

## Pathology of Enzootic Bovine Leukosis Detected in Holstein-Friesian Cattle in Korea

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Although there are a lot of previous reports on the bovine leukemia virus (BLV) and enzootic bovine leukosis (EBL), pathologic researches are not much, especially on the tumor distribution in various organs. Furthermore, there was a little pathologic report of the EBL in Korea. Therefore we were trying to survey lymphoma caused by BLV infection and to examine these cases grossly and histopathologically. Samples were obtained from cattle necropsied at the Pathology division, National Veterinary Research and Quarantine Service, and from cattle slaughtered at the abattoir in the South Korea. All of the examined 25 cows were over three years old and female Holstein-Friesian cattle. There was no Korean native cattle case. Leukotic tissue was gray to pink, soft to firm, and bulges from the cut surface. In advanced cases, hemorrhage and/or necrosis could cause great variation in the appearance of involved structures. In many cases, there were multifocal to diffuse yellowish necrotic foci like pus in the center of the tumor mass; sometimes scattered calcified regions. Neoplastic tissues were mostly located in intestine, heart, stomach, and diaphragm. In the abdominal cavities, large tumor masses sometimes reaching the size of over 20cm developed from a conglomeration of several neighboring lymph nodes. Tumor cells showed similar morphology in all lymphoma cases. The multinucleated cells looked nothing more than a peculiar deviation of uncontrolled neoplastic proliferation and were in no way indicative of an etiologic distinct disease in cattle. In this study, 16% of cattle with EBL had multinucleated cells. This is common finding in the bovine lymphoma caused by bovine leukemia virus. But all of them did not fulfil all requirements of RS cell.

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