

Study on the Effect of Acupuncture on Pain Relief in Endometriosis

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Abstract: Endometriosis is a frequently-occurring disease faced by women of childbearing age. Over the years, the incidence of endometriosis has increased, which affects women's physical and mental health and fertility to a large extent. Based on the above background, this paper studies the effect of acupuncture on pain relief in endometriosis. Firstly, the mechanism of action of acupuncture on pain relief in endometriosis is summarized. The current research status and treatment prescriptions in this field are analyzed. Secondly, the process of acupuncture on pain relief in endometriosis is detailed. The main methods are auricular acupuncture, moxibustion, abdominal acupuncture, acupoint application and acupuncture combined with medicine therapy.

Keywords: Endometriosis; Acupuncture; Pain relief; Traditional Chinese Medicine

1. Introduction

All kinds of pain caused by endometriosis belong to physical and mental diseases, which seriously affect the physical and mental health of women, and make the physical and economic burden of women more serious. How to effectively relieve pain, control the disease, delay the recurrence of the disease, protect the patient's ovarian function and fertility, is the main problem that the industry facing currently. Physical health is determined by an extremely important energy cycle, which is the "qi" in the body. This is the conclusion of traditional Chinese medicine. The "qi" is distributed in the veins of the body (twelve meridians), while the acupoints are distributed in the veins. If an organ in a woman's body transitions or the function declines, the energy will be abnormally circulated. If a blockage occurs at a location in the vein circulation, it must be turned on[1]. Therefore, the acupuncture therapy can be used to treat endometriosis, restore the normal circulation of the veins, and relief the pain symptoms of patients.

2. Mechanism of Action of Acupuncture on Pain Relief in Endometriosis

The current study found that acupuncture has a significant effect on inhibiting the production of prostaglandins, and improving the body's immune function can inhibit pain. Xiong Biyun and other scholars selected 71 patients with dysmenorrhea caused by endometriosis, and treated with electroacupuncture at Zhongji, Sanyinjiao and Guanyuan acupoints. The experimental results showed that the treatment efficiency was 95.71%. After 6 months of observation, there were 38 cases without recurrence. Sun Yuanzheng and Chen Honglin scholars used 31 cases of

endometriosis patients with acupuncture at Yumu acupuncture, acupuncture with western medicine, and conventional acupuncture. The effects of each group were compared. The curative effect of dysmenorrhea, lumbosacral pain and anal bulge by Yumu acupuncture is obviously better than the remaining two groups. Liu Yaxin et al. used moxibustion by Wentong medicine to treat 70 cases of dysmenorrhea caused by endometriosis, and the effective rate reached 87.17%. Wang Huimin et al. used Qili scattered application Shenwang acupoint to treat endometriosis, of which the effective rate of dysmenorrhea treatment was 84.1%, and the effective rate of dyspareunia treatment was 75%.

From the perspective of traditional Chinese medicine, in addition to the blood stasis and physical symptoms have the typical characteristics of blood stasis; the pathological changes of nail fold microcirculation also have the characteristics of blood fatigue. It can be seen that the pathogenesis of endometriosis causing pain is: menstrual blood stasis in the lower coxal vein, menstrual blood does not disperse into a trace, causing the meridians to be unfavorable, and the dysfunction causes the occurrence of pain symptoms.

Acupuncture treatment of endometriosis, acupoints below the abdomen and bones closer to the pelvic organs are selected, acupuncture makes diarrhea to promote blood stasis, regulate thoroughfare and conception vessels as the treatment principle.

The acupuncture therapy in traditional Chinese medicine pays attention to the application of "Li, Fa, Fang, Xue (mechanism, method, prescription and acupoint)". The research puts forward the treatment method of relieving fatigue and stopping pain, solidifying and disentangle qi

by the Chinese medicine for the disease. Therefore, the acupuncture prescription is chosen by this principle.

In acupuncture therapy, the shallow layer of the anterior abdominal wall is the holographic effect of the whole body miniature. Positioning and acupointing use this feature to adjust the whole body's acupoint in the abdomen area. In the research, the doctors used the positioning and acupointing method to select the acupoints for different pain areas based on the basic prescription of acupuncture. Because the lumbosacral region starts from the Qipang acupoint and finishes at the Guanyuan acupoint, it is necessary to take the double Qipang acupoint and the Guanyuan acupoint for lumbosacral pain, and take the middle pole for the anal bulge to guide blood to the lesions and treat the symptoms.

Acupoint injection: Compound Danshen injection is injected into the acupoints of Xuehai, Zusanli or Ciliao, alternating every two days. Inject 2ml per acupoint, usually 10 days before menstruation, 5 times a month, two months for a course of treatment, lasting three to five courses.

Cake-separated moxibustion: cornu cervi degelatinatum, cinnamon, aconite, frankincense, and Wulingzhi are ground into powder in a specific proportion. Prepared with yellow wine to make a medicinal cake with a diameter of 2 cm and a thickness of 0.4 cm. Place the top of the cashmere, the gauze cloth underneath, and then place it at the Guanyuan acupoint or the Ciliao acupoint, alternating every two days, three zhuang for each moxibustion. Two months for a course of treatment, and the general treatment requires three to five courses.

3. Acupuncture on Pain Relieve in Endometriosis

Acupuncture therapy is an important part of traditional Chinese medicine. Because the use of acupuncture to treat diseases has the advantages of low cost, good curative effect, safety and strong technicality, it has received more and more attention[2]. Since the beginning of systematic research on endometriosis in the 1970s, the success of acupuncture treatment for endometriosis has increased significantly, and the clinical effect of acupuncture is certain. The specific methods for acupuncture therapy in endometriosis are described below.

3.1. Auricular acupuncture method

The relationship between the auricular point and the visceral meridian is close. The clinical treatment can use the acupuncture for auricular points to regulate the meridians and organs, so as to achieve the therapeutic purpose. 68 patients with endometriosis and dysmenorrhea were randomly divided into the ear-embedded needle group (36 cases) and the Chinese medicine oral administration group (32 cases) by Xiang Dongfang et al.[3]. The ear-embedded needle group took the sympathetic, subcortical,

endocrine, genital, and cerebral for acupuncture points in the ear, and the traditional Chinese medicine group mainly took the traditional Chinese medicine for promoting blood circulation and removing blood stasis. The two groups started treatment 5 days before menstruation. After 3 months of menstrual cycle treatment, the results showed that the ear-embedded needle group and the Chinese medicine oral administration group had therapeutic effects on patients with mild and moderate dysmenorrhea, while the patients with severe dysmenorrhea had more obvious effects in the ear-embedded needle group. 82 patients with endometriosis dysmenorrhea were randomly divided into acupuncture electroacupuncture group (stimulate body acupoint Diji, Sanyinjiao, Tianshu, Qihai, Guanyuan, uterus, etc.) and auricular electroacupuncture group (stimulate ear acupoint uterus, Shenmen, cortex, endocrine, etc.), the results show that the auricular electroacupuncture group has a more sustained analgesic effect.

3.2. Moxibustion method

Moxibustion is a kind of therapy that uses Aihuo to stimulate body acupuncture points to achieve disease prevention and treatment. The mechanism of moxibustion is similar to that of acupuncture. It stimulates acupoints or specific parts to motivate the functions of meridians, nerves and body fluids, and adjust the imbalance of the body and system of tissues to achieve the purpose of disease prevention and treatment. Clinical treatment is also often used to play a complementary therapeutic effect with acupuncture combined with moxibustion. Lu Song et al. [4] used Aihuo moxibustion to treat the lower abdomen and Renmai acupoints (take Zhongji, Qihai, Guanyuan for moxibustion 3 times a week, each moxibustion last for 30min) to treat 38 patients with endometriosis pain, 57.6% patients had obvious effect. Zeng Rui et al. [5] randomly divided 81 patients with endometriosis pain into warm acupuncture group (take Tianshu, Zusanli, Taichong, Sanyinjiao, Guanyuan, Zhongji, with warm acupuncture) and ordinary acupuncture group (take the same acupuncture points, without warm acupuncture) to carry out clinical comparison studies. The results showed that the warm acupuncture group was significantly better than the ordinary acupuncture group in relieving the symptoms of pain, infertility and irregular menstruation.

3.3. Abdominal acupuncture method

Abdominal acupuncture is proposed by Professor Bo Zhiyun based on traditional meridian theory combined with his long-term clinical practice of acupuncture. It mainly uses micro-needle system formed by stimulating abdominal acupoints to regulate visceral imbalance to treat body diseases. Professor Bo believes that there is a whole-length advanced control system in the abdomen

with the god net as the axis, which can regulate the periphery and adjust the organs.

Modern medicine believes that the abdomen is a very important part of the human body. Many internal organs of the human body are concentrated in the abdominal cavity, and the normal physiological activities of these important organs ensure normal physiological activities. From the perspective of the traditional Chinese medicine, the abdomen not only includes many important internal organs, but also distributes a large number of veins, providing a variety of ways for blood to the whole body for transportation and internal communication. Therefore, abdominal acupuncture treatment of visceral disease and chronic systemic disease has the advantages of having the most concentrated internal organs, the most veins, and the shortest path. And modern medical research has also proposed the existence of a "second brain" - "intestinal brain" in the human abdomen. The "intestinal brain" is located in the sheath of the esophagus, stomach, small intestine and colonic inner tissue. It is a complex circular line containing nerve cells, neurotransmitters and proteins. In the "intestinal brain", most of the substances in the brain that are controlled and operated can be basically found. The acupuncture needle uses the acupuncture abdomen congenital collateral system, and the resulting therapeutic effect may be related to directly stimulating the "intestinal brain" of the abdomen and secreting neurotransmitters acting on the target organ. Therefore, the treatment of the abdominal acupuncture omits the intermediate link, making it the shortest path and the most effective adjustment effect for regulating visceral function.

In the female's body, Renmai is the central point of the acupuncture point of the abdomen, and Renmai acupuncture points are the main constituent points of the abdomen acupoints. Since the uterus and the attachment are all located in the pelvis and in the lower abdomen, they are important parts of the path of Renmai. Therefore, abdominal acupuncture treatment has a greater advantage in the treatment of endometriosis pain.

3.4. Acupoint application method

Chen Ming et al. [6] used acupuncture combined with acupoint application to treat 36 cases of dysmenorrhea of endometriosis. Taking acupuncture points such as Zhongji, Guanyuan, and uterus, and then applying drugs. Once a day, 2 weeks for a course of treatment, 1 week before menstruation begins treatment. Stop taking any other painkillers during treatment. The total effective rate of dysmenorrhea in the treatment of 3 menstrual cycles was 92.1%, and the long-term total effective rate was 96.7%. Chen Liwen applied ointment containing traditional Chinese medicine ingredients such as Danshen, Angelica, Chishao, Yanhusuo, Asarum, and Chinese wolfberry on Guanyuan, Qihai and Shenque, once a day,

3 days before menstruation and 4 days after menstruation for a course of treatment. After 3 courses of treatment, 13 cases were cured, 10 cases with obvious effect, 4 cases were effective, and the total effective rate was 90%. Studies have shown that this method can significantly improve symptoms such as dysmenorrhea, anal bulge, painful intercourse, and irregular menstruation. However, whether this method can change the pathological changes of endometriosis as a whole for a long-term mechanism still needs further clinical research.

3.5. Acupuncture combined with medicine

Acupuncture combined with medicine refers to a combination of acupuncture and the traditional Chinese medicine. Zhang Lei used acupuncture combined with medicine to treat 54 cases of endometriosis dysmenorrhea patients, taking acupuncture points: Sanyinjiao, uterus, Taichong, Guanyuan, sulcus, Guilai [7]. In addition to Guanyuan, all double sides of acupoints, and the method of flat-filling and diarrhea were taken. The needle was left for 30 minutes. After the menopause, acupuncture was performed. The needle was given two to three times every seven days, and the needle was stopped during menstruation. After half a month of menstruation, started taking Chinese medicine and stopped taking it during menstruation. After three menstrual cycles, 54 cases of dysmenorrhea, 36 cases of symptom disappeared, 16 cases of symptom reduced, 2 cases of ineffectiveness, the total effective rate was 96.23%.

4. Conclusion

Endometriosis can cause various gynecological diseases such as dysmenorrhea, dyspareunia and chronic pelvic pain, which seriously affects women's physical and mental health, leading to a decline in quality of life. Therefore, pain relief of endometriosis is a major problem that needs to be solved urgently. At present, the pathogenesis of endometriosis remains to be studied. Although modern medical technology and drug therapy are effective in relieving the pain of endometriosis, but the recurrence rate of the treatment results is high. The acupuncture on pain relief in endometriosis has made great progress, but it still needs to be improved.

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