Research Progress of Traditional Chinese Medicine in the Treatment of Pelvic Floor Spasm Constipation

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Abstract

Objective: The spastic pelvic floor syndrome (SPFS) is an outlet obstructive constipation in functional constipation, the main symptoms are constipation, discomfort, anorectal obstruction, and the need for hand assistance during defecation. With the development of modern theory of pelvic floor rehabilitation, the treatment idea was changed. This review is to explore the main understanding of traditional Chinese medicine on the etiology, pathogenesis and treatment of pelvic floor spastic constipation. Methods: The three major databases of HowNet, VIP and Wanfang were searched, Chinese and English literature related to the treatment of pelvic floor spastic constipation by traditional Chinese medicine in the past 10 years were selected, and the relevant understanding of traditional Chinese medicine on pelvic floor spastic constipation was summarized. Conclusion: Traditional Chinese medicine mostly adopts internal treatment or external treatment in the treatment of pelvic floor spastic constipation, which can obviously correct the spasmodic contraction of pelvic floor muscle tissue, reduce defecation resistance, and achieve therapeutic effect.

Keywords

Pelvic floor spasm syndrome, constipation, etiology and pathogenesis, traditional Chinese medicine treatment

With the continuous refinement of modern diet, the prevalence of constipation shows a clear upward trend, a retrospective analysis shows that the current prevalence of constipation in the global population is between 0.7% and 79%, gender, age, socioeconomic status and education level seem to affect the prevalence of constipation [1], constipation has increasingly become an important factor affecting people's quality of life. The spastic pelvic floor syndrome (SPFS) is an outlet obstructive constipation in functional constipation, the main symptoms are constipation, discomfort, anorectal obstruction, and the need for hand assistance during defecation [2]. Pelvic floor spasm constipation is named according to the colonic kinetic characteristics of constipation, which refers to normal colonic transmission function, but during defecation, the pelvic floor and external sphincter contraction spasms, resulting in obstruction and difficulty in defecation. The causes of pelvic floor spasm syndrome are multifaceted and often require comprehensive treatment. This article focuses on the etiology, pathogenesis and treatment methods of SPFS in traditional Chinese medicine.
1. Etiology and pathogenesis

1.1 Chinese medicine's understanding of pelvic floor spastic constipation

There is no relevant record of spasmodic constipation of the pelvic floor in ancient books of TCM, and it is uniformly treated with "constipation". The word constipation first appeared in the "Yellow Emperor's Internal Canon", which is called "posterior disadvantage", "stool south," and the etiology is recognized as: "Taiyin is disadvantageous, then after abdominal distention". "In the "Typhoid Theory", it is called "Yang Knot", "Yin Knot", "Spleen Covenant", etc., it is believed that the main disease of constipation is in the spleen, and the Yang veins are floating and astringent, but the Shaoyin Taixi vein is normal, and purgative therapy was used. In the "Theory of the Origin of Diseases", constipation is listed as a special symptom, and the following two kinds of "difficult stool" and "incomprehensible stool". By the Song and Yuan dynasties, the overview of the causes of constipation became more specific, such as cold constipation, qi constipation, heat constipation, etc. During the Ming and Qing dynasties, the names of constipation were gradually unified, and most of them were listed as specialized diseases. The causes of constipation can be summarized as follows: (1) Feeling external evil, the "Three Causes and One Disease Evidence" contains: "Injury to wind, cold, summer and humidity" can cause "heat" and "dry liquid, cause gastrointestinal dryness, secret and astringency; (2) Poor diet, craving spicy food, easy to heat and yin loss lead to constipation, excessive food raw cold, waste internal stop leads to cold constipation; (3) Emotional disorders, in the Ming "Cause and Pulse Treatment", there is "anger is qi, thinking is qi knots, sorrow and thoughts, all qi is depressed, then qi is in the intestine, and stool is knots; (4) Old age and physical weakness, "Medical Sect Must Read" contains "The old man's jin liquid is dry, the woman dies of blood after childbirth, and sweats, urinates too much, qi and blood do not recover after illness, and the qi and blood are consumed, so that qi deficiency can not be pushed, yin deficiency can not be seen constipation" [3].

1.2 Modern medical understanding of pelvic floor spasmodic constipation

In 1985, the Dutch surgeon Kuipers [4] found in the constipation examination of constipated patients that 12 patients did not increase the angle of the anorectal angle during defeation, but remained at 90 degrees and could not excrete normally. Dr. Kuipers named it pelvic floor spasm syndrome. The Rome IV standard of care for constipation is classified as outlet obstructive constipation (constipation dysfec) in the recently published Rome IV. The etiology may be related to neurological disorders, Xiao Yuanhong [5] and other studies believe that the pathological mechanism of pelvic floor spasm syndrome is related to the following two factors: resting potential of the external sphincter and potential change of the external sphincter. It may also be related to psychological factors; Niu Jing [6] et al. used controlled test methods to improve the psychological state of patients through biofeedback therapy for the treatment of SPFS. Zhang Dongming [7] believes that there is a positive feedback mechanism in the central nervous system (CNS) of SPFS patients that continuously contracts the pelvic floor muscles, and explains the neural circuits, and Pachlin believes that there are three reasons: (1) mental pain and anxiety; (2) persistent or overloaded contraction of pelvic floor muscles; (3) Incorrect or inefficient use of muscles. At present, the specific pathological mechanism of SPFS is not completely clear, and the above are various views put forward by scholars in the research process, and the specific mechanism needs to be clarified through further research.

According to the diagnostic criteria issued by Rome IV, we can learn that the main symptoms of functional constipation are: difficulty in defeation, defeation as dry or hard stools, anorectal obstruction during defeation, incomplete defeation, need for manual assistance during defeation, diagnostic criteria In addition to the symptoms mentioned above, there are rarely loose stools when using laxatives, and it is not irritable bowel syndrome. In clinical observation, symptoms such as blood in the stool and abdominal distension can often be seen, and complications such as internal abdominal ptosis and intestinal hernia can also be complicated. Over time, damage is caused to the perineal nerve, and digital anal examination may reveal rectal mucosal laxity, rectal protrusion, internal hemorrhoids, external hemorrhoids, etc.

In addition to the main symptoms of functional constipation, pelvic floor spasm syndrome also needs to be diagnosed with the help of a series of clinical examinations, such as: 1. Digital rectal examination: in the process of examination, it can be found that the canal tension becomes significantly stronger, and even the fingers are clamped; 2. Pelvic floor electromyography: routine electromyography and single-fiber electromyography can be done; 3. X-ray bowel contrast examination: by examining changes in the structure, motility, function, etc. of the canal and colorectum, the probability of "goose sign" can reach 100%. The research of Mao Yingmin [8] and others proves that digital gastrointestinal excretion machine angiography has obvious value in the differential diagnosis of SPFS.
Zhu Lanzeng [9] et al. have proved that the detection rate of dynamic photographic fecal angiography SPFS is extremely high, which can be used as an auxiliary reference to facilitate the formulation of clinical treatment plans in the next step.

2. Traditional Chinese medicine treatment

2.1 Internal treatment of TCM

The Criteria for Diagnosis and Curative Effect of Syndrome in Internal Medicine of Traditional Chinese Medicine [10] divides pelvic floor spasm syndrome into three syndrome types: 1. Qi stagnation and blood stasis type: anal pain during defecation, dull tongue or ecchymosis, and astringent pulse; 2. Damp-heat betting type: anal swelling, defection feeling of incomplete defection, red tongue with yellow greasy coating, slippery and rapid pulse; 3. Yin-deficiency fire type: dry mouth and desire to drink, or night sweats, red tongue with little coating, thready pulse number. During the treatment, different methods are used according to the degree of deficiency and excess. The deficiency is replenished, and the excess is purged. Give the method of benefiting temperature and yang, nourishing yin and nourishing blood, and it will be cured when it is in full bloom.

2.1.1 Activate blood circulation and remove stasis, and perform gas conduction hysteresis

Qi and blood stasis constipation should be mainly based on blood circulation and qi, plus liver thinning, dehumidification, heat removal and other drugs. He Lei et al. [11] treated 30 cases of SFPS with anti-depressant decoction, the total effective rate: 93.33%, the control group: 66.67%, the treatment group was significantly better than the control group, indicating that the efficacy of traditional Chinese medicine treatment, and the case evidence type included in it belonged to the Qi stasis type. It also shows that the researchers believe that the influence of emotions on constipation is great, the cerebral cortex is inhibited, and then the defection reflex is also inhibited, the disease mechanism is stagnation of qi, qi and blood are not running smoothly, so the liver relief is relieved by chai hu, yujin, etc., jujube, licorice, angelica and so on to nourish the mind and calm the mind.

2.1.2 Relieve dampness and heat laxation [talk about dampness and humid heat constipation]

The dampness and heat constipation is mostly due to the external sensation of humid heat, and it is easy to eat fatty and spicy, which is easy to generate moist heat internally, which is manifested as the stickiness of the stool. [12] When dehumidification is the main thing, accompanied by heat clearing and laxation. Wu Jutong chose Xuanqing guide turbid soup and half-sulfur pills for treatment; Professor Yang Chunbo[13] likes to use self-prepared Qinghua drink Heda original drink, selecting Yin Chen, Peilan, Coix Kernel, Lotus, White Lentils, and White Cocoon Kernel to aromatize and wet; With betel nut, silkworm sand, magnolia, red peony, wood fragrance, etc. to vaporize turbidity, with white peony to nourish yin, Qianlian to clear heat, the effect is remarkable.

2.1.3 Nourish the yin and lower the fire, moisturize the intestines and laxative

Those who are deficient in yin should be moisturized and laxative. Niu Zhijun et al. [14] used peony licorice and flavored soup to treat 13 cases of stubborn constipation caused by SPFS, of which 30.77% were cured, 53.85% effective, 15.38% effective, and the total effective rate reached 100%. In the licorice soup of peony, licorice and peony medicine are used as the main amount, which can effectively improve its blood circulation and greatly relieve the puborectal muscle spasm.

2.2 External treatment of TCM

2.2.1 Acupuncture

In the treatment of export-type obstructive constipation, from simple acupuncture to the use of modern scientific and technological means, it has developed to a series of methods such as electroacupuncture treatment and acupuncture injection. Liu Changbao et al. [15] selected 30 cases and acupunctured Shangju Deficiency, Dazhu Yu, Tianshu, Zhigou, Zusani, Changqiang, and Neiguan Acupoints, and the treatment efficiency was as high as 93%, of which 14 cases were cured and 14 cases were effective. Liu Rui et al. [16] selected 50 SPFS cases and divided them into electroacupuncture group and biofeedback group, among which electroacupuncture took acupuncture points to the large intestine Yu, upper giant deficiency, lower giant deficiency, eight hips, branch groove, and tianshu, and the electroacupuncture group cured 4 cases, with a total effective rate of 76% in 15 cases, which was slightly better than the effective rate of 68% in the biofeedback group. Zheng Xueping [17] selected 115 patients with pelvic floor muscle spasm syndrome to use Changqiang acupoint injection, using 1% lidocaine 3 ml mixed with compound
danshen injection 2 ml, and using a No. 5 needle vertically into Changqiang acupoint. A total of 97 cases were cured, 16 cases improved, and the total effective rate reached 98%, achieving satisfactory results.

2.2.2 Auricular points plaster therapy
The auricular points plaster therapy refers to the application of Wang Buliuxing seeds to the corresponding ear acupoint under the guidance of the basic theory of traditional Chinese medicine, and the purpose of treatment is achieved through continuous stimulation of the ear acupoint. Ji Chunli et al. [18] divided 50 patients with SPFS into treatment group and control group, and the ear acupoints in the treatment group mainly used constipation points, rectum, sympathetic, subcortical, spleen, lungs and large intestine. Effective rate, treatment group: 92%, significantly higher than control group.

2.2.3 Method Matsuraku
Zhang Shengfu [19] used manipulation to loosen the spasmodic pelvic floor muscles and fascia for treatment. After the treatment, the incidences of incomplete defecation, strained defecation, pain during defecation, and defecation obstruction were significantly lower than those before treatment.

3. Discussion
Traditional Chinese medicine mostly adopts dialectical treatment of oral Chinese medicine in the treatment of pelvic floor spastic constipation, or external treatment such as acupuncture, auricular points plaster therapy, etc., which can significantly correct the spastic contraction of pelvic floor muscle tissue, reduce the resistance to defecation, and achieve the therapeutic effect. In addition to the above-mentioned traditional Chinese medicine methods in clinical treatment, it is often combined with biofeedback therapy or surgical therapy. Biofeedback therapy because its pain is basically no, non-invasive, no adverse drug reactions, easy to accept for patients, but the use needs to be combined with psychotherapy, adjust mood, adjust diet, so that the effect is the best. For pelvic floor spasm syndrome, surgery is not the primary treatment option, and many surgical cases have confirmed that its efficacy can only be maintained for a period of time and is not long-lasting. To clarify the indications before surgery, SPFS surgery is mainly aimed at the formation of scar tissue due to excessive hypertrophy of the puborectal muscle, and the surgical operation is mainly to remove part of the puborectal muscle and part of the external sphincter. However, the ensuing problem is that the scar tissue shrinks over time, and the puborectal muscle spasms again, so the operation is easy to repeat and is not recommended. Nowadays, many doctors have developed different surgical options for different types. Zheng Yi et al. [19] adopted the method of partial cutting of the puborectal muscle total bundle plus autologous obturator internal muscle transplantation in the treatment of pelvic floor spasm syndrome, with a high cure rate, simple operation, obvious postoperative effect, and fewer complications than others, and discussed 42 patients with pelvic floor spasm syndrome, the final effect was obvious, and a total of 13 cases of postoperative complications were well treated, which was a serious phenomenon such as incontinence. However, the follow-up effect is not mentioned in the literature, so the recurrence rate is doubtful, and conservative treatment needs to be given priority.

References


