

Modified Moxibustion Therapy for Intervertebral Disc Disease in a Dog

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초 록 : 개 추간관탈출증에 이환된 환축을 간이뜸으로 치료하였다. 본 환축은 신경계검사와 자기공명촬영을 이용하여 경추 4번과 5번의 추간관탈출증으로 진단되었다. 환축은 2주간 프레드니솔론을 처방 받았으나 임상증상이 개선되지 않아 간이뜸(1일 1회, 10~15분)으로 3주간 처치하였다. 환축은 일주일 후 기립이 가능하였으며, 3주 후 거의 정상적인 보행이 가능하였다.

주요어 : 간이뜸, 추간관탈출증, 개

Introduction

Canine intervertebral disc disease (IVDD) is a common neurological disease in dogs. Clinical signs of IVDD are the result of intervertebral disc protrusion and extrusion. Clinical signs in affected dogs include pain, ataxia, and upper motor neuron (UMN) signs in the thoracic or pelvic limbs depending on lesion location. Surgical and non-surgical therapies are used in IVDD management and treatment. The primary non-surgical therapies in Western medicine include analgesics and anti-inflammatory drugs^{1,2,4}.

Traditional veterinary medicine (TVM) therapeutics have been used in many diseases, including IVDD.^{5-8,10} TVM therapeutics include needle-

acupuncture (AP), injection-AP, electro-AP, laser-AP, moxibustion, modified moxibustion and other herbal medicines. Moxibustion is a traditional Chinese herbal medicine that involves a burning action at an acupoint. This is the first report of modified moxibustion therapy in the treatment of canine IVDD in the veterinary literature. We report a case of canine IVDD which showed a favorable clinical response to modified moxibustion therapy.

Case

An 8-year-old unspayed female Chihuahua dog was presented for 2 month duration of bilateral

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thoracic limb lameness. Superficial pain was decreased from the C2 vertebrae to the tail, and thoracic limb UMN signs were detected on neurological examination. Magnetic resonance imaging (MRI) revealed a moderate degree of ventral spinal cord compression with disc dehydration at C4-C5 (Fig 1), yielding a diagnosis of cervical IVDD.

The patient received prednisolone (2 mg/kg, PO, Nisolone, Kuk Je Pham, Ltd.) for a two weeks course with no improvement in clinical signs. The patient presented with progressing lameness in both the thoracic and pelvic limbs. Modified moxibustion was applied for three weeks. A wet towel was placed over the affected vertebrae

of the patient and an alcohol sponge was placed over the towel. The alcohol sponge was burned for 10 to 15 minutes at a time. The patient could stand after one week and was fully ambulatory after three weeks (Fig 2).

Discussion

TVM methods are used as treatments in many disease conditions. There has been widespread usage of needle-AP, injection-AP, and moxibustion therapy for the treatment of neurological diseases in dogs. Canine facial nerve paralysis has been treated with needle-AP and injection-AP with

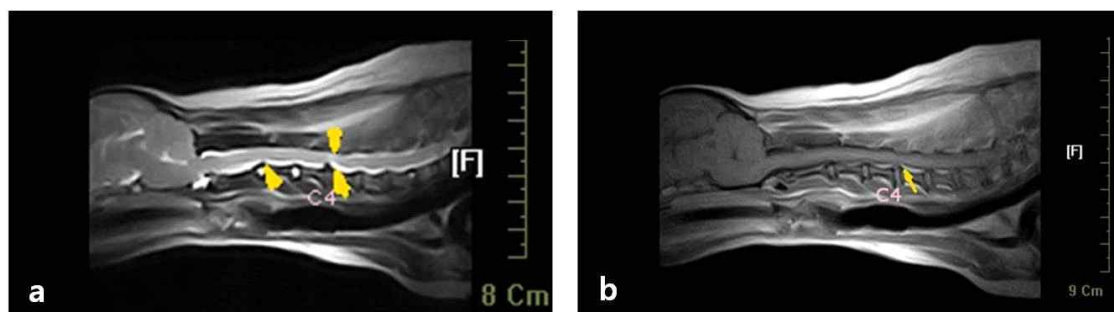


Fig 1. Magnetic resonance imaging (MRI) findings in a dog with IVDD at C4-C5 (a: T2-weighted images, b: T1-weighted images).

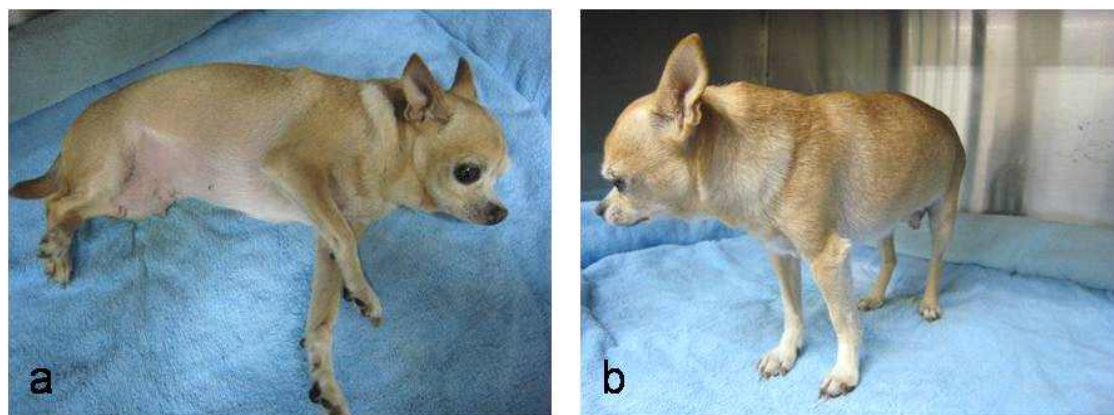


Fig 2. The dog with IVDD at C4-C5 (a: the patient prior to treatment, b: the patient after treatment).

positive therapeutic results.^{5,7} Jun et al⁶ reported the positive effects of injection-AP and herbal medicine on canine hind limb paralysis.

Therefore, many TVM methods may have some utility in the treatment of canine neurological diseases. Original moxibustion therapy requires special moxa herbs, a specialized knowledge of effective acupoints, and can sometimes result in burning and scarring. Conversely, modified moxibustion is simple, convenient, and relatively painless.

The applications of modified moxibustion have also been reported in veterinary clinical practice. Kim et al⁸ reported that injection-AP with dexamethasone and modified moxibustion were effective in the treatment of a downer cow syndrome case. The patient was diagnosed with cervical disc disease, and showed a favorable clinical response to modified moxibustion treatment. Physical therapy is commonly used as an adjunct therapy in human patients with orthopedic and neurological diseases, and modified moxibustion is similar to such physical treatment in Western medicine due to its stimulation of the Bladder and Governor Vessel meridians which help the circulation of “qi” and blood^{3,9}.

Conclusion

The present patient was a case of canine IVDD which showed a favorable therapeutic response to modified moxibustion treatment.

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