Pathological Study of Coccidiosis in Chick Bird

Amal Kumar Sarkar
Veterinary Surgeon, Department of Livestock Services, Dhaka, Bangladesh.

Abstract: In this field study the organisms were mostly found in the large Intestine specially in the caeca. Decrease body weight and economic loss by this condition, excessive haemorrhage from the Intestine. We can used vitaminK with drinking water, sulfa drug (Sulfadiazine 100mg/kg bwt) and Paracox also be use in controlling the coccidiosis in chickens.

Key words: TNLF-Tumor necrotic live factor, bwt-Body weight, mg-milligram, GI-Gastro-Intestinal.

INTRODUCTION

At the early stage of rearing chick are mostly susceptible to the coccidial organism. The organism are protozoal species specially *Eimeria* species. The pathogens causes clinical and mostly sub clinical problem in early age of the farming chick and fatal to the confined bird in rearing unit. The pathogen cause high mortality rate and the infection was acquired by ingestion of contaminated feed material from litter. In this disease decrease growth rate to high percentage, feed and water consumption also decreased, weight loss., decreased egg product[1]. *Eimeria acervulina, Eimeria necatrix, E. maxima, E. brunetti* and *E. tenella* in the infected chick[2]. The Mathematical presentation of host growth in relation to its food intake and parasite load was described[3]. Gradual weight loses in bird for injection of tumor necrotic live factor (TNLF) and fever, necrosis of the GI endothelial tract and secondary bacterial infection[4].

MATERIALS AND METHODS

Ten chick rearing units were selected at the houses of village farmers at my previous work place, pirganj, upazilla, Thakurgaon District, Bangladesh. Chick units were divided into treatment and control groups as A, B and comparison was done in both groups. From each unit the fecal materials were collected and microscopic examination, identification of the organisms were done in veterinary Hospital and separation of the pathogen, cultured and inoculated the organism in the healthy birds about one month of aged. Post mortem was also done of the affected bird. *Eimeria* species were identified under microscope using Logul”s Iodine solution[5]. VitaminK at 5-6mg/ kg bwt, Sulfadiazin 100mg/kg bwt and paracox were used according to the manufacturer recommendation, in the treatment group for treatment of birds for five consecutive days.

RESULTS AND DISCUSSIONS

It was stated that chemo prophylaxis in various types of chickens raised for meat and the future trends in the prevention of coccidiosis (Immunization and Vaccines)[6]. In postmortem Most of the cases, the organism present in the intestine especially in the cecal region and cause the enlargement of the ceca, thinned wall, Haemorrhage and clot of blood, Bloody Diarrhea and droplet of the wings were the main symptoms[7]. The healthy bird also act as carrier of the organism after recovery. Danforth. H.D.[8] reported that vaccination with oocyst elicited induced and naturally acquired coccidial infection, resulting in average body weight loss of bird than normal and feed efficiency similar to that obtained with conventional anticoccidial medication.

Study was conducted on paracox R.(Paracox is a live attenuated anti coccidal vaccine). Compared with Medicated Controls, which showed as single higher peak at 35 days. The use of paracox may control clinical coccidiosis in broilers and achieve performance at least equal to anti coccidial drugs[9] (Willeams R.B.; Carlyle, W.W.H.; Bond, D.R.; Brown, I.A.G. 1998). Infected birds showed typical symptom of caecal coccidiosis severe caecal haemorrhose, 56% mortality and Microscopic changes like widespread desquamation off epithelial mucosa, Marked haemorrhage, intense cellular reaction and presence of large number of different development stages from 4th to 7th day. Treatment with supercox at the preseribed dose on day 3 PI checked the development of...
clinical symptoms, cecal lesions and haemorrhage, anemia and mortality by arresting[1].

**Conclusion:** Thinned wall, haemorrhage, bloody diarrhea, enlargement of intestinal wall in Post-mortem in the infected chickens. So precaution should be taken before rearing the birds, prohibited the visitors, entrance of the affected birds, i.e. bio-security technique should be maintained for controlling the disease. Damped and dirty litter should be avoided and contaminated feed materials also. In the field study we can use the paracox and vitamin with water for future development of poultry sector.

**REFERENCES**