invasiveness and composed of myoepithelial cells and epithelial cells. The cells were pleomorphic. The myoepithelial cells had abundant intercellular mucoid substances. It was difficult to diagnose between complex carcinoma and mucinous carcinoma due to abundant mucinous material. They have similar feature in microscopic examination Samples were examined (1)histochemically PAS, and alcian blue(pH 2 5) and (2)immunohistochemically for cytokeratin 19, vimentin, smooth muscle actin The cases showed PAS negativity, alcianophilia pH 2.5 positivity, vimentin and smooth muscle positivity, and cytokeratin 19 negativity. Thus, it is classified mammary complex carcinoma in mucinous stage.

Corresponding author :
Soon-Seek Yoon 031-467-1756,
E-mail· yoonss24@hotmail.com

P#14

Pathological Findings in Java Sparrow Inoculated with Newcastle Disease Virus

Young-Oh Gu, Young-Bae Jin, Soon-Bok Kim
Veterinary pathology, College of Veterinary Medicine, Gyeongsang National University, Jinju, Republic of Korea

The present study was conducted to determine the pathogenicity of Newcastle disease virus (NDV; Kyojeongwon strain), and the distributions of viral antigens and genes and in experimentally infected Java sparrows (*Lonchura oryzivora*).

Tissue samples were collected on 2, 6, 7, 8, 9, 10 and 11 days postinoculation (dpi) for histopathology, immunohistochemistry (IHC) and RT-PCR.

13 cases out of the 15 inoculated birds showed nervous symptoms with 100% of mortality, and hemorrhages in the visceral organs were often observed. Microscopically, perivascular round cell infiltration in the cerebellum is observed on 6 dpi, and hemorrhages and necrosis were observed in the bursa of Fabricius, thymus, spleen and proventriculus. IHC positive signals were found in the epithelium of the cerebellar vasculars, bursa of Fabricius, spleen, thymus and proventriculus.

Using RT-PCR, viral genes were detected in the cerebellum on 6 dpi and in the cerebrum on 10 dpi

These results suggested that Java sparrow is highly susceptible to NDV Kyojeongwon strain.

Corresponding author : Soon-Bok Kim
(055-751-5816, e-mail : sbk@gsnu.ac.kr)

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Immunohistochemistry and RT-PCR for Pathogenesis of Newcastle Disease in Chickens

Min-Kwon Lee[(1)], Young-Bea Jin[(3)], Oun-Kyeong Moon[(2)] and Son-Bok Kim[(3)]
[(1)]Kyongnam Livestock Promotion Institute, Jinju, Republic of Korea, [(2)]National Veterinary Research and Quarantine Service, Anyang, Republic of