

Suspected Case of Immune Mediated Neuromyopathy in an American Cocker Spaniel Dog

Jae-Im Jang, Chul Park, Jong-Hyun Yoo, Byeong-Teck Kang, Dong-In Jung,
Ha-Jung Kim, Ju-Won Kim, Chae-Young Lim, So-Young Lee, Su-Hyun Gu,
Hyo-Won Jeon, Jung-Hyun Kim, Kyung-Moon Ryu, Hyun-Jung Sung,
Kyo-Im Lee, and Hee-Myung Park*

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

Neuromyopathy is a disorder of muscle due to disorder of its nerve supply . A 4-year-old male American Cocker Spaniel dog was presented to the Veterinary Medical Teaching Hospital of Konkuk University with a history of acute onset tetraparesis. On Physical examination, muscle atrophy and muscle pain on limbs were indicated. Neurologic examination revealed delayed postural reactions and decreased spinal reflex. Magnetic resonance imaging (MRI) of brain and spinal cord and cerebrospinal fluid (CSF) analysis showed no remarkable findings. Muscle damages on four limbs, especially left hind limb, were suspected based on electromyographical findings. Therefore, we performed muscle biopsy of left hind limb and histopathology revealed myofiber necrosis and depletion of intramuscular nerve branches. Based on all tests, this case was suspected as neuromyopathy. To rule out immune mediated neuromyopathy, azathioprine was administered initially, and clinical signs were improved gradually. After one month it was tapered and changed to cyclosporine. Three months after immunosuppression, clinical signs were disappeared and not relapsed until recently. According to the response of medical treatment and clinical findings, we tentatively diagnosed this case as immune mediated neuromyopathy.

This case report demonstrated that clinical findings, electromyographical characteristics, histopathological features of immune-mediated neuromyopathy, and successful management with azathioprine and cyclosporine therapy.

* Corresponding author: parkhee@konkuk.ac.kr