

A Case of Chronic Lymphocytic Leukemia in a Dog : Clinical and Clinicopathological Findings

Ra-Young Heo, Chul Park, Dong-In Jung, Ha-Jung Kim, Ju-Won Kim, Chae-Young Lim, Byeong-Teck Kang, Ki-Jin Ko, So-Young Lee, Sue-Kyung Cho, Su-Hyun Gu, Hyo-Jin Park, Hyo-Won Jeon, Ju-Heon Sung, A-Ram Youn, Jung-Hyun Kim, Sung-Kuk Han, and Hee-Myung Park*

Department of Veterinary Internal Medicine, College of Veterinary Medicine, Konkuk University

Introduction: Chronic lymphocytic leukemia (CLL) is a neoplastic clonal proliferation of small and mature-appearing lymphocytes that manifests as a persistent peripheral lymphocytosis.

Materials and methods: A six-year-old, intact male Shih-Tzu dog was referred due to severe anemia. Based on a tentative diagnosis of CLL, this patient had been treated using chlorambucil. During the period of illness, there had been sporadic head tilt and nystagmus. Complete blood count, serum biochemistry profiles, bone marrow aspiration, magnetic resonance imaging (MRI), and Cerebrospinal fluid (CSF) analysis were performed.

Results: Bone marrow aspiration revealed lymphocytic infiltration and these lymphocytes were similar in shape to cells observed in the peripheral blood. T cell clonal expansion was detected on PCR assay. Diagnosis of T cell chronic lymphocytic leukemia was confirmed by bone marrow aspiration and clonality assessment. This patient was treated with combination of vincristine and cyclophosphamide. The control of lymphocytosis lasted for about 5 months.

Clinical relevance: This case demonstrates that vincristine and cyclophosphamide can be used as a substitute for chlorambucil in a dog with CLL.

*Corresponding author: parkhee@konkuk.ac.kr