

CASE REPORT ON OCCURRENCE OF CAECAL COCCIDIOSIS IN INDIGENOUS SONALIKA BREED OF POULTRY

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Cecal coccidiosis is a highly pathogenic and economically important protozoan disease of poultry, predominantly affecting young chicks and leading to significant mortality under intensive rearing conditions. Incidence in indigenous breed of chicken like kadaknath, Aseel, Chittagong, etc. The present study documents the clinico-pathological and histopathological findings of a confirmed field case of caecal coccidiosis in chickens. Clinically, affected chicks exhibited depression, anorexia, ruffled feathers, progressive weakness, and prostration, followed by death. Enteric manifestations were prominent, characterized by yellowish-green to blood-stained diarrhea, while respiratory distress with gasping was observed in a subset of birds, likely secondary to systemic compromise. A systematic postmortem examination was performed on a dead and moribund bird. Gross pathological examination revealed lesions predominantly localized to the ceca, which were markedly distended, thickened, and dark red to hemorrhagic. The cecal lumen was filled with large blood clots, necrotic debris, and caseous cores firmly adherent to the mucosa. Mild congestion of the liver and spleen was also noted. Histopathological evaluation of formalin-fixed cecal tissues revealed haemorrhagic caecal enteritis characterized by epithelial sloughing, coagulative necrosis, hemorrhage, edema, and dense infiltration of mononuclear inflammatory cells. Numerous developmental stages of *Eimeria tenella*, including schizonts, merozoites, gamonts, unsporulated oocysts, were demonstrated within epithelial cells and deeper layers of the cecal mucosa.

Parasitological examination of mucosal scrapings and fecal samples revealed both sporulated and unsporulated oocysts of *E. tenella*, confirming the diagnosis. The study underscores the severe pathological impact of cecal coccidiosis and highlights the importance of integrated control strategies encompassing hatchery hygiene, farm-level biosecurity, litter management, nutritional modulation, and judicious use of anticoccidial drugs and vaccination to mitigate disease burden in poultry production systems.