

ABSTRACT

Runting stunting syndrome (RSS) is a multifactorial disease with many names and faces that had caused considerable economic losses to poultry through reduced uniformity, reduced livability, decreased body weights, elevated feed conversions and many secondary diseases. The aim of current study was to evaluate the effect of stunting syndrome on body weights, hematology and histopathology in chicks (n=120) of different ages collected from nine (9) different farms. Grouping was done on the basis of age (G1=1-10 days, G2=11-20 days, G3=21-30 days, G4=31-40 days) including both stunted and normal chicks. Body weights of stunted chicks were found significantly reduced (32%) as compared to the normal chicks of the same age. Hematological results exhibited lower levels of Hemoglobin (Hb), total erythrocyte count (TEC) while values for total leuckocyte count absolute monocyte count (AMC) and absolute eosinophil (AEC) count were higher as compared to normal. Absolute lymphocyte count (ALC) was also found lower than normal. Histopathological findings were the intestinal lesions (29%), including degeneration of villi, crypts, epithelial cells and lamina propria. Pancreatic histopathological lesions (16.65%) included the fibrosis, vacuolation and degeneration of acinar cells. Degeneration of follicles and epithelial cells of bursa of fabricius (43%) and dilation of glandular cells of proventriculus including lymphocytes infiltration (5.6%) were other histopathological findings. All these changes may interfere with normal digestive processes and normal body functioning resulting in poor weight gain and retarded growth or stunting of chicks.