## A Case of Splenic Myelolipoma in a Chihuahua Dog

Jung-A Seo, Sang-Mook Lee, Tae-Won Jin, Sun-Jin Hwang, Il-Hwa Hong, Gyu-Sik Jeong, Kwang-Ho Jang, Keun-Woo Lee, Tae-Ho Oh\*

College of Veterinary Medicine, Kyungpook National University, Daegu 702-701, Korea

Myelolipomas are rare, benign, biochemically nonfunctioning tumors composed of a mixture adipose tissue and normal hematopoietic cells. In dogs, only 8 cases of myelolipoma (6 in the spleen, 1 in the adrenal glands, and 1 in the spinal cord) have been reported. The diagnosis of splenic myelolipoma is based on the cytological and histological finding of hematopoietic cells along with all stages of normal myeloid, erythroid, and megakaryocytic precursor cells, admixed with fat tissue. An 11-year 9-month-old, female, 4.3kg Chihuahua dog was presented with clinical sign of anorexia, polydipsia, nausea, vaginal discharge, progressive abdominal distension and generalized weakness of 3 months duration. Abdominal laboratory finding included neutrophilic leukocytosis (WBC 30,920/ $\mu\ell$ ; reference range, 6,000 to 17,000/ $\mu\ell$ ) and mild anemia (PCV 29%; reference range, 35% to 55%). Serum chemistry profile revealed decreased ALT, calcium, albumin and CK. On radiologic examination, a large radio-dense, round shape mass in the mid-abdomen and enlarged uterus was observed. Ultrasonography revealed that the contents of the uterus with fluid. As based on the above results, this case was diagnosed as pyometra and the abdominal mass. The uterus and the mass in the abdomen were removed surgically. Cytologic evaluation of the aspiration of the aspirates from the uterus fluid revealed lots of rod microorganisms with macrophages and neutrophils. Cytologic examination of the mass revealed a marked extramedullary hematopoiesis, associated with normal fat. In histopathology of the mass, well-differentiated adipose cells, megakaryocytes, and hematopoietic cells were observed. Finally, a diagnosis of splenic myelolipoma was made. This case showed that rarely incidenting myelolipoma in an aged Chihuahua dog (>10 years) with clinical alteration including anorexia, weight loss, and abdominal distension.

<sup>\*</sup> Corresponding author: thoh@knu.ac.kr