



# Research Progress of Acupuncture Treatment of Chloasma

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**Abstract:** *Melasma is a kind of facial skin pigmentation spot that occurs in middle-aged women. This disease will have a greater impact on facial aesthetics, but also affect the mood of patients, and even anxiety, depression and other psychological diseases. In recent years, with the improvement of social material level and human pursuit of quality of life, the demand for the treatment of chloasma has also increased. According to the field of traditional Chinese medicine in recent years, the author reviews the research progress of acupuncture therapy and combined with other traditional Chinese medicine therapy in the treatment of chloasma, in order to provide ideas and methods for acupuncture treatment of chloasma.*

**Keywords:** Chloasma; Traditional Chinese Medicine; Acupuncture; Treatment.

## 1. Introduction

In traditional Chinese medicine, chloasma is called 'black spot', which is classified as a kind of 'facial dust'. It is characterized by brown small plaques caused by skin pigmentation on the face. These plaques are usually symmetrically distributed, varying in size and irregular in shape. Melasma usually does not appear any other symptoms, but exposure to the sun will make the disease worse. 'Surgical Authenticity' is the first book to mention the name of this disease. Chinese medicine believes that chloasma is closely related to liver, spleen and kidney, and believes that the main reason for this situation is imbalance of qi and blood. It can be divided into four types: liver depression and qi stagnation, liver and kidney deficiency, spleen deficiency and dampness accumulation, qi stagnation and blood stasis. The occurrence of chloasma is closely related to the six yang meridians around the face. In clinical treatment, the tendon nodes along the meridians of the head, waist and back, chest and abdomen are selected as the acupuncture treatment sites [1]. This article reviews the research status of acupuncture treatment of chloasma in recent years.

## 2. Understanding of the Mechanism of Chloasma in Chinese and Western Medicine

### 2.1 TCM Etiology and Pathogenesis

Understanding from the following points: Treatment from the liver: According to the theory of

traditional Chinese medicine, the liver stores blood, the main catharsis, the liver is happy to reach the evil depression. If the liver is depressed and qi stagnation, depression and fire, the meridian is disturbed, the blood collaterals are burned, and the chloasma occurs on the head and face. Treatment from the spleen: if the spleen is in charge of transportation and transformation, if the diet is not regular, worry and overwork affect the function of spleen and stomach transportation and transformation, the center of spleen and stomach transportation and transformation is abnormal, the clear qi does not rise, the turbid yin does not drop, the spleen deficiency is more wet, the damp heat is endogenous, and the fumigation is on the top and the black spot is born [2]. Treatment from the kidney: the kidney main store essence, and because the liver main store blood, liver and kidney homology refers to the liver blood and kidney essence nourish each other, so also known as essence and blood homology. The two organs interact with each other in physiology and pathology. If the liver and kidney are insufficient, the qi and blood are out of harmony, and the Chong and Ren are out of balance, the face will not be proud, resulting in black spots. And the kidney is black, kidney deficiency will appear complexion black [3]. From the treatment of blood stasis, long-term illness and more blood stasis, disharmony between Ying and Wei, qi and blood running disorders, hair on the face and for chloasma. Therefore, the treatment of chloasma in traditional Chinese medicine is based on the basic principles of soothing liver, removing blood stasis, invigorating spleen and removing blood stasis.

## **2.2 Western Medicine Pathogenesis**

Melasma is a kind of disfigurement skin disease, which occurs on the face and is harmful to the beauty of the skin. It is also a kind of disease that grows on the surface of the skin, including chloasma, freckles, flat warts, etc. [4]. Western medicine believes that chloasma is an acquired pigmentation spot. The common causes and incentives are as follows: Genetic factors: Some scholars in English have found that about half of chloasma patients have a family history [5]. Ultraviolet irradiation: under the irradiation of ultraviolet light, the skin will activate melanocytes to produce melanin, which is also a common cause of chloasma [6]. Sex hormones: Chloasma is more common in women, and is affected by estrogen and progesterone, which has a greater impact on women 's menstrual cycle. At the same time, estrogen accelerates the formation of melanocytes, and progesterone accelerates the transport and diffusion of melanin. Under the combined action of the two, it will cause the formation of chloasma [7]. Inferior cosmetics: heavy metal components will be deposited in the dermis through hair follicles, sebaceous glands, etc., destroying the skin barrier and inducing melanin deposition. Mental and emotional: patients with chloasma showed a higher anxiety score [8]. Patients with chloasma often have tensions such as anxiety, insomnia, and excessive stress, which will promote the secretion of melanocyte - promoting hormones by the hypothalamus-pituitary gland, resulting in the deposition of melanin.

At present, the pathogenesis of chloasma has not been fully elucidated, but it is clear that in addition to melanocytes, fibroblasts, mast cells, sebaceous gland cells, etc. are also involved in the production process of chloasma, mainly due to increased melanin formation and transport disorders, local skin lesions Vascular hyperplasia leads to poor blood circulation, inflammatory response, etc. [9].

## **3. Clinical Research**

### **3.1 Ordinary Acupuncture**

Chloasma is mostly caused by the imbalance of liver, spleen and kidney qi and blood, and the loss of nourishment of the face. Acupuncture has the effect of dredging meridians and activating collaterals,

harmonizing yin and yang, strengthening the body and dispelling evil. Chinese medicine treatment emphasizes that 'treatment must be based on this'. Back-shu point is a special point on the back. When visceral lesions occur, the corresponding back acupoints will show abnormal reactions. Back-shu points can also be used to treat visceral diseases. Women..... Five seven Yangming pulse failure, facial coke, hair began to fall', it can be seen that the rise and fall of qi and blood of Yangming meridian is closely related to the appearance of facial chloasma. Cao Qing selected Hegu, Tianshu and Zusanli as the main acupoints. For patients with insufficient qi and blood, spleen shu and kidney shu are used as tonics. For patients with qi and blood stasis, Geshu and blood sea are taken. For patients with yangming internal heat, Quchi is taken, and Neiting is diarrhea. Once a day, two courses of treatment interval of one week, set as the treatment group. At the same time, oral VC and 3% hydrogen cream were used for local external use, and only western medicine treatment was set as the control group. The results showed that the treatment group was better than the control group [10].

Fan Hongmei et al. divided 94 patients with chloasma into control group and treatment group: the control group was treated with traditional Chinese medicine; the observation group was treated with acupuncture and moxibustion of traditional Chinese medicine, acupuncture Waiguan point, Quchi point, Hegu point, Taichong point, Sanyinjiao point. For patients with weak middle energizer, Fenglong point, Zhongwan point, Pishu point, and patients with kidney deficiency, Taixi point and Shenshu point can be added. For patients with qi stagnation, Neiguan point and Xingjian point can be used. Each needle retention for 30 min, continuous treatment for three months, and finally concluded that the clinical diagnosis and treatment of chloasma with traditional Chinese medicine acupuncture therapy, the treatment effect is significant [11]. Acupuncture treatment of chloasma, by stimulating the operation of meridian qi and blood, to achieve the purpose of internal regulation and external treatment.

### **3.2 Combined Surround Needling**

The encircling needling method is evolved from the ancient lifting needling method. Because the operation site is wrapped by several needles, it can promote qi and blood circulation, expel pathogenic factors and dredge collaterals, so it is more effective for refractory diseases. Compared with the single acupuncture method, it has a larger stimulation range and intensity, so it is more suitable for local diseases on the body surface [12]. The triple energizer is a channel for running qi and blood and passing vital qi. Therefore, the smooth operation of the triple energizer affects the physiological function of the human body. The upper energizer regulates the lung qi, soothes the qi movement, the middle energizer promotes the transportation and transformation of the spleen and stomach, ensures sufficient qi and blood, the lower energizer supplements the liver and kidney, and regulates the thoroughfare and conception vessels. On the basis of understanding the pathogenesis of chloasma, Professor ni uses triple energizer adjustment to cure the root cause, combined with percutaneous acupuncture and moxibustion to disperse knots and remove spots, to suit the remedy to the case and achieve accurate curative effect. He emphasized the lower energizer and formed a unique acupuncture method to regulate the triple energizer, so as to select the core acupoints such as Danzhong, Zhongwan, Tianshu, Guanyuan, Qihai, Shuidao and Guilai to regulate the triple energizer. Combined with facial encircling acupuncture, after treatment, the patient's facial spot boundary was reduced and the complexion was ruddy [13]. Huang Xiaofei et al. divided 60 patients with chloasma into two groups. The control group was only treated with local surround needling, while the observation group was treated with dialectical acupoint selection at the same time. Taichong, Xingjian and Danzhong were used in the observation group. The spleen deficiency dampness accumulates the earth machine, Yinling spring, etc.; for the above two groups, stay for 30 min after acupuncture.

During this period, 3 times of acupuncture were performed, and the treatment was continued for 1 month. The results showed that both groups could improve the symptoms of skin lesions, and the clinical efficacy of the observation group was significantly better than that of the control group [14]. In recent years, there are few surround needling methods for the treatment of chloasma, so there is still a large research space in the future.

### **3.3 Combined Auricular Points**

The auricular point pressing bean method is to prevent and treat the disease by pasting a circular particle at the position of the auricular point, pressing it and stimulating the auricular point. Compared with the traditional acupuncture treatment, the ear pressure bean method has the advantages of low pain, long stimulation time, easy to adhere to the treatment and so on. 'Huangdi Neijing ' said: ' the ear, the pulse of the gathering also '. The ear is closely related to the five internal organs and the limbs [15]. In the treatment of 56 patients with chloasma, Gongjia used acupuncture combined with auricular points combined with auricular points. At the same time, it also selected facial cheekbones, Yingxiang, etc., as well as the commonly selected acupoints for the treatment of this disease. According to the dialectical classification, the corresponding acupoints were selected, and the needles were retained for 25 min each time, and acupuncture was performed every other day. One month was a treatment cycle, including 3 courses. The ear acupoints were selected: the projection points of the five zang organs and the endocrine points. The stimulation was carried out by pressing the pill method. Specifically, the Chinese medicine seeds were pasted on a small square tape, and then the correct position was selected. At the same time, the patient presses and kneads the local area on his own, with slight pain as the degree, and should pay attention to hand hygiene. Only one ear was pasted each time, and the opposite side was changed after 3 days. After 3 courses of treatment, the data showed that the total effective rate was 100 %, including cured, markedly effective and effective [16]. Based on the holographic theory of syndrome differentiation of auricular acupressure bean method, combined with the specific condition of syndrome differentiation and treatment, to give Vaccaria seed ear sticker pressure to implement the overall conditioning [17]. The study conducted by Mana and her colleagues involved randomly dividing 68 patients diagnosed with chloasma into two groups. One group was treated with oral vitamin C and vitamin E as the control group, while the other group received experimental treatment of acupuncture combined with auricular acupuncture. Acupuncture selected five zang-organs shu and ge-shu, and auricular points selected endocrine, genitals and five zang-organs. After one cycle of treatment, the results showed that the effective rate of the experimental group was as high as 88.23%, which was higher than that of the oral drug group (61.76%) [18]. Therefore, it can be seen that by stimulating and pressing the corresponding auricular points, it can produce better curative effect on the treatment of chloasma.

### **3.4 Combined with Traditional Chinese Medicine**

#### **3.4.1 Combined with oral administration of traditional Chinese medicine**

As a common treatment method of traditional Chinese medicine, oral administration of traditional Chinese medicine has a wide range of clinical use and good curative effect on various diseases. Li Yanmei divided 126 chloasma patients with qi stagnation and blood stasis into three groups: the acupuncture group was treated with neck three needles, the Chinese medicine group was treated with Sihong Quban Decoction, and the acupuncture-drug combination group. After one cycle, the effective

rate of the three groups was observed and analyzed. The combined group was 92.86 %, which was higher than 71.43 % of the acupuncture group and 73.81 % of the Chinese medicine group. In addition, the skin lesion area and color of the combined acupuncture and medicine group were lower than those of the single treatment method, and the skin elasticity and moisture were higher than those of the single treatment method[19]. The combination of oral Chinese medicine and acupuncture can reduce the skin lesions, improve the skin condition, and play a better therapeutic effect.

#### 3.4.2 Combined with external use of traditional Chinese medicine

Because ' chloasma ' mainly occurs in the surface layer of facial skin, topical drugs or masks have the advantage of direct access to the disease. Cai Donghua et al. selected 200 patients with this disease and randomly divided them into three groups. They were treated with acupuncture, self-made traditional Chinese medicine mask, and acupuncture combined with traditional Chinese medicine mask. After a period of observation, the effective rate of the acupuncture combined with medicine group was high, and the adverse reaction rate was lower than that of the control group [20]. Zhao Qiongna et al. randomly divided 60 patients with this disease into two groups. The control group was treated with external application of traditional Chinese medicine Xiaoban Powder, 30 minutes each time; the observation group not only used external application, but also selected Hegu point for acupuncture. After 28 days of each course of treatment, the next course of treatment was started after 2 days of rest, and 2 courses were the treatment cycle. After treatment, the chloasma area and severity scores of the two groups were compared. The results showed that the total effective rate of treatment in the observation group was significantly higher than that in the control group [21]. It can be seen that compared with a single way to treat chloasma, acupuncture combined with topical drugs will achieve higher treatment efficiency and fewer adverse reactions.

#### 3.5 Combined Moxibustion

Moxibustion has a wide range of treatment, and the curative effect is exact. Acupuncture and drugs can not solve the disease, it is necessary to use moxibustion. Moxibustion has the effect of warming yang qi, promoting qi and dredging collaterals. Lin Baozhen et al. randomly selected 100 patients with this disease and divided them into two groups. The control group was only treated with western medicine, taking vitamin C and vitamin E; in the study group, thunder-fire moxibustion was used to take Ashi points. In the treatment of binaural and acupuncture, the local Ashi points, Quchi, Xuehai, Sanyinjiao and Hegu of the upper and lower limbs were selected. The two groups were treated for 12 weeks. The results showed that thunder-fire moxibustion combined with acupuncture was more effective than conventional western medicine in the treatment of female chloasma, which could achieve the function of regulating qi and blood, warming and dredging the thoroughfare and conception vessels [22]. Among the patients with chloasma, Dou Zhongwei selected 60 patients with qi stagnation and blood stasis syndrome in traditional Chinese medicine, and divided them into two groups on average. One group was only treated with acupuncture, while the other group was treated with moxibustion at Shenque point at the same time. The preparation of umbilical moxibustion drugs was made of Radix Bupleuri, Cortex Citri Reticulatae, Borneol and so on. After 1.5 hours of moxibustion, the drugs were stored in the navel for 6 hours. After 30 minutes of moxibustion, acupuncture was performed. Common acupoints were selected for routine operation. The study group was treated twice a week for a total of 8 weeks. The control group was treated 3 times a week for 8 weeks. Finally, through the effect analysis, the acupuncture combined group was more effective [23].

#### 4. Summary

There are various methods currently available for treating melasma. Compared to the sole use of acupuncture therapy, the combination of acupuncture with other traditional Chinese medicine treatments (such as auricular acupuncture, moxibustion, and internal and external herbal medicine) often yields better efficacy and lower side effects, gaining recognition from a wide range of patients. However, the following issues still exist: (1) There are relatively few articles comparing the effects of traditional Chinese medicine treatments with Western medicine treatments, with most focusing on comparisons between acupuncture and other traditional Chinese medicine methods. (2) Observations of clinical effects are primarily determined by the improvement of local skin lesions, without integrating the holistic view of traditional Chinese medicine (such as tongue, pulse, spirit, and qi-blood) for analysis. (3) The sample size of research investigating patients is relatively small and covers a wide range of syndromes, making it difficult to clearly analyze the treatment effects of combined herbal medicine for a specific syndrome. The above points outline the future research directions for acupuncture treatment of melasma.

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