

Research Progress of Acupuncture and Moxibustion in the Treatment of Hemifacial Spasm

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Abstract: Hemifacial spasm is a common clinical peripheral neuropathy with complex pathogenesis. In recent years, acupuncture and moxibustion have played an important role in the treatment of this disease, and good curative effects have been achieved. It can significantly improve the frequency and intensity of hemifacial spasm, and improve the patient's quality of life, and has a high safety, worthy of in-depth clinical research. This article briefly describes the development process of acupuncture treatment of hemifacial spasm, and provides a diagnosis and treatment idea for further treatment of hemifacial spasm.

1. Introduction

Hemifacial spasm (HFS), also known as hemifacial spasm, often occurs in the periocular region, with involuntary twitching of one side of the facial muscles as the main clinical manifestation. As the disease progresses, other muscles on the affected side gradually twitch. The change of the disease is related to a variety of factors, such as sudden changes in climate, or the patient's sudden emotional tension, overwork, etc., which will aggravate the disease, and the symptoms can be relieved or improved after falling asleep. According to research, the majority of the patients with hemifacial spasm are middle-aged and elderly, but with the increase of social life pressure, the disease gradually appears younger ^[1]. Western medicine has many ways to treat the disease, but there are also different pros and cons. For example, botulinum toxin a injection can relieve the attack to a certain extent, but repeated injections will cause permanent facial paralysis. Surgical treatment is more popular in recent years, but the operation is difficult, and it is easy to cause secondary damage or recurrence. There will also be financial burdens for patients ^[2]. Acupuncture therapy has the advantages of good curative effect, convenient operation, small side effects, and low treatment cost, and has been well received by patients. Although the disease is not life-threatening to the patient, it has a serious impact on the patient's mental, spiritual, and quality of life. Therefore, we should pay attention to the treatment of this disease.

2. Traceability of disease names

There is no record of the name of hemifacial spasm in ancient medical books, but according to

its clinical manifestations, it is classified into the categories of "cramping", "tepidity", "muscle pain", "spasm syndrome" and so on. The description of jaundice in "The Yellow Emperor's Classic of Internal Medicine" is: "The disease is caused by tendons and pulses, and the disease is called sun jaundice." "Lingshu • Jingjin" says: "For people with disease of Jingjin, cold will cause reflexes and tendons." It is believed that cold condensation can also lead to malaria. It is mentioned in "Zhang's Medical Tongue" that "for those with malaise, the tendons and veins are in a state of urgency; for those with boils, the tendons and veins are relaxed, which is commonly called convulsion." For the first time, the concept of malaise and boils are distinguished. Zhang Zhongjing, a physician in the Eastern Han Dynasty, once said: "The sun has a stroke... if you take it, you will be rebellious, and your muscles will be stunned...". It provides a certain basis for the diagnosis of hemifacial spasm in later generations.

3. Etiology and pathogenesis

3.1. TCM etiology and pathogenesis

Chinese medicine believes that the disease is located on the face and is closely related to the spleen, stomach, liver and kidney. Wu Qian mentioned in the "Golden Mirror of Medicine" that "too much blood goes out after childbirth...the tendons cannot be nourished, which will inevitably lead to lame convulsions." Fu Renyu believed that wind evil, qi stagnation, and blood deficiency can all lead to HFS. Ancient physicians had different views on this disease, but the clinical symptoms were roughly the same, which laid the foundation for later physicians to understand HFS and determine the name of the disease. Professor Fu Weimin ^[3] emphasized that the key to the pathogenesis of hemifacial spasm is spleen deficiency. The pathological basis is wind, phlegm, blood stasis, and deficiency. The pathogenesis is mixed with deficiency and excess. Professor Chen Yi ^[4] the main pathogenesis of the disease is the lack of yin and blood in the liver, and the blood is deficient in the wind. Dystrophy of tendons and meridians can lead to aggravation of facial muscle spasm. Therefore, this disease is a symptom of deficiency and excess, with liver-yin deficiency as the foundation, and wind and blood stasis as the target. Chen Baogui ^[5] believed that hemifacial spasm was aggravated by exogenous wind-cold on the basis of internal movement of liver wind. In clinical treatment, attention should be paid to distinguish the severity of internal and external wind in the pathogenesis, and rationally allocate the proportion of drugs.

In general, the etiology and pathogenesis of hemifacial spasm can be summarized as the invasion of exogenous pathogens, stagnation of Qi and blood in the meridians, internal injury to the seven emotions, and damage to the functions of the viscera, resulting in the imbalance of yin and yang.

3.2. Western Medicine Mechanism

At present, the pathogenesis of hemifacial spasm is still unclear, and recent studies have shown that it may be related to factors such as blood vessels, space-occupying, arachnoid, and other diseases. There are three main pathogenic mechanisms: 1. Peripheral theory based on demyelination of nerves, 2. Central theory based on abnormal discharge of nerve nuclei, 3. Sympathetic bridging hypothesis ^[6].

4. Acupuncture treatment

Acupuncture for hemifacial spasm has the advantages of high acceptance, remarkable curative effect, simple operation, and pain relief. Acupuncture dredges facial meridians and local qi, thereby relieving facial muscle spasm. "The A and B Classic of Acupuncture and Moxibustion" first

proposed that "Houding point" could be used to treat "scrofula", which laid a theoretical and practical foundation for the treatment of this disease by acupuncture in later generations. Clinically, there is a situation of contention among a hundred schools of thought for the acupuncture treatment of HFS. Traditional acupuncture therapy includes conventional acupuncture, giant burr needling, hanging acupuncture, etc., in addition to ear acupuncture, scalp acupuncture, moxibustion, electro-acupuncture, acupoint application, acupoint injection, abdominal acupuncture, acupoint embedding, etc. Used alone or in combination, the efficacy and flexibility of clinical treatment of hemifacial spasm are greatly improved.

4.1. Ordinary acupuncture

Zhang Yuying^[7] applied the method of regulating the mind and soothing the liver, and selected acupoints of the Du meridian, pericardium meridian and liver meridian to treat 30 cases of HFS, and the total effective rate was 90.0%. Ma Lei^[8] chose paired acupoints to treat HFS, and the main acupoints were Shuigou, Fengfu, Zygoliao and Fengchi. Shuigou and Fengfu are the points of the Du meridian, which achieve the purpose of relieving wind and stopping spasm, activating qi and activating blood. Zygoliao and Fengchi are opposite acupoints, which not only disperse wind pathogens, but also relax tendons and collaterals. Acupuncture at different acupoints according to the different syndromes of the patient and simultaneous manipulation can relieve hemifacial spasm quickly. Li Linjun^[9] used the "Shaoyang penetration needling method" (the main acupoints of the head-dimensional penetration rate Gu and the Shugu penetration Wangu) to treat primary hemifacial spasm. The treatment group chose Shaoyang penetration needling + body acupuncture. The efficiency was 90.90%; the control group chose oral carbamazepine tablets, and the total effective rate was 70.58%. However, the Shaoyang penetration needling method has higher efficiency, marked efficiency and higher recovery rate, and is worthy of clinical application. Shi Guirong^[10] used acupuncture to treat HFS. The control group was treated with carbamazepine tablets, while the observation group was treated with acupuncture. The main points were Baihui, Fengchi, Sibai, Xiaguan, Chengqi, Hegu, Taichong and Zusanli. The total effective rate was 93.75% in the acupuncture group, which was significantly higher than 75% in the western medicine group. Zhao Yan^[11] the control group was given oral carbamazepine tablets, methylcobalamin tablets, and intramuscular injection of vitamin B11 and vitamin B12. Acupuncture was used in the treatment group. The total effective rate was 92.1% in the treatment group and 63.2% in the control group. Acupuncture for hemifacial spasm could effectively relieve muscle fatigue, and the curative effect was significant. Zhao Hongyan^[12] used the principle of three-pass acupuncture group to unblock the meridians and collaterals, viscera, and the Yuanshen, while the control group used conventional acupuncture. The total effective rate in the treatment group was 96.67% higher than that in the control group, which was 83.33%. Both treatments had certain effects on improving the spasm frequency and spasm degree of the facial muscle spasm. Anxiety symptoms.

4.2. Auricular acupuncture and moxibustion

Each zang-fu of the human body has its corresponding area on the auricle, and acupuncture at auricular points can effectively treat and regulate the diseases of the various zang-fu organs. Liu Shenyi^[13] injected botulinum toxin intramuscularly into the site of hemifacial spasm. In the observation group, auricular acupuncture was used to take eyes, mouth, cheeks, brain, heart, liver, and kidney, and acupoints were added according to the different parts of the patient's spasm. It was concluded that the total effective rate of the observation group was 95.0%, which was significantly higher than that of the control group, which was 80.0%, indicating that auricular acupuncture has obvious curative effect on hemifacial spasm. Ma Xiaoping^[14] used auricular point burial to treat the

disease, and auricular points were selected from Shenmen, subcortical, heart, liver, kidney, sympathetic, cheek area, etc. Oral administration of carbamazepine tablets in the control group, the total effective rate of auricular acupuncture and acupoint embedding was significantly higher than that in the drug group, and the side effects were small, which had obvious clinical advantages. Zhong Min^[15] started from "Treat the wind first, treat the blood, and the blood will cause the wind to self-extinguish", and combined the heat-sensitive moxibustion with the flash pot on the patient's face to adjust the qi and blood, and play the role of dispelling wind and cold, Promote blood circulation and relieve spasm, dredging collaterals and relieve pain. It is obviously better than taking carbamazepine tablets, and it is concluded that heat-sensitive moxibustion combined with flash pot therapy can improve the clinical efficacy in the treatment of hemifacial spasm. Zhang Yu^[16] The acupuncture group was treated with thunder-fire moxibustion combined with acupuncture for hemifacial spasm, and the western medicine group was treated with carbamazepine. The total effective rate of the acupuncture group was 90%, and that of the western medicine group was 66.67%. The combination of fire moxibustion and acupuncture enhanced the sensation of needles and increased the penetration effect of the medicines in thunder fire moxibustion to the hospital. The combination of the two complemented each other. Stimulate the body's own immune regulation function, strengthen local blood circulation, improve local metabolism, and promote the recovery of damaged nerve function. Dong Xiaofu^[17] The treatment group used moxibustion to Yin points combined with facial acupuncture on the affected side, while the control group used conventional facial acupuncture on the affected side. The total effective rate of the treatment group was 90.00%, and the cure rate was 66.67%, which was significantly higher than that of the control group, which was 82.76%, and the cure rate was 58.62%.

4.3. Fire Needle

Yang Xiaorong^[18] used filiform fire needle acupuncture in the treatment group and conventional acupuncture in the control group. The total clinical effective rate in the treatment group was 86.7%, which was better than 66.7% in the control group ($P < 0.05$). The total effective rate of Xiaohuo for hemifacial spasm is better than that of conventional acupuncture. Chen Tianfang^[19] used a small Heshi fire needle to acupuncture the Ashi points, Yangbai, Sibai, Dicang, Jiache, Xiaguan and Shuangtaichong on the head and face. The effective rate of treatment accounted for 72.2%. Qian Jie^[20] selected 60 patients with hemifacial spasm, 30 in the fire-needling group and 30 in the acupuncture group. All of them used filiform acupuncture at Fengchi, Baihui, Shenting, Zusanli, and Yanglingquan. Fire acupuncture was used for acupuncture without needle retention, and the acupuncture group was treated with simple acupuncture to retain needles. Sun Shijing^[21] treated with fire needling combined with traditional Chinese medicine, and the control group took carbamazepine orally. The total effective rate of fire needling group was 90% higher than that of control group, which was 60%.

4.4. Electroacupuncture

In recent years, electroacupuncture has become more and more commonly used in clinical practice. It can not only increase the stimulation intensity, but also inhibit sensory and motor nerves, relieve muscle and vascular spasm through waves of different intensities, and thus achieve the purpose of treating hemifacial spasm. Zhang Wei^[22] the control group was treated with conventional drugs, and the treatment group was treated with electroacupuncture combined with drugs. The total effective rate in the treatment group was significantly higher than that in the control group. Li Longfen et al^[23] selected 30 patients with hemifacial spasm. The treatment group took cervical Jiaji combined with conventional acupuncture, while the control group used conventional

acupuncture alone. The total clinical effective rate of the treatment group was 86.7%, which was better than that of the control group. Of 66.7%. Conclusion Electroacupuncture at Neck Jiaji combined with conventional acupuncture has obvious therapeutic effect on facial spasm, and the total effective rate is better than that of conventional acupuncture alone. Shi Shuai et al ^[24] selected 60 patients with idiopathic facial paralysis accompanied by hemifacial spasm. The treatment group used dense wave acupuncture on facial acupuncture points, while the control group used traditional acupuncture to observe the paralysis before and after treatment in the two groups. Recovery and improvement in facial spasm. Results For the efficacy of facial paralysis, the total effective rates in the treatment group and the control group were 100% and 76.67%, respectively. Electroacupuncture dense wave treatment of idiopathic facial paralysis with hemifacial spasm was effective.

4.5. Head needle

Xu Lifei et al ^[25] used microneedling to treat 50 cases of this disease according to the head reaction area, and the effective rate was 80% in the treatment group and 72% in the control group. Scalp acupuncture can improve blood circulation and treat diseases. Wang Min ^[26] compared the treatment of facial spasm with electroacupuncture scalp acupuncture combined with facial acupuncture and conventional acupuncture, and found that the recovery rate of electroacupuncture scalp acupuncture combined with embedded acupuncture was 28.95%, the total effective rate was 89.47%, and the recovery rate of conventional acupuncture was 28.95%. 12.50%, the total effective rate was 71.88%, electroacupuncture scalp acupuncture combined with buried acupuncture group had a good effect on hemifacial spasm. Lu Zeqiang ^[27] used a combination of scalp acupuncture and warm acupuncture to treat primary hemifacial spasm, and the recovery rate and total effective rate were 73.02% and 95.24%, respectively, indicating that the treatment method has a certain effect.

4.6. Acupoint injection, acupoint catgut embedding

Acupoint injection therapy is to inject medicines into acupoints through acupuncture, which can not only stimulate the effect of acupoints through acupuncture, but also make the medicines directly act on the tissues around the acupoints, and go to the corresponding positions through the meridians, which can harmonize yin and yang. , Relieve meridians and relieve spasm, so that hemifacial spasm can be relieved. Wang Wenbin ^[28] treated hemifacial spasm by acupoint injection and acupuncture, first acupuncture and then acupoint injection with the drug Methylcobalamin (Mikebao) injection. The results showed that the total treatment efficiency of acupoint injection and acupuncture was 97.55% better than that of acupuncture alone, which was 82.5%. Zhao Song ^[29] selected vitamin B12 and vitamin D2 calcium fructonate for acupoint injection, or anisodamine and promethazine hydrochloride liquids. One group of liquids was taken each time, and the two groups of liquids were used alternately. 0.5 mL of liquid medicine was injected into each acupoint. It was concluded that the total effective rate of the observation group was 100.00%, which was significantly higher than that of the control group, which was 81.54%, indicating that acupoint injection has the dual regulation of acupuncture and drugs on acupoints, as well as its own pharmacological effects, which can produce comprehensive effects. Yu Xiangjie et al. ^[30] treated primary hemifacial spasm by acupoint injection with far and near points. They selected Anding injection and used Yifeng and Yanglingquan as the injection points. The total effective rate was 86.7%, which was significantly higher than that of the acupuncture group.

4.7. Combined needle method

Gao Feng ^[31] used floating acupuncture combined with pressing acupuncture and buried

acupuncture to treat hemifacial spasm with a total effective rate of 93.8%, which could significantly improve the intensity and frequency of spasticity. Tang Yu and Li Yan ^[32] used hanging acupuncture combined with wheat grain moxibustion to treat hemifacial spasm. The treatment group was given hanging acupuncture combined with wheat grain moxibustion, and the effective rate was 91.18%, which was significantly higher than that of the control group, which was 76.47%, indicating that hanging acupuncture combined with wheat grain moxibustion Moxibustion has obvious effects on the clinical efficacy, symptoms and neuromuscular function of hemifacial spasm. Wu Xian ^[33] observed the treatment of hemifacial spasm by pressing acupuncture combined with conventional acupuncture. The control group was given conventional acupuncture for 30 cases, and the treatment group was additionally given pressing acupuncture on this basis. It was concluded that the total effective rate was 93.33% in the treatment group and 73.33% in the control group, and the curative effect was better than that in the control group. Lei Pengpeng ^[34] used a combination of acupuncture and acupuncture. First, acupuncture was given for release, followed by acupuncture treatment. The effective rate was 85% in the acupuncture group and 70% in the acupuncture group. Dong Jianping ^[35] used scalp acupuncture combined with pressing acupuncture, took the scalp acupuncture and selected acupuncture points Baihui Tou Shenting, Sugu Tou Qu Temple, Tongtian Toluoque, Touwei Tou Xuanli, and pressed acupuncture to take the affected side Zanzhu, Sibai, Zygoliao, Cheekche, Chengqi, Dicang, Ashi (the most obvious place for spasm), and Hegu on both sides. The control group took ordinary acupuncture, and the results showed that the total effective rate of the observation group was 91.7%, which was significantly higher than that of the treatment group, which was 75.0%.

5. Conclusions

To sum up, acupuncture and moxibustion in the treatment of hemifacial spasm has its unique advantages, which are safe, economical, and non-invasive, and are worthy of clinical application. promotion. However, with the deepening of the research on acupuncture treatment of hemifacial spasm, the clinical treatment methods are also constantly changing. In general, the etiology and pathogenesis of hemifacial spasm is always related to the imbalance of yin and yang. Deficiency of yin cannot control yang, and yang is relatively dominant. We can start from the perspective of balancing yin and yang.

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