Marek’s disease among broiler’s chicken flocks in Khorasan province

Farhoodi. M *1, Toroghi. R1, Bassami. M.R2
1. Department of Animal Diseases Diagnosis, Razi Vaccine & Serum Research Institute, P.O.Box: 91735 / 174 - Mashhad - Iran
2. School of Veterinary Medicine, Ferdowsi University, Mashhad

Marek’s disease (MD), an economically important lymphoproliferative disease of primarily chickens, is caused by an alphaherpesvirus. MD viruses cause immunosuppression and predispose poultry to other infectious diseases. The disease is considered to be an important agent in layer and breeder flocks rather than chicken flocks. In this study, five broiler flocks collected from slaughter house of Khorasan province were examined by histopathology study of various tissues and PCR for detection of serotype-1 MD virus in spleen tissue.

Postmortem examination revealed unusual hemorrhages especially in wing tips and leg muscles of the studied flocks. 6% showed positive PCR reactions, gross and microscopic lesions including red leg, swollen feather follicles and accumulation of lymphoblast in dermis. Since MDV could be detected in the most of studied flocks it seems that the virus might play an important role in the development of immunosuppression syndrome among Iranian broiler chicken flocks. Therefore, MD should not only be considered a serious threat to the layer and breeder flocks but to the broiler flocks. As there are no prevention and control programs for MD among broiler chicken flocks in Iran, it is recommended to employ effective prophylactic measures to reduce economic losses.

Key Words: Marek’s disease, broiler chicken, Khorasan