

Research Progress of Acupuncture Treatment for Irritable Bowel Syndrome

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Abstract: This article briefly introduces the concept, manifestation, pathogenesis and clinical treatment of Irritable Bowel Syndrome (IBS), and describes the progress of clinical research on the treatment of IBS in recent years from the various aspects of acupuncture therapy, and summarizes the aspects that are still to be perfected in the study of IBS, which is conducive to the further in-depth study and promotion of the treatment of IBS by acupuncture, and improve the therapeutic effect for the benefit of patients. The study summarizes some aspects of the current research on IBS that still need to be improved, which is conducive to the further in-depth research and promotion of acupuncture for IBS, improving the therapeutic effect and benefiting patients.

Keywords: Irritable Bowel Syndrome, Acupuncture Treatment, Review.

1. Introduction

Irritable bowel syndrome (IBS) is a common functional bowel disease characterized by recurrent episodes of abdominal pain accompanied by changes in bowel habits without organic lesions, and is classified as diarrhea, constipation, mixed and indeterminate according to diagnostic criteria [1]. The majority of patients are young and middle-aged, and the incidence of the disease is twice as high in women as in men, with a tendency of family aggregation. This disease is caused by a variety of factors that jointly stimulate the human body, according to its clinical symptoms similar to the Chinese medicine disease "abdominal pain", diarrhea "and" constipation "to start to explore, the cause of the pathology of external attack, internal injuries to food and drink, emotional and emotional disorders, The pathogenesis is closely related to the liver, spleen and kidney, and is characterized by liver and spleen disorders and intestinal disorders [2]. This disease is one of the advantages of acupuncture treatment, acupuncture treatment of this disease has fewer adverse reactions and toxic side effects, the operation is simple, convenient, inexpensive, and tested, many scholars have launched a series of studies on the treatment of this disease, and have achieved quite good results.

2. Simple Acupuncture

In the therapeutic study of acupuncture treatment for diarrhea-type IBS, Chen Dan divided 110 cases of diarrhea-type IBS with spleen and kidney yang deficiency into a control group and an observation group, and the observation group adopted the waking up and regulating the spirit acupuncture therapy, with the following points: tianshu, guanyuan, baihui, shenting, benshin, zhongcu, and zhusanli, and the control group adopted the regular administration of pivalidium bromide tablets and montelukast, and carried out the treatment for a period of 1 month, and the result of the study was that the treatment effectiveness rate of the observation group was found to be 96.36%, while the control group's treatment efficiency was 74.55%. After comparing the IBS-QOL scores before and after treatment, it was found

that the scores of the observation group were significantly higher than those of the control group, and the level of serum inflammatory factor was lower than that before treatment, and the level of serum inflammatory factor of the observation group was lower than that of the control group, which shows that acupuncture has considerable advantages in the treatment of irritable bowel syndrome relative to the western medicine treatment [3]. Professor Chu Haoran [4] proposed the treatment of this disease with the "dragon and tiger combat maneuver", which refers to a kind of acupuncture compound tonic and diarrhea maneuver, the dragon refers to the Canglong as the left, which means twisting the needle to the left, which is the tonic method, and the tiger refers to the White Tiger as the right, which means twisting the needle to the right, which is the diarrhea method, and the two methods are used repeatedly and alternately, which is known as the dragon and tiger combat maneuver. Prof. Chu Haoran, through a large number of clinical experimental studies, found that the efficacy of this method for the treatment of irritable bowel syndrome is very significant. For constipated IBS Xue Yuhan [5] summarized several major acupoints with the highest frequency of use in the treatment of this disease through extensive literature search and reference, which are Tianshu, Ashigaru, Shangjiuxu, Daigongyu, and Zhongshu. And the association rule analysis in this study found that the combination of large intestine Yu, foot Sanli and Tianshu had the highest confidence level and the strongest correlation between the acupoints, which provided a new direction for the clinical acupuncture treatment of constipation matching program, such as the Yu recruitment and matching method, and the combined recruitment and matching method.

3. Moxibustion

This disease belongs to the advantage of moxibustion, especially for diarrhea type IBS, clinical research found that moxibustion for the treatment of irritable bowel syndrome set of "warm tonic", "warm", "warm through the" triple effect. Clinical studies have found that moxibustion for the treatment of irritable bowel syndrome combines "warm tonic", "warm heat" and "warm pass" to achieve the effect of stopping diarrhea and fixing astringency [6].

3.1 Mild Moxibustion

Yu Huamei randomly divided 24 Wistar male rats into normal group, western medicine group, model group and mild moxibustion group, and modeled the rats except normal group as IBS-D rats with liver depression and spleen deficiency, in which the normal group and the model group were fed without therapeutic interventions, the western medicine group was given pivalcurium bromide by gavage, and the mild moxibustion group was treated with moxibustion at the bilateral upper Gouxu, Tianshu, and Taichong points for a period of 14 days once a day for 20 min per point, with a significant decrease in TNF- α level and a significant increase in IL-10 level (IL-10) compared with the model group. The experimental results showed that compared with the model group, TNF- α level in the western medicine group and the mild moxibustion group decreased significantly, and IL-10 content increased significantly ($P < 0.01$), and the difference between the mild moxibustion group and the western medicine group was not statistically significant ($P > 0.05$), which can reduce intestinal inflammation and improve the immune function by correcting the dysregulation of inflammatory factors, and thus improve the immune function, which can show that moxibustion is effective in the treatment of abdominal pain, and it can be used to treat abdominal pain. This shows that moxibustion therapy is feasible for the treatment of diarrhea-type IBS [7].

3.2 Moxibustion Through Ginger

In the treatment of patients with liver depression and spleen deficiency, Yang Min [8] compared the two treatments of irritable bowel syndrome with oral montelukast in the treatment of liver depression and spleen deficiency, and concluded that, according to the therapeutic efficacy and the quality of life assessment of the patients, the clinical efficacy of the treatment of diarrhea-type irritable bowel syndrome with acupuncture and ginger acupuncture was remarkable, and its therapeutic effect had a great advantage compared with that of pure drug treatment. According to the therapeutic efficacy and quality of life assessment of the patients, the clinical efficacy of acupuncture with ginger moxibustion in the treatment of diarrhea-type irritable bowel syndrome is remarkable, and its therapeutic effect has a great advantage compared with that of drug treatment alone, and the improvement of the patients' physical function, health status and psychological status is more significant. The combination of acupuncture and moxibustion is an innovative approach for the treatment of functional diseases, and lays the foundation for further exploration of the treatment of irritable bowel syndrome from the aspect of liver-spleen co-regulation.

3.3 Warm Acupuncture

Warm acupuncture is a therapeutic method combining acupuncture and moxibustion, the principle of which is to enhance the efficacy of acupuncture by adding moxa floss at the end of the needles so that it burns and heat is transmitted into the body through the needles to achieve the therapeutic purpose. Wei Xiujuan [9] in for 86 cases of diarrhea type irritable bowel patient history will be divided into the observation group and control group of 48 cases, the control group to give oral trimebutine maleate tablets conventional

treatment, the observation group in the control group on the basis of conventional treatment to give the spleen regulating God warm acupuncture treatment, take the acupuncture points bilateral tianshu, taichong, foot Sanli, giant false, three yinjiao and yintang and Baihui, both groups are 4 weeks of continuous treatment, through the After 4 weeks of treatment, it was found that the effective rate of the observation group was significantly higher than that of the control group, the clinical efficacy was more prominent, and the dysregulation of inflammatory factor levels in the cases of the observation group before and after treatment was significantly reduced. Liang Xiaoling [10] found that after treating 32 IBS patients, the efficacy of warm acupuncture and moxibustion was more significant than that of simple acupuncture and moxibustion, and the improvement of abdominal discomfort was more prominent than that of simple acupuncture, which demonstrated that the thermal effect of warm acupuncture and moxibustion could enhance the efficacy of treatment to a certain degree, especially for constipation-type IBS, which is the most common type of IBS. It is an effective, economical and convenient treatment for constipated IBS.

3.4 Thunder Fire Moxibustion

Ji Chunyan [11] et al. randomly and equally divided 50 patients with diarrhea-type IBS into a control group and an observation group, with 25 patients in each group. The results showed that moxibustion and acupoint therapy were more effective under the guidance of the theory of Ziwu Liuzhi, and the severity of IBS in the observation group was lower than that in the control group, and the quality of life of the patients in the observation group was better than that in the control group, so it can be concluded that the application of the theory of Ziwu Liuzhi in the clinical treatment can enhance the clinical efficacy and improve the quality of life in relieving patients' abdominal pain. Therefore, it can be concluded that applying the theory of Ziwuyu injection to clinical treatment can enhance the clinical efficacy and improve the quality of life of patients to a certain extent while relieving their abdominal pain, diarrhea and other related discomforts.

4. Combination Therapy

4.1 Needle-medicine Combination

In the treatment of patients with liver depression and spleen deficiency type, Tan Rongrong [12] proposed to treat 20 patients in the observation group and 20 patients in the control group, each of whom had a comparable average age, a coordinated male-to-female ratio, and a course of disease of about 6 years. The observation group was given the Painful Diarrhea Essentials Formula combined with acupuncture, and the control group was treated with the western drug pivalcurium bromide tablets. Diarrhea-type IBS could effectively reduce the clinical symptom scores, and the clinical symptom scores were significantly lower than those of the control group. After 4 weeks of treatment, the effective rate of the control group was 65%, which was 25% lower than that of the observation group, which also fully demonstrated that the combination of acupuncture and medicine occupies a considerable advantage in the treatment of this disease, and it is also a strong combination of the two characteristic therapies of traditional Chinese medicine (TCM), which provides more possibilities

for the treatment of the disease by TCM.

4.2 Acupuncture Combined with Acupoints Patch Application

In the treatment of patients with diarrhea-type IBS, Shi Hao [13] randomly divided 150 cases with spleen deficiency and dampness syndrome into a combination group, a patch group, and a western medicine group, with 50 people in each group. In the western medicine group, pivalcurium bromide tablets were given orally at 50 mg three times a day; in the patch group, ginseng-ling-white-jujutsu-san prepared with ginger juice was applied to the Shenque acupoint once every other day; in the combined group, on the basis of the acupoint patches, milli-fire needling was applied to the Tianshu, Shanggouxu, Yinlingquan, and Daji Yu acupoints once every other day, and all the groups were treated for 4 weeks. After a period of 4 weeks of treatment found that the joint group of patients with abdominal pain, abdominal distension, the number and character of stools and defecation were significantly relieved compared with the other two groups, the combination of acupuncture and acupuncture point dressing efficacy is far more than the efficacy of Western medicine, which shows that compared with the use of medicine alone, the combination of traditional Chinese medical specialties acupuncture and Chinese medicine dressing is more conducive to the treatment of this disease.

5. Other Therapies

5.1 Electroacupuncture

Electroacupuncture is a method of combining acupuncture and electricity to prevent and treat diseases by adding current stimulation on the basis of acupuncture through electronic acupuncture instrument. Electroacupuncture has the effects of analgesia, sedation, promotion of qi and blood circulation, and adjustment of muscle tone, which is often more significant than the effect of simple needling treatment. Fu Yi-Ming [14] et al. divided 56 pregnant rats born to 5 SPF-grade KM pregnant rats into blank, model, electroacupuncture, and acupoint injection groups after randomization and modeling of the groups, of which the latter two groups were intervened with electroacupuncture stimulation and injection of Astragalus injection, respectively, and then made comparative observations on the models of the four groups to conclude that the effects of electroacupuncture and acupoint injection on the symptoms associated with the hepatoproliferative and spleenpanc deficiencies of small intestinal tracts with irritable syndrome were more significant than that of acupuncture alone. It was concluded that electroacupuncture and acupoint injection had therapeutic effects on mice with symptoms related to liver-depression and spleen-deficiency type of irritable bowel syndrome, and electroacupuncture was better than acupoint injection in improving and preventing the symptoms in mice. Related studies have shown that psychosomatic factors are closely related to the development of irritable bowel syndrome. In a study on the clinical efficacy of electroacupuncture in the treatment of IBS, Sun Yuanzheng [15] randomized 76 patients with diarrhoeal irritable bowel syndrome into the "Shenzhongqin" group, which was randomly divided into the "Shenzhongqin" group. Seventy-six patients with

diarrhea-type irritable bowel syndrome were randomly divided into the "Shen-tuning group" and the "electro-acupuncture group", with 38 patients in each group. The Shen-tuning group selected acupuncture points with the effect of nourishing the heart and tranquilizing the mind and regulating the emotion and mood on the basis of the relevant points in the electro-acupuncture group, such as Baaihui, Shenting, and Bengshen. Both groups were treated with the program of leaving the needle for 30 min, treating once a day for 6 days, four consecutive courses of treatment, with an interval of 1 day between each course of treatment, and at the end of the course of treatment, according to the comprehensive scores, the Shentian group had a 16% higher therapeutic efficacy rate than that of the electro-acupuncture group, which further confirmed the correlation between the patient's moods and the onset of the disease, and concluded that: on the basis of symptomatic treatment to improve the quality of life of patients, improve the state of depression of patients, and improve their quality of life. It is concluded that improving the patients' depressive state on the basis of symptomatic treatment and improving the patients' quality of life is more effective than electroacupuncture treatment alone.

5.2 Millifire Needles

In a study of clinical treatment of irritable bowel syndrome by millimetre fire acupuncture, Zhang Mengyang [16] randomly divided the patients into a control group of 30 cases each and a treatment group of 30 cases each, with the former treated with oral pivoxyl bromide tablets, and the latter divided into two groups, A and B. The acupuncture points related to the foot yangming gastric meridian, such as the foot Sanli, the upper Guxu, and the heavenly pivot were selected, and the large intestine and Sanyinjiao, which has the effect of strengthening the spleen and seeping dampness, were used for group A and group B, with treatment once every two days and one day of rest three times a week. Due to the location of this disease in the large intestine, together with the large intestine yu and Sanyinjiao, which has the effect of strengthening the spleen and seeping dampness, the left side of group A and the right side of group B were treated once every two days, and rested for one day three times a week with millimetre fire needling treatment. Both groups were treated for a period of 2 weeks, and after observing the efficacy of the treatment, it was found that oral pivacyl bromide tablets and milli-flame needles were both effective in patients with irritable bowel syndrome, but the latter had better efficacy in improving the patients' discomfort and quality of life in a short period of time.

6. Summary and Outlook

In recent years, the incidence of irritable bowel syndrome (IBS) has been increasing year by year due to factors such as increased social pressure, disordered lifestyle and irregular diet. With the accumulation of a large number of clinical experiences, the treatment of irritable bowel syndrome through acupuncture is gradually emerging. Clinical and experimental results show that acupuncture has certain advantages. However, recent studies have shown that there are still problems in the treatment of irritable bowel syndrome with acupuncture: (1) Due to the specificity of acupuncture treatment, it is difficult to match a convincing biological model, and the small samples of human experiments with

large individual differences, which makes it impossible to study the mechanism of action of acupuncture treatment in a specific and systematic way. (2) Most of the ancient classics recorded the treatment points, but less records on the treatment methods and intensity of needling, which led to the concentration of the treatment methods with obvious efficacy in the hands of only a few people, and the promotion of the treatment methods was limited. (3) The research process is only from the perspective of curative effect, the experiment is not accurate enough, and there are problems such as difficult to unify the diagnostic criteria and unknown causes of the disease.

Therefore, in the future research process of acupuncture treatment, we can establish a sample database of patients with irritable bowel syndrome treated with acupuncture according to the actual situation, and expand the research sample of acupuncture treatment by accepting the relevant patient data and treatment methods across the country, so as to minimize the impact of individual differences on the experiment, and we can also consider the changes in the intestinal flora, the specific changes in the organs of the digestive system after the treatment as well as the synergistic effect of the overall changes. In addition, we can consider the changes in the intestinal flora, the specific changes in the organs of the digestive system after treatment, and the overall synergistic effect, so that we can work together to improve the diagnostic process, treatment methods, and mechanism of action of acupuncture in the treatment of irritable bowel syndrome. Ultimately, we will be able to serve our patients in a more comprehensive way in the clinical setting.

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