



Malabsorption Syndrome

This complex disease has been reported under various names such as helicopter disease, femoral head necrosis, brittle bone disease, infectious proventriculitis, pale bird syndrome, running disease and stunting disease.

Cause

The malabsorption syndrome appears to be a disease complex involving avian Reoviruses and other viral and bacterial agents which may affect the digestive system resulting in nutritional and deficiency signs and lesions.

Transmission

Only circumstantial evidence is present at the moment to indicate that the causal organism(s) may be vertically transmitted. Horizontal transmission also seems to play a role in infected sites.

Species affected

Chickens and possibly turkeys.

Clinical signs

The disease is mainly observed in broiler flocks. Many of these broiler flocks have a history of diarrhoea, beginning early as a few days of age and lasting until 10-14 days of age. Light or dark brown, foamy droppings can be found with undigested food particles. Several affected broilers in a flock may exhibit malpositioned feathers, especially on the wings.

Early rickets with extreme paleness of legs and heads can be observed.

Encephalomalacia is also regularly found. At a later age (weeks) osteoporosis becomes clinically evident, frequently unilateral causing the birds to limp. Later an important sign is the delayed growth of the affected birds. Mortality is possible and in general as low as 4%.

Diagnosis

The clinical disease is characterized by one or more of the following lesions: enteritis with watery brown and foaming contents and the presence of undigested food in the intestine. Mucosal and submucosal - proventricular lesions. Pancreatic inflammatory infiltration with degenerative changes have been found. Osteoporosis and osteomyelitis, femoral head necrosis whereby the bone of the epiphysis of the femur is unusually soft. Since the causal agent may differ it is difficult to base a diagnosis on virus isolation or serology.

Treatment and control

Treatment is impossible, vaccination against reovirus in the breeders helps to reduce problems in the progeny.

Strict hygienic and sanitary measures will reduce the incidence of the disease.