary and Animal Sciences, Pakistan. His area of expertise includes livestock & dairy farm management.

younusrana@hotmail.com

Notes: