

## THESIS ABSTRACT

Title of the thesis : Prevalence and pathology of hepatic lesions associated with diseases of poultry and quail

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The prevalence of hepatic lesions associated with various diseases of poultry and quail was 46.03 and 26.83 per cent, respectively. The diseases primarily affecting the liver were inclusion body hepatitis, hydropericardium syndrome and lymphoproliferative diseases in poultry and Marek's disease in quail. Young broilers suffered mainly from inclusion body hepatitis, hydropericardium syndrome and ascites syndrome, whereas adult layers and quail Marek's disease. Both inclusion body hepatitis and hydropericardium syndrome were characterized by the presence of basophilic and/or eosinophilic intranuclear inclusion bodies along with hyperchromatic nuclei. Among the lymphoproliferative diseases, acute form of Marek's disease dominated, characterized by both progressive and regressive lesions in different tissues, besides vascular invasion and embolisation by tumour cells. In ascites syndrome, chronic perihepatitis, fibrosis and pseudolobulation of liver were the chief lesions. Only visceral form of gout was recorded in all age groups of birds affecting mostly the surface. The urate crystals in gout were of calcium and other salts. Aspergillosis characterized by pyogranulomas in lungs and livers, presence of fungal hyphae as well as isolation of both *Aspergillus fumigatus* and *Aspergillus flavus*, were evidenced. Other diseases affecting liver were colibacillosis, infectious bursal disease, non-specific hepatitis, omphalitis, fatty liver, liver rupture and infarction. From affected livers, *Escherichia coli* and *Pseudomonas aeruginosa* were the most frequent isolates, sensitive to gentamicin and resistant to amoxycillin. Another feature of the study was the detection of concurrent affections in 24 cases i.e. IBH with aflatoxicosis (9), IBH with MD (3), IBH with colibacillosis (2), HPS with aflatoxicosis (1), HPS with MD (1), MD with pulmonary aspergillosis (4), MD with coccidiosis (1), omphalitis with pulmonary aspergillosis (2) and adenocarcinoma of liver with MD (1).