Research Progress of TCM Treatment of Postoperative Constipation in Anorectal Diseases

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Abstract: Postoperative constipation for anorectal diseases is mainly manifested as dry stool due to pain and fear of defecation, slow bowel movement or improper diet, difficulty in defecation or even several days without defecation after anorectal diseases. It is a common disease after anorectal diseases, which not only affects postoperative wound healing, but also often causes psychological and mental diseases and acute cardiovascular and cerebrovascular diseases. In severe cases, the postoperative recovery of patients is greatly affected. At present, through the treatment of Traditional Chinese Medicine (TCM) syndrome differentiation, TCM external treatment and other methods, has achieved good curative effect. In this paper, the recent progress in the treatment of constipation after anorectal diseases by traditional Chinese medicine was summarized.

Keywords: Postoperative constipation, Anorectal diseases, Chinese medicine therapy, Overview.

1. Introduction

Clinical anorectal diseases postoperative constipation is one of the most common complications, as well as anorectal industry faces a difficult problem for a long time. Postoperative constipation after anorectal surgery refers to the symptoms such as difficult defecation, reduced frequency of defecation or dry stool caused by various factors such as pain, slow intestinal peristalsis, and improper diet in patients with anal and colorectal diseases after surgery. The symptoms usually lasting for days, weeks or even months, at the same time because of different patients constitution by different symptoms for days[1]. Current clinical diagnosis is: hemorrhoids, anal fistula, anal carbuncle stool anorectal diseases after operation such as quality, a reduction in the difficulties, discharge, without using laxatives within 7 days of spontaneous bowel movements is not much greater than 2 times or the symptom such as no meaning is for a long time. This is usually due to postoperative fear of anal pain and reduced activity, [2] and postoperative mental factors causing intestinal peristalsis slow, or eat less, postoperative intestinal fluid loss, cause the stool stem node, in intestinal long hair for constipation [3]. These symptoms can bring great pain to patients, seriously affect the postoperative recovery of patients and the effect of surgery. Therefore, more attention should be paid to the diagnosis and treatment of constipation after anorectal disease surgery. In recent years, Chinese medicine dialectical treatment, acupoints were applied, such as traditional Chinese medicine enema in a rich variety of traditional Chinese medicine treatment in this field has obtained the satisfactory curative effect. This article reviews the research progress of the etiology, pathogenesis and traditional Chinese medicine treatment of postoperative constipation of anorectal diseases.

2. The Etiology and Pathogenesis of TCM and the Pathogenesis of Western Medicine

2.1 TCM Etiology and Pathogenesis

Chinese medicine called constipation "spleen" and "shit", think anorectal postoperative constipation is associated with disease and operation, lesion location in the large intestine, and at the same time the spleen and stomach, lung, liver, kidney related. [4] The lung loses xuanshu, does not distribute body fluid, the inability to push, the inability of the large intestine to transmit. "Element asked, five Tibetan BieLun" pointed out that "the stomach, the water of the sea, the big source of the six fu". Stomach and spleen are the sources of qi and blood biochemistry. The patients with anorectal disease after operation are injured by the golden blade instrument, and some of the seminal blood and body fluid are lost [5]. The patient's vitality is greatly injured, qi and blood deficiency, body fluid depletion, easy to form intestinal dryness and constipation. Stomach also main pass down, stomach qi drop, water and grain down, stomach qi do not drop, then constipation [6]. Spleen health delivery, YuJiu fire, consumption of body fluid. Liver sex strong, main fu, article. "Element asked, ling LAN secret DianLun" records "liver, the officer, of general counsel out". Postoperative patients with anxiety, move not to move, qi activity is not thin. The combination of the above reasons leads to the long-term retention of feces in the intestinal tract after surgery, and excessive absorption of water, resulting in insufficient intestinal body fluid, dryness of the gastrointestinal tract, and eventually constipation [7]. In addition, "Treatise on Febrile Diseases: Dialectics of Pulse" cloud: "its pulse floating and number, can eat, do not defecate, this is real, called Yang knot also...". Huang Feng [8] think, such as traditional Chinese medicine in the "gold" category which includes anorectal diseases surgery, intraoperative crissum local damage of main and collateral channels, qi, and qi stagnation and blood stasis cause constipation. Postoperative patients with anaemia empty, tianjin to bowel embellish, Yang gu intestinal wander, Yin deficiency, intestinal lost glory, above all can cause defecate is difficult. Anyhow, viscera of postoperative patients with more weak, constipation not as the standard, the basic pathogenesis of this virtual to real.

2.2 Western Medicine Inducement and Pathogenesis

First, since the anus local unique sensitive physiological structure, dominated by pudendal nerve dentate line and its surrounding the following part is sensitive to abnormal pain, belong to the sensitive area "pain" [10]. The operation is also
performed in this area, which is easy to cause damage to the pudendal nerve and aggravate pain. At the same time, ligation causes obstruction of venous and lymphatic reflux in this area and aggravates local tissue edema. Combination above factors, the patients fear defecation, leading to bowel problems. Second, it is very important to the patient's own factors, mainly including patients with physical factors and the patient's living habits. Patient has a history of constipation, easy to anxiety, older age, gender factors such as [11] would induce and aggravate the postoperative constipation symptoms, and patients with postoperative activity decreased, stay in bed longer, less slag liquid dietary fiber content is less, intestinal peristalsis abate is also an important factor. Finally, surgical methods, intraoperative procedures and anesthesia methods [12] can also lead to postoperative constipation. For example: difficult defecation due to anastomotic stenosis after PPH [13]. Anastomotic stenosis is usually mainly caused by irregular contraction of the scar at the anastomotic site, and may also be related to too deep purse-string suture depth, the patient's personal constitution, the anastomotic site is not located in the same plane, postoperative and defecation [14]. Combined with the above three points, the causes and mechanisms of postoperative constipation are diverse and complex, but pain is the main reason, supplemented by physical fitness, and the second reason is surgical operation. Therefore, in clinical work, must pay attention to the corresponding prevention. Psychological comfort was given to patients before operation, reasonable selection of surgical methods, appropriate analgesia and effective defecation methods were given after operation, and prevention was taken before it happened.

3. Clinical Treatment

3.1 Internal Treatment of TCM

3.1.1 Chinese medicine medicinal broth and TCM syndrome differentiation and treatment

Mr Liu will [15] 110 patients with anal fissure surgery using the random number table method divided into observation group (angelica four kernel purge water treatment) 55 patients and the control group (western medicine) 55 cases. The clinical efficacy, defecation, pain and anxiety scores of the two groups were compared and analyzed within 12 days after treatment. Results: After 12 days of treatment, the improvement of the above indicators in the observation group was more significant (P<0.05). Observation group of patients after treatment of 12 d GIQLI score significantly higher than the control group (P<0.05). Chars lee [16] the randomized, controlled method is adopted to 120 patients with mixed hemorrhoid postoperative constipation were divided into treatment group (60 cases taking replenishing qi xuan lung huoxue fang (18g of syndromes: 30g angelica, astragalus membranaceus, rhizoma ligustici wallichii, 18g atractylodes 10g, 12g almond, platycodon grandiflorum 12g), the control group 60 cases take the spirit of Michael tablet plus angelica dragon hui capsule; Both groups were treated for 2 weeks and observed for 2 weeks after drug withdrawal. During the period, all drugs affecting defecation were stopped, and the clinical efficacy was observed. Results: The total effective rate at 2 weeks after drug withdrawal, efficacy scores at 2 weeks of treatment and 2 weeks after drug withdrawal, postoperative complication scores, and wound healing time in the treatment group were significantly better than those in the control group (P<0.05). Qin Zhaqun [17] selected 48 patients with constipation after mixed hemorrhoids surgery, and they were divided into two groups according to the random number table. The treatment group (24 cases) was treated with Qingchang decoction, a traditional Chinese medicine decoction, and the control group (24 cases) was treated with lactulose. The constipation symptoms, perianal pain scores and total efficacy were compared between the two groups before and after treatment for 1 week. Results: treatment group total effective rate was higher than the control group, and medical treatment group after 1 week of constipation symptoms integral, crissum pain scores were better than control group (P<0.05). Xiong Guohua [18] randomly divided 88 patients with constipation, fluid deficiency and dryness of intestine after anorectal surgery into two groups. The control group (44 cases) was treated with oral lactulose solution, and the treatment group (44 cases) was treated with Zengye Tongbian decoction on the basis of the treatment of the control group. Comparing the total effective rate of two groups of patients. Results: the patients after treatment were analyzed: the total effective rate in treatment group (93.2%) is significantly higher than control group (75.0%). After treatment, the degree of defecation difficulty, defecation time and interval time of the two groups were lower than those before treatment, and the treatment group was lower than the control group after treatment, and the differences were statistically significant (P<0.05). Wan Jiaxin [19] summarized Zhang Longjiang's experience of constipation after colorectal cancer surgery and concluded that the etiology and pathogenesis of constipation after colorectal cancer surgery are mainly lung qi deficiency, spleen and stomach qi deficiency, and menstrual blood deficiency. Therefore, according to TCM syndrome differentiation and treatment, we should give targeted and individualized drugs such as ginseng, astragalus, almond, etc., to clear the lung qi, moisten the lung, moisten the lung, and tonic drugs such as astragalus, Angelica, and Shouji, etc., to nourishing Yin and blood, strengthen the spleen and stomach. Zengye decoction, Runchang pills, such as nourishing blood, increasing water row boat. Yang Wanqing [20] based on the idea of "gasification cardinal" treatment of anorectal postoperative constipation were discussed. "The cardinal of gasification" is one of Wang Mengying's main thoughts. Because of "guilt and stagnation", the disease was caused by "guilt and stagnation". Constipation is a common complication after anorectal surgery. The causes of constipation after anorectal surgery are dereliction of intestinal conduction, stagnation of intestinal qi, failure of lung qi, dysmotility of spleen and stomach, failure of heart to hide spirit, loss of liver circulation, and intestinal damage. With deficiency as the root, secret knot as the standard, combined deficiency and excess, the treatment is to open the lung, regulate the spleen and regulate the liver, clear the heart, strengthen the kidney and remove stools. The theory of "pivot of pneumatization" in the treatment of constipation after anorectal surgery has a positive effect on promoting postoperative intestinal peristalsis and improving constipation symptoms.

3.1.2 Traditional Chinese medicine decoction combined with non-drug therapy
Han Fangqi [21] divided 80 patients with constipation after mixed hemorrhoids surgery into the reference group (treated with western medicine) and the experimental group (treated with traditional Chinese medicine combined with rhubarb Tongbian paste) according to the computer blind selection method, and compared the treatment results. Results: The total effective rate of the trial group (95.00%) was significantly higher than that of the reference group (80.00%), P<0.05. Patients in comprehensive evaluation of life quality scale (QOL) score higher than the control group, the relevant constipation score were lower than that of control group, P<0.05. Zhang Zhigang [22] divided a total of 80 patients with qi stagnation constipation after mixed hemorrhoids operation into observation group and control group according to random number table method. 20 patients in the control group were treated with lactulose oral solution, and 20 patients in the observation group were treated with Simo Runchang decoction combined with acupuncture application. Both groups were treated for 10 days. Results: After treatment, the total effective rate of the observation group was 100.00%, which was significantly higher than 87.50% of the control group (P<0.05). Zhou Gaosheng [23] divided 52 patients with constipation after anorectal surgery into study group and control group by systematic sampling method. 26 cases were treated lactulose oral liquid treatment, the team of 26 cases give ten flavour WenDan tonga subtraction treatment combined with external treatment of traditional Chinese medicine acupuncture points buried line. The first defecation time of the study group was (28.69±0.51) h after surgery, and that of the control group was (39.24±0.61) h after surgery, and the difference was statistically significant (t=27.96, P<0.05). Lu Lili [24] divided 90 patients with mixed hemorrhoids with damp-heat injection into two groups according to the random number table method. The control group (45 cases) was given routine treatment, and the observation group (45 cases) was given Tongbenhuazhi recipe combined with traditional Chinese medicine retention enema treatment. The defecation time, defecation interval time, defecation bleeding, defecation difficulty symptom score, anal pain, the number of enema intervention and emotional state within 7 days after operation were compared between the two groups. Results: the observation group, defecation time interval, defecate haemorrhage, defecation time defecation difficult symptom score lower than the control group, (P<0.05); Observation group pain score lower than the control group, within 7 days of open dew intervention times less than the control group, (P<0.05); After intervention, the emotional state score of the observation group was lower than that of the control group, P<0.05. After the intervention, the observation group of TCM symptom scores in patients than controls, (P<0.05).

3.2 External Treatment of TCM

3.2.1 Traditional Chinese medicine fumigation and washing, enema

Zheng Zhenbo [25] divided 70 patients with constipation after hemorrhoids into control group and observation group according to the random number table method, with 35 cases in each group. The control group was given Maren Zipi pill orally, and the observation group was given Chinese medicine enema treatment. The clinical efficacy and constipation after surgery were compared between the two groups. Results: the curative effect of observation group was higher than the control group, at the same time constipation, significantly lower than the control group (P<0.05). XinHua [26] 118 patients with mixed hemorrhoid, randomly divided into two groups, two groups of patients adopt circumscribed in treatment. The treatment group (n = 59) took polyethylene glycol 4000 powder orally on the first day after operation. From the third postoperative day, warm saline enema was used. The control group (59 cases) received the same postoperative treatment as the treatment group, but without enema. Results: After treatment, the constipation, pain, bleeding, and edema in the treatment group were significantly lower than those in the control group (P<0.05). Shang Youwei [27] 100 routine mixed hemorrhoid external strip internal plunge in hot and humid betting type patients were randomly divided into two groups. Two groups of patients were given conventional perioperative treatment and in the sacral hemp downlink mixed hemorrhoid tied for the treatment of external strip, before the operation treatment group (50 cases using small gas soup retention enema, 50 cases of control group using normal saline enema. The first defecation time, constipation symptom checklist (PAC-SYM) score, visual analogue scale (VAS) score and constipation quality of life scale (PAC-QOL) score were observed in the two groups. Results: The first defecation time of the treatment group was significantly shorter than that of the control group, and the difference was statistically significant (P<0.05). Two groups of patients after surgery PAC - SYM, VAS score and total score higher than preoperative obviously, the difference was statistically significant (P<0.01). The improvement of PAC-QOL score in the treatment group was significantly better than that in the control group (P<0.05). Zhang Henglin [28] choose 100 cases of clinical diagnosis standard circular mixed hemorrhoid postoperative constipation elderly patients as the research object, using randomized grouping method is divided into two groups. The control group using cannabis zi lienal bolus treatment, treatment group to adopt the yiqi tong fang (main ingredients: radix pseudostellariae, dwarf liyl turf, Chinese angelica, astragalus, etc.) enema treatment. The total course of treatment in both groups was two weeks. The clinical efficacy of the two groups was observed. Results: in general curative effect, total effective rate difference of two groups have statistical significance (P < 0.01), the treatment group (96.00%) than the control group (80.00%), the effect is much better. The difference was statistically significant (P<0.05).

3.2.2 Acupoint sticking

JingShuHong [29] 240 patients with mixed hemorrhoid surgery were randomly divided into 4 groups according to the arrangement of block method, 60 cases in each group, with vinegar and evodia rutaecarpa powder select god deficiency and double pivot point to attach (attach time 4 h), first division: vinegar: = 3:1 evodia rutaecarpa powder paste (9 ml of vinegar, evodia rutaecarpa powder 3 g), stick take time 6 h; Group B: vinegar: Wuzhuyu powder =2:1 paste (vinegar 8ml, Wuzhuyu powder 4g), sticking for 6 hours; Group C: vinegar: Wuzhuyu powder =3:1 paste (vinegar 9ml, Wuzhuyu powder 3g), sticking time 4 hours; Butyl group: vinegar: evodia rutaecarpa powder = 2:1 paste (8 ml of vinegar, evodia rutaecarpa powder 4 g), 6 h stick take time. The time of first
flatus and defecation, the characteristics of feces, the subjective feeling of patients, the frequency, nature, and volume of defecation, local skin reaction, and pain within one week after operation were recorded and compared. Results: The constipation, abdominal distension and pain in group D were the best after treatment. Liu Hong [30] selected 213 patients with constipation after anorectal surgery as research objects. Control group given conventional treatment. On the basis of the control group, the study group was assisted with traditional Chinese medicine sticking at Shenque and left and right Tianshu points. On two groups of patients with defecation time, number and difficulty of rating, etc. Results: The therapeutic effect of the study group (91.41%) was significantly higher than that of the reference group (75%), and the difference was statistically significant (P<0.05). ChanJuan [31] choose 96 cases of mixed hemorrhoid external strip surgery patients as the research object, in accordance with the method of random number table method is divided into two groups at random. In the control group of 48 patients after surgery to give regular diet instruction, semi-liquid diet 1 ~ 3 days, 4 days began to ordinary crude fibre food. Treatment group of 48 patients in the control group therapy on the basis of given MaoShi abdominal acupuncture point massage combined CV 8 hole were applied. On two groups of patients with postoperative defecation time and for the first time to compare the incidence of constipation, and compare the two groups of postoperative bowel movement for the first time, 3, 5 days excrement characters, defecate difficulty score, comparing two groups of anorectal dynamics indexes before and after intervention (ARP) [anal resting pressure, rectal resting pressure tubing (RRP) and high length (HPZ)]. Results: the treatment group for the first time defecation was shorter than control group (P<0.05), lower incidence of postoperative constipation in the control group (P<0.05); Postoperative first bowel movement, 3, 5 days postoperatively, the treatment group defecate difficulty rating scores were lower than the control group, excrement characters, differences were statistically significant (P<0.05); After treatment, the ARP, RRP and HPZ in the treatment group were higher than those in the control group, and the differences were statistically significant (P<0.05).

3.2.3 Acupuncture and electroacupuncture therapy

Zhai Baizhi [32] enrolled 150 patients with mixed hemorrhoids into the study on the effect of acupuncture and moxibustion on improving constipation after mixed hemorrhoids surgery. The control group (n = 50) received conventional treatment, the group A (n = 50) received acupuncture and moxibustion for one week, and the group B (n = 50) received acupuncture and moxibustion for two weeks. The results were observed and compared. Results: After treatment, the clinical symptom score and therapeutic effect in group B were better than those in the control group and group A (P<0.05). Group B after treatment the total incidence of adverse drug reactions (adrs) in patients with relatively lower than that of group A patients, control group patients (P<0.05). XinTao [33] to 84 patients with mixed hemorrhoid postoperative constipation symptoms as the research object is divided into control group and observation group, 42 cases, control group given constipation routine treatment, observation group acupuncture treatment, to observe treatment effects compared two groups of patients and defecation. Results: treatment group total effective rate (92.86%) compared with control group (73.81%), significantly higher, the difference is statistically significant, (P<0.05); Compared with the control group, the score of defecation difficulty in the observation group was lower, and the first defecation time was earlier than that in the control group, and the difference was statistically significant (P<0.05). Zhang Zihao [34] selected 70 patients with constipation symptoms after hemorrhoids surgery and divided them into treatment group and control group by random table method. Thirty-five patients in the control group were treated with self-made Shengxue Tongbi granules for 7 days. Joint electric acupuncture treatment group 35 examples based on the pivot point (take days, e. shenshu point) in the treatment of constipation, defecation time, interval time and stool properties, quantity left after 72 h e. markers and containing barium markers of colonic transit test discharge time as observing indexes, to the end of treatment, treatment after 30 d outcome and statistical analysis. Results: through the observation indexes after analysis it is concluded that: treatment group total effectiveness is 88.6%, control group total effectiveness is 60%, much higher in treatment group than control group, difference has statistical significance (P<0.05).

3.2.4 Comprehensive therapy

Guo Jingming [35] will be mixed hemorrhoid surgery of patients with constipation, 90 cases were randomly divided into group A and group B. Group 45 cases were treated by routine nursing treatment, A group of 45 cases in group B on the basis of using hot high compress with acupoint sticking therapy 1 pack. Compare two groups of patients enema number 5 days before and after treatment in both groups psychological state [Hamilton depression scale (HAMD), Hamilton anxiety scale (HAMA)] to assess changes. Results: the intervention in five days, A group of patients 6 ~ 8 times, nine or more enema significantly less than group B (P<0.05); at the same time Intervention for five days, A group of patients with HAMD, HAMA scores significantly lower than before the intervention (P<0.05), while lower than group B (P<0.05). Feng Xiuoyong [36] randomly divided 60 patients with constipation after mixed hemorrhoids surgery into treatment group and control group by random number table method. Treatment group 30 cases with abdominal needle combined with acupoint sticking therapy, Chinese medicine treatment with an oral lactulose oral solution control group 30 cases. Results: after one course of treatment, treatment group total effectiveness is better than that of control group (P<0.05). Compared with the control group, the defecation difficulty score of the treatment group was lower, the first defecation time was earlier, the interval time of defecation and the duration of each defecation were shorter, and the incidence of adverse reactions was lower in the treatment group.

4. Conclusion

By studying the progress of traditional Chinese medicine on constipation after anorectal disease surgery in recent years, it can be seen that the effect of traditional Chinese medicine treatment is quite rich, whether it is traditional Chinese medicine decoction, traditional Chinese medicine external treatment, or traditional Chinese medicine comprehensive
therapy, etc., has made significant achievements. And compared with the western medicine treatment of traditional Chinese medicine treatment more concise and convenient, small side effects, recovery is more stable, the effect is much better. At the same time, on the basis of TCM syndrome differentiation and treatment, combined with traditional Chinese medicine fumigation enema, acupoint application, acupuncture, ear point pressure bean and other traditional Chinese medicine characteristic therapies are the basic and common methods of TCM treatment of postoperative constipation. On the one hand, the use is convenient, cost is not high, on the premise of guarantee effect obviously reduce the economic burden of patients. On the other hand, under the influence of the holistic concept of traditional Chinese medicine, it can be more individualized to give the corresponding specific treatment plan according to the different constitution of each patient, and comprehensive conditioning has a better effect on constipation. However, as far as the current research is concerned, most of the treatment of postoperative constipation takes the treatment of chronic functional constipation as the standard, ignores the pathological process of the patient being injured by the golden sword during the operation, lacks more targeted treatment standards, and mostly aims at relieving symptoms, lacks accurate evidence and long-term individualized treatment. In many traditional Chinese medicine therapy, including external treatment, acupuncture point acupuncture research is less in recent years, traditional Chinese medicine medicinal broth and acupoint sticking therapy research. It is hoped that in the future, scholars can focus on the influence of postoperative golden blade injury and firmly grasp the syndrome differentiation and treatment, review and seek causes, and improve the accuracy and pertinence of treatment in the process of TCM treatment of constipation after anorectal disease. The observation period of the patients should be extended, and the appropriate treatment should be selected reasonably according to the patients’ personal constitution and living habits. At the same time, it is advocated to encourage more research on filiform acupuncture for clinical observation, expanding the range of acupuncture point selection, etc., so as to give full play to the advantages of traditional Chinese medicine, so as to better guide clinical practice.

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