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Clinical Case of Acupuncture Combined with Modified Liuwei Dihuang Pills for the Treatment of Ptosis

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Abstract: Ptosis is primarily caused by dysfunction or complete loss of the levator palpebrae superioris muscle, or other factors leading to the partial or complete inability to elevate the upper eyelid, resulting in partial or complete obstruction of the pupil as the main clinical manifestation. In traditional Chinese medicine, this condition falls under the category of "muscle atrophy," with the pathogenesis characterized by "muscle laxity" and "loss of control over the ocular tendons," leading to an inability to open the eyes. Through syndrome differentiation, the treatment of ptosis integrates acupuncture and herbal medicine to address both symptoms and underlying causes, yielding significant clinical results. This article briefly reports a clinical case from our hospital, where acupuncture combined with modified Liuwei Dihuang Pills was used to treat ptosis.

Keywords: Acupuncture; Ptosis; Traditional Chinese Medicine.

1. Introduction

Ptosis falls under the category of "upper eyelid drooping" in traditional Chinese medicine, with severe cases referred to as "eyelid paralysis." The Mujing Dacheng states [1]: "This condition appears normal internally, but the upper and lower eyelids remain persistently closed day and night, unable to open. Even if forced open, blinking is impossible... Movement or walking requires manually lifting the eyelids to see." This condition is categorized as "wei syndrome" in traditional Chinese medicine. According to the Suwen: Treatise on Wei Syndrome, based on the theory of viscera and the respective roles of the five organs, wei syndrome is classified into five types: muscle atrophy (jin wei), vessel atrophy (mai wei), flesh atrophy (rou wei), paralysis (wei li), and bone atrophy (gu wei). Upper eyelid drooping is classified under muscle atrophy (jin wei) [2]. The primary causes include spleen qi deficiency leading to failure of clear yang to ascend and weakness in lifting the upper eyelid; disharmony of nutritive and defensive qi causing loosened interstitial structures and susceptibility to wind invasion affecting the eyelid; or congenital deficiencies leading to incomplete eyelid development. Mild cases partially obstruct vision, while severe cases result in complete pupil occlusion [1]. From the perspective of Western medicine, this condition is caused by paralysis of the third cranial nerve, leading to functional impairment of the levator palpebrae superioris muscle and Müller's muscle [3-4]. This disease significantly affects patients' physical and mental well-being. Modern medicine lacks a definitive and unified treatment approach. Here, we present a clinical case from our hospital involving the treatment of ptosis with acupuncture combined with Chinese herbal decoctions.

2. Case Presentation

Improved Patient Li, female, 55 years old, was admitted on July 26, 2021, due to "intermittent ptosis for over 8 months, worsening for 1 hour." The patient reported experiencing dry eyes, eye irritation, and occasional foreign body sensation since October 2020, with no obvious triggers. Symptoms were accompanied by dry nose and dry mouth but without facial asymmetry, water leakage while drinking, or difficulty swallowing. She was treated with eye drops (details unknown). Two months later, the symptoms progressively worsened, with the patient developing involuntary ptosis of the right eyelid occurring daily around 3 p.m. and lasting for 3 hours. Symptoms were aggravated by light and wind exposure, although vision remained clear. She also experienced dizziness, tinnitus, and constipation. Consultations at several hospitals in Wuhan and Huanggang revealed the following: Vision test: VOS 1.0, VOD 1.0. Neostigmine test: negative. MRI of both eyes and orbits showed no significant abnormalities. Ocular tissue examination revealed three mites in the right eye and none in the left. CT of the brain and chest revealed a liver cyst and a lacunar infarct in the right corona radiata. Blood tests showed no significant abnormalities in fasting blood glucose, liver function, or kidney function. Treatment with eye drops and Chinese medicine fumigation yielded poor results. This morning, the patient presented with pronounced bilateral ptosis and difficulty opening her eyes, prompting her visit to our department.

On admission, symptoms included bilateral ptosis, difficulty opening eyes, blurred vision, dizziness, tinnitus, dry eyes, periorbital pain, dry nose, dry mouth, and constipation. No ocular muscle twitching, facial asymmetry, water leakage while drinking, or difficulty swallowing was observed. Appetite was normal, but sleep quality was poor. Examination revealed tightly closed eyelids with difficulty opening. No entropion, ectropion, trichiasis, eyelid congestion or edema, conjunctival hyperemia, or scleral icterus was observed. Corneas were clear and transparent, with pupils bilaterally equal in size and round. Light reflex was untested, and no ocular muscle twitching was noted. Past Medical History: Cesarean section in 1992 at Huanggang Central Hospital (details unknown) and pterygium excision in 2016 at Huangzhou District People's Hospital (details unknown). Denied a history of hypertension, coronary artery disease, infectious diseases (e.g., hepatitis, tuberculosis), exposure to endemic areas or contaminated water, trauma, blood transfusion, hereditary diseases, or drug and food allergies.

Personal History: Married at 24 years old; spouse is healthy. Menopause occurred at age 52. Diagnoses: Traditional Chinese Medicine: Wei syndrome (liver-kidney deficiency with qi insufficiency). Western Medicine: 1. Ptosis, etiology under investigation; 2. Lacunar cerebral infarction; 3. Liver cyst.

The treatment was based on the principle of "nourishing the liver and kidney while tonifying the middle and benefiting qi." Acupuncture was applied with a focus on tonifying qi, unblocking channels, and relieving pain. The selected acupoints included Sibai, Juliao, Touwei, Hegu, Shenmai, Jingming, Taichong, Yinlingquan, Zusanli, Taixi, Guangming, and Fengchi, applied bilaterally. Each session lasted 20 minutes, once daily, for a 7-session course. The procedure involved disinfection with 75% alcohol and the use of 0.25 × 40 mm needles. Needles were inserted with precision to induce a radiating or aching sensation without manual manipulation techniques. In combination, a Chinese herbal decoction was prescribed to tonify the liver and kidney, nourish yin, and clear heat. This formula included various traditional herbs and was administered daily, decocted in 400 mL of water and taken warm in two doses. The patient was also advised to massage the Jingming point regularly. After two days, ptosis symptoms improved with shorter episodes and partial eyelid lifting during attacks. By the end of one week, the patient fully recovered eyelid function and eye movement without discomfort.

3. Discussion

Under normal circumstances, when the eyeball looks straight ahead, the palpebral fissure measures approximately 12–15 mm, with the upper eyelid covering no more than 2 mm of the corneal margin. If this value is exceeded, it is defined as ptosis[5,6]. Traditional Chinese Medicine (TCM) attributes the etiology of this disease to internal and external factors. External factors mainly involve the invasion of exogenous pathogenic factors, particularly wind pathogens. The upward-rising nature of wind easily affects yang positions, disturbing the head and facial sensory organs, loosening the skin pores, and causing the eyelid to droop over the eye. Internal factors are attributed to deficiency of qi and blood, with the pathological focus primarily on the spleen and kidney. The kidney, being the foundation of congenital essence, and the spleen, the foundation of acquired essence, both play crucial roles. Deficiency of kidney essence, combined with spleen qi insufficiency and qi-blood depletion, leads to dysfunction in transportation and regulation, obstruction of the clear qi ascending and turbid qi descending, and the inability of the spleen to lift. Consequently, ptosis manifests[7-9]. Currently, the main clinical treatments for ptosis rely on surgical interventions, such as frontalis suspension and combined fascial sheath excision. While these procedures can alleviate symptoms to some extent, they often lead to complications, including unnatural eyelid appearance, incomplete closure of the palpebral fissure, and uncoordinated eye movements. Additionally, adhesions resulting from scar tissue healing can lead to recurrence[10].

The mechanism of acupuncture treatment for this condition lies in stimulating muscle function and regulating the balance between tissues[11]. Due to microcirculation disturbances in the eye, local energy supply is severely inadequate. Acupuncture along the meridian pathways can unblock the meridians, allowing the affected areas to quickly receive blood supply, enabling rapid self-repair of tissues and subsequent functional recovery[11]. The Suwen: Wei Lun states, “To treat atrophy, exclusively target the Yangming meridian.” The Stomach Yangming Meridian is the "sea of the five viscera and six bowels," playing a role in nourishing the sinews. The bones, joints, and tendons of the human body rely on the essence and blood generated by the Yangming Meridian for nourishment, allowing for smooth movement; both the Yin and Yang meridians converge in the sinews and unite in the Yangming. The Chong Mai is the "sea of the twelve meridians," channeling the essence and blood from the Yangming to irrigate the valleys, and integrates with the Yangming in the sinews. Therefore, targeting the Yangming is key to acupuncture treatment for this condition. Based on this principle, acupuncture treatment for this disease locally selects points on the Stomach Yangming Meridian, such as Sibai, Juliao, and Touwei. The Suwen: Wei Lun states, “Replenish the Ying points and unblock the Shu points, adjust the deficiency and excess, and harmonize the counterflow.” This suggests that acupuncture treatment for Wei syndrome involves selecting both the Ying and Shu points of the Yangming Meridian and those of the affected viscera. The liver governs the eyes and regulates the free flow of qi throughout the body. Considering the patient's tendency to sigh, Taichong (the Shu and Yuan point of the Liver Meridian of Foot Jueyin) is selected to regulate the qi. The Lingshu: Xieqi Cangfu Disease Forms states, “To treat the internal organs, use the combined points of the Five Shu points.” The spleen and stomach are the foundation of postnatal life, the source of the transformation of qi and blood. Therefore, selecting Yinlingquan (the combined point of the Spleen Meridian) and Zusanli (the combined point of the Stomach Meridian) can regulate the qi and blood of the Spleen Meridian, strengthening the spleen and muscles. The Lingshu: Cold and Heat Diseases states, “The Yin and Yang Qiao meridians, when in harmony, affect the eyelids... Excessive Yang leads to bulging eyes, while excessive Yin leads to closed eyes.” This suggests that the Qiao meridians control the opening and closing of the eyelids. Jingming point, on the one hand, is the starting point of the Foot Taiyang Meridian; on the other hand, it is the meeting point of the Hand and Foot Taiyang Meridians, the Foot Yangming Meridian, and the Yin-Yang Qiao meridians. In conjunction with Shenmai (a meeting point of the eight meridians and connecting the Yang Qiao meridian), it can treat ptosis. The Yinhai Zhinan states, “Insufficient Zhongqi results in loose eyelids.” The combined use of Hegu (the Yuan point of the Hand Yangming Meridian) can benefit the qi and tonify the spleen, providing a source for the transformation of essence and blood, thus nourishing the sinews. Taixi (the Shu and Yuan point of the Kidney Meridian) nourishes Yin and strengthens the kidneys; Guangming (the Luo point of the Foot Shaoyang Meridian) is combined with Fengchi and Jingming to treat eye pain and ocular diseases. In clinical practice, most clinicians use shallow acupuncture, but in this case, the Fengchi point was needled deeply using the Máng needle technique, ensuring that the needle sensation spreads across the entire eyeball, thus achieving the goal of guiding qi to the affected area. This reflects the principle of Máng needle: "direct, deep penetration, with qi reaching the disease site."[4,12].

4. Conclusion

Based on the clinical symptoms and medical history, this

patient is diagnosed with a deficiency of both liver and kidney Yin, and insufficiency of Zhongqi. The kidney is the foundation of congenital life, while the spleen is the foundation of postnatal life. In this patient, the deficiency of kidney Yin, coupled with Zhongqi insufficiency, impairs the transformation and transportation of qi, obstructs the ascent of clear qi and the descent of turbid qi, and weakens the ability to lift, resulting in ptosis. "The liver and kidneys share a common origin." The liver stores blood, and the kidneys store essence. The essence of the kidneys and the blood of the liver nourish each other, while the Yin and Yang of the liver and kidneys also mutually support and regulate each other. Kidney Yin is the root of the Yin of the five viscera, nourishing the liver Yin and jointly regulating liver Yang. Deficiency of kidney Yin can affect the liver Yin, leading to the combined deficiency of both liver and kidney. When Yin fails to control Yang, water does not nourish wood, and empty fire rises internally, injuring body fluids, resulting in symptoms such as dry mouth, dry eyes, and constipation. Therefore, Rehmannia root, Chinese foxglove root, Dioscorea, mulberry fruit, and black scorpion are used to fill essence and nourish the marrow, benefiting Yin and tonifying the kidneys. Dong quai, Polygonum multiflorum, and Codonopsis are used to tonify qi and nourish the blood. Bupleurum, Salvia, Chuanxiong, and Loofah are used to move qi, relieve stagnation, and open the channels to stop pain. Poria is used to strengthen the spleen and promote urination, ensuring the generation of qi and blood and solidifying the foundation of postnatal life. Chrysanthemum, Red peony root, and Kudzu are used to nourish Yin and clear heat. Cuscuta seeds are warm but not drying, nourishing without stagnation. The combination of these herbs treats both the root and branch of the disease, replenishing qi and blood and resolving all the symptoms.

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