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Objective - We report here the case of canine multiple intestinal lymphomatous polyposis in the Jindo breed.

Animals - A male, 5-year-old Jindo dog underwent an enterectomy and enteroanastomosis due to ileus of the intestine in a local veterinary hospital.

Procedure - The gross and histopathological findings of the excised intestine were observed. In order to identify the origin of the neoplastic cells, sections were stained immunohistochemically.

Results - The excised intestine include markedly thickened multinodular masses showed extensive mucosal protuberances into the lumen. These large round neoplastic cells were infiltrated mainly in the mucosal and submucosa, and they were diffusely invaded the muscular and serosal layers. In immunohistochemistry, the tumor cells were diffusely positive for CD20 as the B-cell marker and negative for CD3 as the T-cell marker.

Conclusions and Clinical Relevance - The morphological diagnosis was determined as a canine multiple intestinal malignant lymphomatous polyposis based on the gross and histopathological findings of this case. The origin of these tumor cells was elucidated the B-cell that was expressed as being positive for anti-CD20.

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P#41

Case of Sporadic T-cell Lymphosarcoma in a Cattle

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In the parous cattle of livestock farmhouse near the Kyungpook province, several subcutaneous masses were observed initially, but abdominal cavity had multinodular mass when the animal was slaughtered. In clinical signs, veterinarian described that the animal was accompanied with mild leukemic signs, but not affected viral or bacterial infection. Samples from the abdominal masses were collected into 10% buffered formalin and submitted for microscopic examination at the department of pathology, in Kyungpook National University. Grossly, whitish to yellowish smooth masses like fat tissue were covered with thin membrane. Multilobulated mass formed around

the arteries and showed reddish fluid rich on the cut surface. Histopathologically, microscopic findings described a monomorphic population of lymphocytes with small amounts of cytoplasm, round nuclei with coarsely granular chromatin, and numerous mitotic figures in samples examined. In the tumor lesion, uniformly round cells invaded and neovascularization observed abundant. Also tumoric masses were enveloped with adjacent fat tissues and collagen tissues. These small sized neoplastic lymphocytes consisted of hyperchromatic and basophilic nucleus with abundant starry sky appearance. Especially, the immunohistochemical phenotype of the tumor cells showed positive reaction for anti-CD3, T-cell lineage. Therefore, morphological diagnosis determined multinodular bovine lymphosarcoma, T-cell origin. No infected signs by viral agent, we would like to report on the critical value of our bovine lymphosarcoma case.

In general, bovine lymphoma (BL) is one of the most common neoplasms in cattle. Compared to enzootic bovine leukosis (EBL) caused by bovine leukemia virus (BLV), however, sporadic bovine leukosis (SBL) rarely diagnosed. It is considered that SBL is not caused by BLV although the exact pathogenesis has not been proposed yet. Until now, previous investigations reported that tumor cells of EBL have proven to be primarily of B-cell lineage. Tumor cells in animals with SBL, however, have been reported to be primarily of T-cell lineage and several differential marker of SBL suggested. Moreover, there was a little pathologic report of the SBL in Korea. Therefore, we suggested that our bovine lymphosarcoma case

might be belonging to sporadic bovine leukosis, T-cell lineage, according to the histopathological analysis. For exact diagnosis as SBL in this case, further studies are needed to various epidemiological and serological analyses to other animal of same farmhouse.

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Expression of MMP-1, 3 in Mast Cells and Macrophages might Contribute to the Resolution of Fibrosis in Carbon Tetrachloride-Induced Cirrhosis of Rat's Liver

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Liver fibrosis results from the imbalance of a matrix deposition and degradation by matrix metalloproteinases (MMPs), and a tissue inhibitor of metalloproteinases (TIMPs).