

Communication

Infectious bursal disease (IBD) and coccidiosis concurrent infections in Nigerian indigenous chickens. A case report

F. Oluigbo ¹L. U. Enurah ¹

OLUIGBO (F.), ENURAH (L. U.). Infections simultanées par la maladie de Gumboro et la coccidiose chez les poulets de race locale au Nigeria. Étude d'un cas. *Revue Élev. Méd. vét. Pays trop.*, 1989, **42** (3) : 330.

Dans un foyer situé au Nigeria, une mortalité de 75 p. 100 a été enregistrée dans un groupe de 45 poulets de race locale, lors de l'apparition simultanée de la maladie de Gumboro et d'une coccidiose du caecum. Le troupeau comprenait 36 poussins non sexés de 29 jours et 9 poules adultes. Les poules adultes n'ont pas été affectées. *Mots clés* : Poulet - Maladie de Gumboro - Coccidiose - Nigeria.

An outbreak of concurrent infectious bursal disease (IBD) and caecal coccidiosis was reported in a flock of 45 indigenous chickens comprising 36 unsexed chicks and 9 adult hens which resulted in 75 per cent mortality. The chickens were reared on free range « back yard » system and they were not immunized against any prevalent disease. The chicks just showed severe depression, ruffled feathers and greenish watery faeces on the 29th day of age. These were followed by passage of bloody faeces with the onset of the coccidiosis. The adult hens were not affected.

At necropsy, the birds showed emaciation, dehydration and congestion of the pectoral and thigh muscles. The bursa were either swollen or atrophic. The caecal pouches were haemorrhagic and distended with either blood or mucohaemorrhagic ingesta. Histopathological examination revealed marked lymphocytic depletion of the bursa and spleen and interfollicular fibroplasia were evident in the bursa. The caeca showed desquamation of the superficial layers of the mucosa, intense hyperaemia and extensive vacuolations in the glandular epithelial cells. Schizonts and merozoites were found in many enlarged epithelial cells.

Serodiagnosis using the suspensions of the bursa from the dead birds against sera from the surviving birds in the agar-gel diffusion test showed positive reactions. The increased susceptibility and mortality observed in the chicks would tend to suggest that their prior infection with IBD before the onset of coccidiosis resulted in immunosuppression.

1. National Veterinary Research Institute, Vom, Nigeria.

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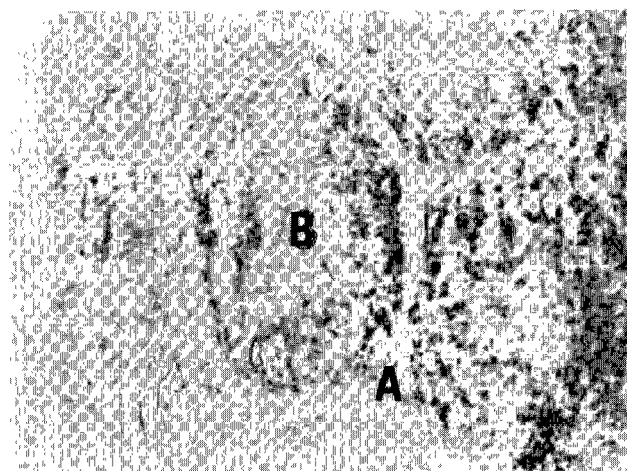


Fig. 1 : Bursa of chicken that died of IBD showing oedema interfollicular fibroplasia (A) and necrotic follicles (B).

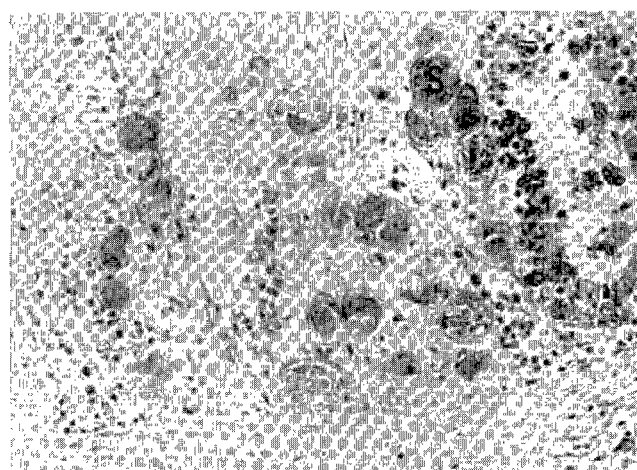


Fig. 2 : Caeca of dead chicken showing damaged superficial and middle part of the mucosa, distended and ruptured epithelial cells with developing and fully formed schizonts (S).

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In an outbreak of concurrent infectious bursal disease (IBD) and caecal coccidiosis in a flock of 45 Nigerian indigenous chickens comprising of 36 unsexed 29 days old chicks and 9 adult hens, 75 per cent mortality was recorded. The adult hens were not affected. *Key words* : Chicken - Infectious bursal disease - Coccidiosis - Nigeria.