Acquired Myasthenia Gravis in a Dog

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

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

Introduction: Myasthenia Gravis (MG) is a disorder of neuromuscular transmission resulting from either a deficiency or functional disorder of the nicotinic acetylcholine receptor(AChR) as in congenital MG or an autoimmune attackagainst AChRs resulting in depletion of receptors in aquired MG

Materials and methods: A 3-year-old female shih-Tzu dog was referred because of continuous vomiting and lethargy. Physical examination, complete blood counts, serum-chemistry, radiography, basal T4 and TSH test, Computerized tomography (CT), ACh Receptor Antibody test, and muscle biopsy were initiated.

Results: Megaesophagus was detected on radiographic findings. Thymoma was excluded from the CT result. Clinical signs showed dramatic improvements with the neostigmine injection. Acquired MG was confirmed from the AChR Antibody test, which is the diagnostic method. Long term management with pyridostigmine has been successful for 3 months and management is in progress.

Clinical relevance: This report describes the clinical findings, high titiers on the AChR Antibody test, and successful management with pyridostigmine therapy in canine aquired MG.

^{*}Corresponding author: parkhee@konkuk.ac.kr