AVIAN LEUCOSIS COMPLEX

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A new form of visceral lymphomatosis type of avian leucosis complex has been studied and classified. Macroscopically it resembled pathognomonic lesions of avian monocytosis and was characterized by generalized petechial haemorrhages especially in the liver, kidneys, pancreas, lungs, serous membranes, muscles, around the joints etc., with more or less hyperplasia of lymphoid tissues and microscopically by multiple haemorrhages, thrombosis, organization of the clot. fibrosis of the dilated blood vessels, disintregration of the blood elements predominantly over the leucocytic infiltration which is the classical from of visceral lymphomatosis. The blood films showed both erythroblatosis and granuloblastosis. Zenker's hyalinization of the muscle, essinophilio intranuclear inclusion of the Langerhans islets, protein precipitation in the Bowman's capsule, hyaline casts, pseudo-giant cells and crystalloid radiating casts in the renal tubules which should be present in avian monocytosis were not observed.

It is suggested that the classical form of visceral lymphomatosis be designated as "leucocytic form" which is usually due to any kind of leucocytes other than lymphocytes, while the one just

described, which has also been recorded in literature as erythroblastosis or erythrogranuloblastosis, should, at present, be designated as "haemorrhagic form". Both forms can be differentiated macroscopically but show microscopically considerable overlapping.

The "haemorrhagic form" of visceral lymphomatosis type in avian leucosis complex was observed as a definite entity during the investigation of an outbreak of poultry disease around Bangkok recently. Clinically, it was characterized by intramuscular haemorrhages over the breast, thighs, around the joints resembling purpura haemorrhagica and confirmed by haematological examination.

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References

- 1. Biester, H.E.: Diseases of Poultry 2nd., ed. 1948.
- 2. Hutyra, F, Marek, J. & Manninger R.: Special Pathology and Therapeutics of the Diseases of Domestic Animals 5th., ed. 1949.
- 3. Runnenls, R.A.: Animal Pathology 4th., ed. 1948.