

Discoid Lupus Erythematosus (DLE) in a Young Malamute Dog : Histopathological and Immunohistological Criteria and Immuopathologic Test

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

Department of veterinary internal medicine, college of veterinary medicine, Konkuk University,

Introduction: Discoid lupus erythematosus (DLE) is the second most common immune-mediated dermatitis of the dog. Sun exposure commonly exacerbates or precipitates.

Materials and methods: A 10-month-old female Alaska Malamute dog was presented because of depigmentation, erythema, alopecia, crust and pruritus of the nose for 2 months. We performed hemogram, serum chemistry, skin scraping, skin impression, fungal /bacterial culture, scatch taping and skin biopsy.

Results: Positive bacterial culture indicated the secondary infection causing pruritus. In histopathology of skin biopsy, marked hydropic degeneration of basal epidermal cells, pigmentation, apoptotic keratinocytes, and accumulations of mononuclear cells and plasma cells around dermal vessels and appendages are consistent with a common feature of discoid lupus erythematosus. Immunohistochemistry shows deposition of granular deposits of immunoglobulin at the dermal-epidermal junction (positive lupus band). She was diagnosed of DLE, and treated with oral glucocorticoid for 2 months. It was successful therapy for DLE.

Clinical relevance: Definitive diagnosis of DLE is based on history, physical examination, and skin biopsy, and immunohistochemistry.

*Corresponding author: parkhee@konkuk.ac.kr