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Metastatic Cholangiocellular Carcinoma in a German Shepherd Dog

In-Soon Roh, Kyung-Hyun Lee, Min-Jeong Kim, Young-Hwa Jean and O-Soo Lee

Division of Pathology, National Veterinary Research and Quarantine Service, Anyang, Republic of Korea

An 8-year-old female German Shepherd dog was presented with a history of decayed tooth and gingivitis. At necropsy, 0.5-5cm in diameter, multinodular, firm, white-yellowish masses were found in gingiva, lung, pleura, liver, spleen, adrenal gland and lymph nodes, they protrude above the capsule of organs. Histologically, the neoplastic masses were composed of cells resembles the biliary epithelium. They were organized into a tubular or acinar arrangement. The epithelial components of the neoplasms were separated by fibrous connective tissue. The neoplastic cells had a clear to pale eosinophilic cytoplasm, oval to vesicular nuclei and were cuboidal to columnar. The neoplastic cells were positive for cytokeratin, cytokeratin high molecular weight, cytokeratin 19 and actin, but they were negative for vimentin. In conclusion, this dog was diagnosed with canine cholangiocellular carcinoma on the basis of the anatomical, histological and immunohistochemical features.

Corresponding author :
Young-Hwa Jean 031-467-1870,
E-mail. Jean@nvqrs.go.kr

P#11

Prevalence of Postweaning Multisystemic Wasting Syndrome by Porcine Circovirus 2 in Korea

In-Soon Roh⁽¹⁾, Jae-Hoon Kim⁽²⁾, Jeong-Hee Han⁽³⁾, Young-Hwa Jean⁽¹⁾ and O-Soo Lee⁽¹⁾

⁽¹⁾Division of Pathology, National Veterinary Research and Quarantine Service, Anyang, Republic of Korea, ⁽²⁾Department of Veterinary Medicine, Cheju National University, jeju, Republic of Korea and ⁽³⁾Department of Veterinary Medicine, Kangwon National University, Chuncheon, Republic of Korea

This study was carried out in Korea to investigate the prevalence of postweaning multisystemic wasting syndrome (PMWS). This was also a retrospective study of natural PMWS cases, recorded from January 1989 to December 2003, to determine the prevalence, microscopic lesions, and other coexisting pathogens associated with PMWS. From 585 pigs reviewed, 156 tested positive for PMWS. The first positive case of PMWS with typical lesions and positive immunohistochemical (IHC) staining corresponded to a pig necropsied in 1995. The most characteristic clinical signs were systemic wasting and respiratory anomalies such as dyspnea. Typically, the lymph nodes were enlarged and the lungs were diffusely non-collapsed. PMWS cases had characteristic microscopic lesions that were granulomatous along with lymphoid depletion in the lymph nodes, and granulomatous interstitial pneumonia. A combination of PCV2 and porcine reproductive and respiratory syndrome virus (PRRSV) was the most prevalent diagnosis,

followed by *Pasteurella multocida*. In conclusion, pathological data of the present study indicated that PCV2 infection has been enzootic in Korea since 1995.

Corresponding author :
Young-Hwa Jean 031-467-1870,
E-mail : jean@nvrqs.go.kr

P#12

Prevalence of Bovine Teat Papilloma in Korea

You-Chan Bae⁽¹⁾, Soon-Seek Yoon⁽¹⁾, Jong-Hyeon Park⁽¹⁾, Kyoung-O Cho⁽²⁾ and Mun-Il Kang⁽²⁾

⁽¹⁾*Division of pathology, National Veterinary Research and Quarantine Service, Anyang, Republic of Korea* and ⁽²⁾*College of Veterinary Medicine, Chonnam National University, Gwangju, Republic of Korea*

Teats of 880 cows were examined to investigate the prevalence of bovine papilloma. Among them, 49% (432) to be examined were Holsteins, whereas the rest were Korean-natives. Based on gross and histopathological examination, the prevalence of bovine papilloma were 33.6% (296/880). Strikingly, the prevalence of papilloma in Holsteins (263/432) was 8 times higher than that in Korean-natives. Histopathologically, teat papilloma exhibited various degree of hyperkeratosis, severe hyperplasia of granular and prickle cell layers, and large, irregular, keratohyaline granules in granular cells. Immunohistochemically, bovine papilloma virus (BPV) antigen was scattered in the nuclei of degenerated granular and cornified

cells. Twenty-three percent of papilloma in Holsteins were positive for BPV by immunohistochemistry (IHC). Electron microscopically, BPV particles were found in 39.2% out of papillomas in Holsteins. The low detection rate of BPV by IHC and electron microscopy might be attributable to that the number of BPV particles or amount of its antigen were very low in the cells. Moreover, PCR assay was developed using one primer pair to detect any BPV type. BPV DNA was amplified in 71.4% out of Holstein teat papilloma in PCR, whereas 21.4% out of Korean-native teat papilloma was positive. From these results, we confirmed that bovine papilloma in teat was prevalent in Korea.

Corresponding author :
You-Chan Bae 031-467-1747,
E-mail : baeyc@nvrqs.go.kr

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Mammary Complex Carcinoma in Mucinous Stage: Case Report

Kyung-Hyun Lee, Soon-Seek Yoon, Jae-Won Byun, Young-Hwa Jean and O-Soo Lee
Division of Pathology, National Veterinary Research and Quarantine Service, Anyang, Republic of Korea

A 15 years old female mongrel dog was referred to a local animal clinic with 7×5×4 mass in right 5th mammary gland. The veterinarian did the biopsy and sent to our laboratory. Grossly, the tumor was lobulated. Microscopic examination of tumor showed