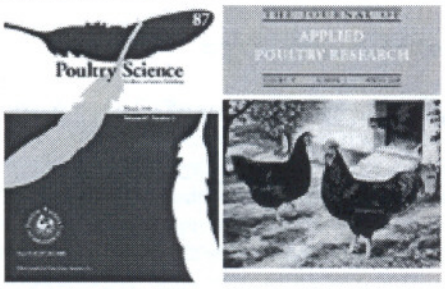

Poultry Science

PSA Abstracts

MP275 Changes of biochemical parameters and enzymes activities in broiler chickens with cold induced ascites. M. Daneshyar, H. Kermanshahi*, and A. G. Golian, *Ferdowsi University of Mashhad, Mashhad, Khorasan Razavi, Iran.*

An experiment with 250 day-old Ross male broilers was conducted to investigate the differences of some blood parameters of cold induced ascitic and healthy broiler chicks in a 6-week period. These chickens were divided into 2 groups of 5 replicates each. One group of these chickens was raised in normal temperature (NT treatment) and the other in cold temperature (CT treatment) to induce ascites. Mortality was necropsied daily to determine cause of death. Serum glucose, total protein, cholesterol, triglyceride and also activity of lactate dehydrogenase (LDH), aspartate aminotransferase (AST) and alanin aminotransferase (ALT) were determined. At the end of the experiment (week 6), 5 chickens from each replicate were randomly selected and slaughtered. The heart was removed; the right ventricle (RV) was dissected away from the left ventricle and septum. Weights of right and left ventricular were determined separately. Throughout the study, fast blood sugar (F.B.S) of CT-treated birds in week 4 and 6 were higher ($P \leq 0.05$) than NT-treated birds. Total protein of CT treatment was lower than NT-treated birds in every week and whole period but this difference was only significant ($P \leq 0.05$) in week 6. There was not a significant difference between 2 treatments for triglyceride and cholesterol, LDH, AST and ALT. It was concluded that cold induced ascites could impact serum fast blood sugar and protein of broiler chickens.

Key Words: ascites, enzyme activities, broilers