

# *Research Progress of Chinese Medicine in the Treatment of Functional Constipation*

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**Abstract:** Functional constipation is a common chronic disease, and its incidence rate is increasing. Modern medicine in the treatment of constipation, the use of cathartic treatment, rapid onset, but long-term use of cathartic is more harmful than good. Traditional Chinese medicine has irreplaceable advantages in the treatment of functional constipation because of its high drug safety, rich treatment methods, significant clinical efficacy and less adverse reactions. Therefore, this article will discuss functional constipation from the general situation, etiology and pathogenesis, TCM internal treatment, TCM External Treatment and psychotherapy. The internal treatment includes Chinese Decoction and Chinese patent medicine, and the external treatment includes acupuncture, acupoint thread embedding and injection, acupoint application, enema, auricular point sticking and massage. In this paper, through the analysis of relevant literature, in order to provide reference for the treatment of functional constipation of traditional Chinese medicine.

## 1. Introduction

Functional constipation is a kind of constipation that causes intestinal dysfunction due to improper diet, emotional depression, drug influence, poor living rules or poor defecation habits, and no organic diseases are found through examination [1]. The main manifestations are dry stool, difficulty in excretion, reduction of defecation frequency and prolongation of defecation cycle, and sometimes accompanied by abdominal distension or falling anus, incomplete defecation and other feelings. At present, the incidence rate of chronic constipation in China is 4.0% ~ 6.0%, most of which are women. In recent years, senile constipation is also increasing [2]. The etiology of functional constipation is complex, the course of disease is long, and it is difficult to cure. Long term constipation will not only cause stupidity, bad breath, facial color spots, abdominal distension and falling, insomnia and fatigue, but also induce anorectal diseases, mental and psychological diseases, cardiovascular and cerebrovascular diseases and cancer diseases, which are directly life-threatening in serious cases. Therefore, active treatment is needed. Good defecation habits and life rhythm are the basis for the prevention and treatment of constipation, and drug intervention can be carried out when necessary.

## 2. Etiology and Pathogenesis

According to the theory of traditional Chinese medicine, the occurrence of constipation has the following reasons: first, improper diet. Spicy or drinking behavior will lead to gastrointestinal heat accumulation, heat accumulation and fluid injury, and constipation; Second, emotional factors. Worry and worry, the Qi machine is not smooth, the wood is not sparse, and constipation is caused by transportation and loss of division; Third, evil is prosperous and positive is declining. The evil of yin and cold stagnates the gastrointestinal tract or the heat evil injures the body fluid and the intestines lose nourishment, resulting in constipation; Fourth, old age and physical weakness. Loss of Qi and blood, dry intestines and stopped circulation, resulting in constipation [3]. The essential reading of medical science added that the weakness of viscera in the elderly, excessive blood loss in women's production, excessive sweating and urination will lead to the loss of body fluid, the loss of Qi with fluid, and the injury of Qi and fluid will lead to constipation. The basic pathogenesis of constipation is the abnormal conduction of large intestine, which is closely related to the five zang organs. Loss of support for the heart, lack of liver qi, lack of lung qi, deficiency of spleen qi and lack of source of essence and Qi of the kidney can lead to asthenia of large intestine conduction, and then dross is difficult to go down.

## 3. Internal Treatment of Traditional Chinese Medicine

### 3.1 Chinese Herbal Medicine Treatment

Traditional Chinese medicine adopts an integrated and individualized diagnosis and treatment scheme to treat functional constipation by controlling the symptoms and signs of patients as a whole, combined with tongue and pulse. Liu xinglei [4] used Guizhi Decoction and Tongxie Yaofang to treat constipation of liver depression and spleen deficiency type; Yu Jiangping [5] used Yinqiao Guizhi Dahuang Decoction to treat intestinal damp heat constipation; Zhao Shicong [6] used Fangfeng Tongsheng Decoction to treat constipation of gastrointestinal heat accumulation type; Wang Xiuzhen [7] and others used Bushen Tongjie formula to treat constipation of spleen

kidney yang deficiency type; Bi Zhong [8] used Zengye Decoction plus Jianfang to treat constipation of Qi Yin deficiency type; Ma wanwan [9] used Yiqi Runchang diet to treat constipation of lung spleen qi deficiency type; Li Genhu [10] used modified Huangqi Decoction to treat Qi deficiency constipation; Fang Li [11] used Modified Sini Powder to treat constipation of qi stagnation and blood deficiency type. There is no clear and unified dialectical classification in traditional Chinese medicine, so doctors have different diagnosis and treatment ideas in clinic, but dialectical accuracy is the most basic premise to achieve curative effect. Therefore, doctors should look carefully, smell, ask and cut, so as to draw up the most accurate prescription.

### 3.2 Chinese Patent Medicine Treatment

Under the guidance of traditional Chinese medicine theory, Chinese patent medicine is a patent medicine processed by using modern technology to make Chinese herbal medicine according to the specified prescriptions and standards, including pill powder, ointment and pill. It is conducive to carrying and preservation. It has good curative effect and has been highly praised by patients. In the treatment of functional constipation, the Chinese patent medicines commonly used in the medical market include Maren pill, Sanhuang tablet, Liumo decoction, compound aloe capsule, etc. the prescription can play a good defecation effect according to the patient's condition. Guo Yunfeng et al. [12] used the auxiliary platform of traditional Chinese medicine inheritance to sort out and mine data, and screened out 10 drugs with the highest frequency of use from 56 prescriptions and 160

traditional Chinese medicines, namely rhubarb, *Scutellaria baicalensis*, licorice, gardenia, *Fructus aurantii*, *Coptis chinensis*, areca nut, tangerine peel, wood fragrance and hawthorn. After data mining, a new prescription is formed, which can be used by doctors according to the patient's condition in clinical treatment, which provides a theoretical basis for further research and development of new drugs for constipation. However, there is still a lack of clinical testing of new drugs, so we should add or subtract them on the basis of dialectical treatment.

## 4. External Treatment of Traditional Chinese Medicine

### 4.1 Acupuncture Treatment

Modern research shows that acupuncture can affect the secretion of basic substances in the brain gut axis. The content of brain gut peptide hormone in brain gut axis is closely related to functional constipation. Acupuncture can regulate the content of brain gut peptide and related nerve factors, which can not only promote intestinal peristalsis, but also improve mental and psychological state. Shao Wenchao et al. [13] divided 60 patients with functional constipation into two groups. The control group was treated with traditional acupoint selection acupuncture, and the treatment group was treated with acupoint selection acupuncture according to the brain gut axis theory. After 2 weeks of treatment, it was found that the total effective rate of the treatment group was 83.3%, higher than 60% of the control group ( $P < 0.05$ ), and the constipation score, anxiety and depression scores of the treatment group were lower than those of the control group. This result shows the effectiveness of acupuncture in the treatment of functional constipation. Among them, the effect of acupuncture on functional constipation based on brain gut axis theory is better. Liu Li et al. [14]

randomly divided 130 patients with functional constipation into two groups. The control group was given routine symptomatic treatment, and the observation group was treated with acupuncture and moxibustion on this basis. After treatment, it was found that the total effective rate of the observation group (90.77%) was higher than that of the control group (76.92%) ( $P < 0.05$ ). After treatment, the levels of MTL, VIP and SP in the observation group were higher than those in the control group, and the level of NO was lower than that in the control group; The gastric emptying rate, constipation score and defecation time in the observation group were lower than those in the control group; All patients had no allergy or infection. This shows that acupuncture is safe and effective in improving gastrointestinal function and alleviating constipation symptoms.

### 4.2 Acupoint Catgut Embedding and Injection Therapy

Catgut embedding therapy and injection therapy stimulate the meridian system through chemical, biological and mechanical stimulation to improve the patient's own immunity, stimulate acupoints for a long time through absorbable thread or liquid medicine to play a role, adjust the endocrine level, moisten the large intestine and speed up defecation. The treatment is simple and effective [15]. Professor Liu Dianwen [16] treated functional constipation with Catgut Embedding at three points (Tianshu, Guanyuan and Zhongwan) and compared it with acupuncture treatment. The study found that the improvement of defecation patency, defecation time and abdominal distension symptoms in the experimental group were better than those in the control group after 15 and 30 days of treatment ( $P < 0.05$ ), and the total effective rates were 93.3% and 73.3% respectively. Zhang Lingling [17] randomly divided 54 patients with functional constipation into two groups. The treatment group selected acupoints and buried catgut according to the Shu Mu acupoint matching method, and the control group took oral Chinese patent medicine. After 2 months of treatment, it was found that the total effective rate in the treatment group was 85.19%, which was higher than 66.67% in the control group. Zhao Yan [18] selected 46 patients with constipation for acupoint injection, selected

Zhongwan, Tianshu, abdominal node, Shangjuxu and positive reaction points, and gave vitamin B1 injection 100mg or normal saline 2ml once a day for 21 times. The effective rate was 95.65%. Therefore, the effect of catgut embedding and injection in the treatment of functional constipation is worthy of affirmation.

### 4.3 Acupoint Application Therapy

According to the meridian theory, acupoint application therapy is to use water, vinegar, wine and other substances to prepare traditional Chinese medicine powder into paste, or make it into pills, cakes, or boil traditional Chinese medicine into paste, and apply it to relevant acupoints or positive reaction points. This method has rapid effect and high safety. It can not only directly absorb drugs through the skin, but also accurately stimulate corresponding acupoints to give full play to the curative effect. Wang Jundong et al. [19] selected 42 patients and randomly divided them into two groups. The treatment group was treated with Acupoint Application of traditional Chinese medicine, mainly cassia seed and *Magnolia officinalis*, mixed with honey into medicine cake, and fixed at Pishu, Guanyuan, Shenque and other acupoints with adhesive tape. The control group was given itopride hydrochloride tablets to promote gastrointestinal peristalsis, 1 tablet / time, 3 times / d. After 4 weeks, it was found that the effective rate of the treatment group was 95.24%, higher than 76.19% of the control group, which proved that acupoint application could effectively improve the symptoms of constipation.

### 4.4 Enema Therapy

Traditional Chinese medicine enema is to boil Chinese herbal medicine into a decoction and drip it through the anus and rectum, so that the medicine can be directly absorbed by the intestinal mucosa. This treatment not only improves the absorption rate of the effective components of the medicine, but also the liquid medicine can promote the local intestine to soften the feces and facilitate the excretion of feces. Yang Xi [20] collected 80 patients with functional constipation and randomly divided them into four groups. In group A, 200ml of traditional Chinese medicine compound decoction was injected into the colon once a day, and 4 jinbifi tablets were taken orally, 3 times a day; Group B was given traditional Chinese medicine enema only; Group C was given colon hydrotherapy and oral golden bifidus; Group D took 1 package of fosone orally, twice a day. The total effective rates of the four groups were 89.47%, 90.00%, 61.11% and 89.47% respectively. Thus, in the treatment of functional constipation, the effect of traditional Chinese medicine enema combined with western medicine is basically the same as that of traditional Chinese medicine enema alone, which is better than colon hydrotherapy combined with western medicine or oral western medicine alone. Compared with western medicine, the short-term effect of traditional Chinese medicine enema is similar, but in the long run, the effect of traditional Chinese medicine enema is significantly better than western medicine, and the recurrence rate is lower.

### 4.5 Auricular Point Sticking and Pressing Method

Auricular point sticking and pressing method is to place drug seeds, such as wangbuliuxing seed, white mustard seed and radish seed, on adhesive tape and stick them on the ears, and ask the patients to press them every day to stimulate the corresponding viscera, which plays the role of treating diseases. This method is simple to operate, has no side effects and has good patient compliance. Wu Qiuzhen et al. [21] selected 60 patients, and the control group used routine nursing methods to ask the patients to massage the abdomen and defecate regularly. The observation group was treated with auricular plaster and moxibustion. Wang buliuxing seed was pasted on the

acupoints of large intestine, brain and sympathetic with adhesive tape, and moxibustion was performed on the relevant acupoints of abdomen. After half a month of treatment, it was found that the patient's difficult defecation was improved, and the abdominal pain and abdominal distension were also significantly relieved, indicating that auricular point sticking combined with moxibustion can effectively treat constipation.

#### 4.6 Massage Therapy

Massage therapy is an auxiliary treatment that stimulates the corresponding acupoints of the human body by using certain techniques with both hands of the doctor to adjust the state of the body, so as to promote defecation. It is especially suitable for patients with weak gastrointestinal peristalsis, long-term bedridden or poor physique. For patients with functional constipation, lumbar and abdominal acupoints are often used for massage. Investigation shows that pushing lumbosacral acupoints can increase gland secretion and improve defecation reflex function. Liu Wenxia et al. [22] used abdominal massage to treat functional constipation in the elderly, and found that the constipation symptoms and defecation frequency of patients were improved. Zhou Xiaoqin [23] and others selected 80 children with functional constipation and randomly divided them into groups. The control group was treated with western medicine and the treatment group was treated with massage. After 10 days, it was found that the TCM symptom score of the treatment group decreased more significantly and the recurrence rate was lower. The experiment shows that the treatment of functional constipation by massage can improve the symptoms of constipation regardless of age and gender. The treatment has high comfort, safety and effectiveness, so it is deeply loved by the majority of patients.

#### 5. Psychotherapy

Research shows that patients with long-term constipation are more likely to have psychological disorders, such as depression, anxiety, paranoia, etc. negative emotions will aggravate the symptoms of constipation, make patients fear defecation, develop bad defecation habits, and finally form a vicious circle. At present, the academic circles generally believe that its pathogenesis is a biological psychological social comprehensive reason. In terms of treatment, general psychotherapy, cognitive behavioral therapy, biofeedback and other therapies can be used, combined with drug treatment when necessary [24]. Traditional Chinese medicine believes that emotional stimulation is closely related to functional constipation. The regulation of emotion in the five zang organs depends on the heart and liver. The poor emotion is born in the heart and is responsible for the liver. For a long time, the mood is anxious and depressed, the Qi mechanism of the liver is not smooth, the wood is not sparse, the spleen and stomach are out of control, and the intestinal tract is out of nourishment, resulting in constipation. Chen Meng [25] randomly divided 68 patients with slow transit constipation and emotional depression into two groups. The control group was treated with oral Chinese herbal medicine, and the treatment group was treated with psychotherapy on this basis. The methods were as follows: listen to and help the patients vent their emotions, find the crux of the patients' emotional discomfort, and explain the basic situation of the disease to the patients to eliminate their psychological fear; Guide patients to divert their attention, make them actively participate in social activities, and reduce excessive attention to diseases; Help the patient think in a transposition and see the multifaceted nature of a thing rather than the negative side; If necessary, seek the help of doctors and family members to obtain certain spiritual and material support. After 14 days, it was found that the total effective rate in the treatment group was 88.6%, which was higher than 66.7% in the control group ( $P < 0.05$ ), and the scores of anxiety, depression and constipation in the treatment group were significantly lower than those in the control group.

Director Deng Zhengming [26] put forward the treatment mode of “cognition coordination construction” based on years of experience in the treatment of functional constipation, and achieved good results by harmonizing body and mind to alleviate the symptoms of constipation. In addition, traditional Chinese medicine is often based on the Modified Xiaoyao Powder to soothe the liver and relieve depression, tonify the spleen, calm the heart and calm the mind; Or acupuncture treatment based on brain gut axis theory combined with psychological counseling can also effectively alleviate the tension and anxiety of patients.

In psychotherapy, doctors' language should have affinity, understand the causes of patients' anxiety and depression, help patients relax their tense emotions, encourage patients to adjust themselves, maintain stable emotions, and enhance patients' confidence in curing diseases. A positive and healthy attitude is the basis for improving constipation. Optimism will form a positive feedback on constipation. Therefore, it is necessary for us to conduct psychological counseling for patients to alleviate their pressure and tension. As an auxiliary means, psychotherapy can indirectly strengthen the curative effect of drugs by improving the mental state of patients, which shows that humanistic care can not be ignored in the diagnosis and treatment of diseases.

## 6. Conclusion

Traditional Chinese medicine adopts treatment based on syndrome differentiation and individualized treatment. Through traditional Chinese medicine, acupuncture, sticking and injection, catgut embedding, traditional Chinese medicine enema, massage, psychotherapy and other traditional Chinese medicine characteristic therapies, it can adjust the function of Zang Fu organs and restore the balance of the body, which can achieve good results, but it still needs long-term conditioning and observation. At present, there is no clear conclusion on the mechanism of traditional Chinese medicine and external treatment of traditional Chinese medicine to improve constipation. In terms of TCM syndrome differentiation and diagnosis and treatment standards, doctors are highly subjective and it is difficult to objectively evaluate the curative effect. At present, we still need to carry out scientific and standardized clinical research. During treatment, patients should eat reasonably, defecate regularly, develop a good rhythm of life and maintain a pleasant state of mind, which is the basis for the treatment of constipation. Doctors should also follow the guidance of traditional Chinese medicine theory, combine four diagnosis and treatment based on syndrome differentiation, and combine traditional Chinese medicine with modern science and technology. I believe we can finally overcome the problem of constipation.

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