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Acupuncture Treatment for Acute Torticollis (Wry Neck) in a Dog

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Abstract : A fifteen-year-old spayed female Pug was referred to Veterinary Medical Teaching Hospital of Seoul National University. The clinical sign was a restriction of the movement of the headneck and acutely presented for 5 days ago. On the basis of physical, laboratory and radiological examinations, the dog was diagnosed acute torticollis (wry neck). We treated two times the dog with acupuncture therapy for 2 weeks. The acupuncture points BL10, BL11, LU7 and SI3 were used. When the dog was rechecked at three weeks after the therapy, torticollis was disappeared and voluntarily head movement found. Thus, it is suggested that traditional acupuncture might be effective therapy for acute torticollis.

Key words **:** acupuncture, dog, torticollis.

Introduction

Torticollis is, the condition of twisted neck, associated with pain of the cervical muscle[9]. Although torticollis may mimic head tilt, it is not usually presented due to cranial problem[8]. The pathophysiology of torticollis is still unknown[12]. Torticollis may be a result of motor neuron lesion of the accessory nerve, midbrain damage, postural problems, inflammation, infection, ear condition, ocular dysfunction, calcification of a cervical disc and tumors of the spinal cord or brain in human[5,14]. Treatments of the torticollis include massage, acupuncture, botulinum toxin injections and nerve root denervation procedures[6,7,13]. In dogs, torticollis is associated with disorders of extrapyramidal systems, spinal cord stimulation and spinal cord dysraphism[1-3]. Acupuncture therapy was applied in several cases of human patients with torticollis[7,13]. However, it has not been reported yet in dogs. This short communication describes the treatment of acupuncture for acute torticollis (wry neck) in a dog.

Case

A fifteen-year-old spayed female Pug was referred to Veterinary Medical Teaching Hospital of Seoul National University. The clinical sign was a limited head and neck movement. The patient had no history of trauma. This sign was acutely presented for 5 days ago but did not progress.

On physical examination, the dog had significant pain of the trapezius muscle area. No evidence of external trauma was found. Neurological examination indicated that the headneck twisted toward right side. In addition, the dog had a mild appearance of ataxia. However, the cranial nerves and conscious proprioceptions of the all limbs were normal and spinal reflexes were intact. The pupillary light reflexes were normal. There was no facial nerve paralysis or sign of Horners syndrome and idiopathic geriatric vestibular disease

A completed blood count of the dog presented neutrophilia and slightly elevated the serum alkaline phosphatase activity (170 U/litre). Blood urea nitrogen, creatinine, electrolyte, glucose and albumin were normal.

Radiological examination revealed intervertebral space narrowing at C5-6 and C6-7 in the cervical region. In addition, spondylosis deformans of C4-C7 and L7 in the lumbar region was shown. In skull view, there were no abnormalities. The owner did not want to do more detailed examinations because of the patients age. On the basis of the examinations, acute torticollis (wry neck) and cervical disk disease were tentatively diagnosed by the western diagnosis. The traditional Chinese medicine (TCM) diagnosis was nutritive deficiency of muscle and bone by stagnated Qi. The treatment goals were to nourish the muscle by TCM and induce a normal correction of head-neck position.

As the owner wanted to try the conservative therapy, acupuncture treatment was performed. BL10, BL11 as local points and LU7, SI3 as distal points were used (Fig 1). The local points and the distal points were treated bilaterally at each point with sterile, dry acupuncture needles. During the treatment, the needles were periodically rotated clockwise or counterclockwise to stimulate for 20 minutes. The dog was treated once a week for two weeks. During this period of treatment, the dog did not receive any medical treatment.

After the initial acupuncture treatment, torticollis and head movement recovered partially. When the dog was rechecked at three weeks after the second therapies, torticollis was dramatically disappeared and head voluntarily moved. After ten weeks from the last therapy, head and neck movement was still normal.

Discussion

As the cause of torticollis is still unknown, it is difficult to diagnose exactly. In geriatric dog like this case, torticollis is often confused with idiopathic vestibular disease. Idiopathic geriatric vestibular disease is acute in onset and may present with signs of head tilt, unilateral nystagmus and an asymmet-

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Legends for Figure

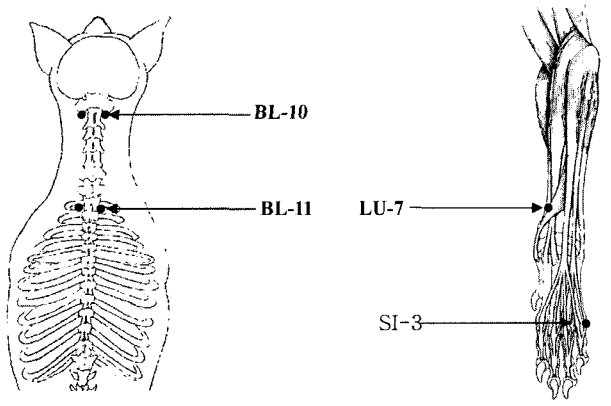

Fig 1. Acupoints used for acute torticollis in the dog. BL-10 On the dorsal aspect of the neck, in the depression at the atlanto-axial junction, BL-11 Midpoint between the spinous process of the first thoracic vertebra and the medial border of the scapula, LU-7 Proximal to the radial styloid proess and medial to the tendon of the extensor carpi radialis, SI-3 On the lateral side of the fifth metacarpophalangeal point.

rical ataxia[10]. However, this case differently had a neck pain.

In human, torticollis is of frequent occurrence in the young child or old people[9,12]. Application of acupuncture therapy in torticollis has been reported in human and the used acupoints were SI-3 and M-ue-24[12]. Nasir[9] also used acupuncture to treat human patients with torticollis. In the present case, a limit of head-neck movement was returned to its normal following the acupuncture therapy.

In present case, the acupoints BL10, BL11, LU7 and SI3 were used. According to the theory of traditional Chinese medicine, BL10 is indicative acupoint for neck pain and BL11 is influential point to use for bone[4]. The LU7 and SI3 as distal points are confluent points to use for treating head-neck pain and stiffness[4]. All of the four acupuncture points have a good effect on neck and the surroundings area. Needling insertions on the acupoint are occurred the effects of interaction with autonomic nervous system and local inflammatory responses[11].

Though only one case, this case may be the meaning of acupuncture treatment for torticollis in dogs. In addition, more cases should be studied to investigate the effectiveness of acupuncture in the treatment of torticollis.

Conclusion

A fifteen-year-old dog was referred with a history of a limit of the head and neck movement to Veterinary Medical Teaching Hospital of Seoul National University. The dog was diagnosed acute torticollis and applied acupuncture therapy with needling the acupoints BL10, BL11, LU7 and SI3. In the initial therapy, torticollis and head movement recovered partially. After three weeks, the dog was dramatically recovered from the limited of head and neck movement. It is suggested that traditional acupuncture might be effective alternative therapy for the patient with acute torticollis.

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개에서 급성사경(torticollis)의 침술치료 일례

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요 약 : 15살의 중성화한 암컷 퍼그가 서울대학교 동물병원에 내원하였다. 임상증상으로는 5일전부터 갑자기 머리와 목을 움직이지 못하는 것이었다. 몇몇 검사를 통해 이 환축은 급성으로 발생한 사경이라고 잠정 진단되어 2주 동안 침술치료를 실시하였다. 침자리는 BL10 (천주), BL11 (대저), LU7 (열결), SI3 (후계)를 사용하였다. 2주 후 다시 검사를 하였을 때 사경의 증상은 거의 사라졌으며, 자발적으로 목을 움직일 수가 있었다. 이것으로 보아 급성 사경이 있는 동물에서 전통침술의 적용은 효과적인 치료법이라고 사료된다.

주요어 : 개, 사경, 침