

Acupuncture Treatment in Feline Horner's Syndrome: Case Report

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Abstract : A about 2-month- old, mixed female cat was referred to Yeon Chang Veterinary Clinic in Taiwan. Because this patient was wandering cat, precise history was not known. At first admission, miosis, ptosis and protrusion of the nictitating membrane was observed in the right sided eye, and also slight miosis was found in the left sided eye. The patient was diagnosed into feline HS. Oculo-AP and injection-AP with dexamethasone were applied to this patient. Oculo-AP at Shang Jiao regions of both eyes was done for 10 minutes. In addition, injection-AP with dexamethasone (0.2 ml/acupoint) at BL01-Jing Ming, BL02-Zan Zhu and ST01-Cheng Qi. After AP treatment, prolapse of the nictitating membrane was amazingly disappeared and pupil was dilatated at session 1. Ocular findings at session 2 (one day after session 1) were maintained with nearly normal state. Accordingly, the present patient was a case with feline HS that showed favorable therapeutic effect by AP treatment.

Key words : Feline, Horner's syndrome, acupuncture treatment.

Introduction

Horner's syndrome (HS) is generally occurred by especially cervical sympathetic trunk injury. It can be also occurred iatrogenically by cervical sympathetic nerve injury during surgery. HS were reported in several kinds of animals including dogs (3-6,12,14,22,23,34), cats (1,12,14,23), sheep (21), horses (8,28) and owls (10,35) in addition to in human (6,11,16,18-20). It was known that unilateral miosis, ptosis and protrusion of nictitating membrane are characteristic symptoms in HS. In addition, therapeutic effect can be anticipated by epinephrine treatment in case of peripheral HS(23).

It was demonstrated that acupuncture (AP) treatments including needle-AP, laser-AP, injection-AP, microwave-AP, oculo-AP and moxibustion etc. had therapeutic effects in human and animal diseases (2,9,15-20,24,25,27,31,32,36,37). Here, we report a case of feline HS that showed favorable therapeutic effect by AP treatment.

Case:

A about 2-month-old, mixed female cat was referred to Yeon Chang Veterinary Clinic in Taiwan. Because this patient was wandering cat, precise history was not known. At first admission, miosis, ptosis and protrusion of the nictitating membrane was observed in the right sided eye (Fig 1), and also slight miosis was found in the left sided eye. Although precise examinations

including 10% phenylephrine test and determination of ocular pressure were not made, the present patient was diagnosed into feline HS based on clinical symptoms only. The authors decided to apply AP treatment to this patient.

AP treatment: Oculo-AP and injection-AP with dexamethasone were applied to this patient. Oculo-AP at Shang Jiao regions of both eyes was done for 10 minutes (Fig 2). In addition, injection-AP with dexamethasone (Lida Pharmaceutical Co., Taiwan, 4 mg/ml: 0.2 ml/acupoint) at BL-01 (Jing Ming), BL-02 (Zan Zhu) and ST-01 (Cheng Qi)(Fig 2).



Fig 1. The feline patient with Horner's syndrome before treatment (protrusion of the nictitating membrane is seen in right eye).

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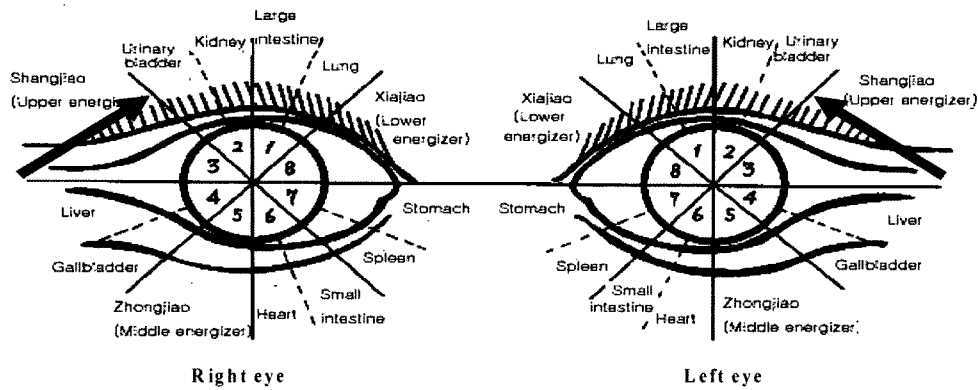


Fig 2. Oculo-acupuncture at Shiang Jiao region and the acupoints used in injection-acupuncture in the present patient (Arrow indicates insertion of acupuncture needle).



Fig 3. The present feline patient after acupuncture treatment (prolapse of the nictitating membrane was disappeared).

Outcome:

After AP treatment, prolapse of the nictitating membrane was amazingly disappeared and pupil was dilatated at session 1. Ocular findings at session 2 (one day after session 1) were maintained with nearly normal state (Fig 3).

Discussion

Jones *et al.* (12) described four cases of HS, two in dogs and two in cats. Miosis, ptosis and enophthalmos were present in three of the cases. Protrusion of the nictitating membrane was present in one case. Similar findings such as prolapse of the nictitating membrane, miosis and ptosis were also found in the present patient.

Kern *et al.* (14) pointed out that the important causes of HS in dogs and cats were trauma (hit by car), brachial plexus root avulsion, intracranial and thoracic neoplasia, and otitis media/interna, based on the results of 100 cases (74 dogs and 26 cats) with HS which were admitted to the New York State College of Veterinary Medicine between 1975 to 1985. In addition,

Morgan *et al.* (23) reviewed 49 dogs and cats with HS and reported that causes of HS were head, neck and chest trauma, chronic otitis, cranial thoracic mass and injury attributable to cleaning of the external canal. Because the patient was wandering cat, its cause was not clear.

As for treatment of HS, van Hagen *et al.* (34) reported that symptomatic treatment with topical 10% phenylephrine alleviated the clinical signs and generally patients recovered in 2 to 6 months. In addition, Morgan *et al.* (23) described that resolution of all clinical signs were observed in 36 animals and required a mean of 7.7 weeks, based on the results from 49 dogs and cats with HS. However, the present patient could be recovered to normal state by one treatment by oculo-AP and injection-AP with dexamethasone. This is thought to be amazing result.

Oculo-AP is new modality of AP treatment and its therapeutic effects were demonstrated in human and animal diseases (20). In addition, the therapeutic effects of injection-AP were described in human and animal diseases (9,15,17,37).

The merits of injection-AP are stimulation of the acupoint before absorption of injected material combined by pharmacological action after absorption of injected medicine. It was supposed that to get such a rapid, favorable therapeutic effect in the present patient was attributed by synergistic effect of oculo-AP and injection-AP. This is thought to be the first article to treat feline HS by AP treatment in veterinary literature. The authors described about only one case with feline HS in the present study, however, AP treatment researches about not only in many cases with feline and canine HS but also in other kinds of ocular diseases of small animals should be performed in near future.

Considering the above findings, the present patient was a case with feline HS that showed favorable therapeutic effect by AP treatment.

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고양이 Horner's syndrome에 대한 針治療: 症例報告

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요 약 : 약 2個月齡의 잠중 암컷 고양이 永昌動物病院에 내원하였다. 1次 診療時 우측 눈의 縮腫 및 瞬膜 突出이 인정되었으며, 또한 좌측 눈의 경도의 축동이 인정되어, 본 患畜은 고양이 Horner's syndrome으로 診斷되었다. 본 患畜에 대하여 眼針(上焦 領域, 10分間) 및 dexamethasone 藥鍼(0.2 ml/혈위: BL01-睛明, BL02-纒竹 및 ST01-承泣)을 各各 實施하였다. 1차 치료 후, 縮腫 및 瞬膜突出이 놀랍게도 소실되었다. 2차 진료시(1차 치료 후 1일) 확인 결과, 눈의 소견은 정상 상태를 유지하고 있었다. 따라서 本 症例은 鍼治療에 良好한 反應을 나타낸 고양이 Horner's syndrome의 症例이었다.

주요어 : 고양이, Horner's syndrome, 침치료