Case Report: Masticatory Muscle Myositis in a Dog

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ABSTRACT A 3-year-old, spayed female, mixed breed dog was referred to the National Taiwan University Veterinary Teaching Hospital with an 8-month history of progressively decreased opening range of the mouth. The dog showed severe bilateral atrophy of the temporalis and masseter muscles. Unilateral mandibular condylectomy and short-term steroid had been given with some benefit. However, symptoms recurred after the steroid therapy was discontinued. Owing to the presence of a high serum antibody titer to type 2M muscle fibers, masticatory muscle myositis was diagnosed. The patient showed an excellent response to the immunosuppressive dosage of prednisolone with symptoms completely resolved. She is currently under long-term follow-up and the given dose of prednisolone is gradually tapering. [Huang CH, Pang VF, Jeng CR, Lin CT, and *Yeh LS. Case Report: Masticatory muscle myositis in a dog. Taiwan Vet J 32(2): 88-92, 2006. *Corresponding author TEL: 886-2-2739 6828 ext 2070, FAX: 886-2-2366 1475, E-mail: lsyeh@ntu.edu.tw]

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INTRODUCTION

Masticatory muscle myositis (MMM) is an inflammatory disorder selectively involving the masticatory muscles in dogs [6, 7, 11]. It is speculated to be an immune-mediated disease based on the infiltration of mononuclear inflammatory cells within the masticatory muscles, the clinical response to immunosuppressive dose of corticosteroids, and the detection of autoantibodies against type 2M muscle fibers [6, 9, 10].

Masticatory muscle myositis has two distinct clinical and pathological forms, the acute eosinophilic myositis and the chronic atrophic myositis. The acute form presents with intermittent exacerbation of firm, swollen, and painful muscles. The affected dogs may exhibit trismus while opening the mouth and usually feel pain. In the chronic form, the patients show severe and progressive atrophy of the masticatory muscles [1, 2, 5, 6, 7, 11]. The diagnosis of MMM is confirmed by the presence of antibodies to the 2M muscle fibers in the biopsied muscle tissue or serum [5, 6, 7, 11]. The present case was diagnosed as chronic MMM with intermittent acute episodes based on the clinical signs, high serum titer of 2M antibody, and the response to immunosuppressive dosage of prednisolone.

CASE REPORT

A 3-year-old, spayed female, mixed breed dog was referred to the National Taiwan University Veterinary Teaching Hospital for an 8-month history of progressive difficulty in mouth opening. She had been treated with antibiotics, anti-inflammatory drugs, and corticosteroids with variable short term responses. The mouth-opening range reduced to 1-2 cm and finally the owner had to hand feed her. There was no prior history