DOI: 10.53469/jcmp.2025.07(07).32

Research Progress of Traditional Chinese Medicine in the Prevention and Treatment of Postoperative Complications of Anal and Intestinal Diseases

Suwen Yang¹, Qunhu Feng^{2,*}

¹Shaanxi University of Chinese Medicine, Xianyang 712046, Shaanxi, China ²Shenzhen Bao'an Traditional Chinese Medicine Hospital, Shenzhen 518101, Guangdong, China *Correspondence Author

Abstract: Anal and intestinal diseases are prevalent in daily life and are often treated with surgical procedures. However, multiple postoperative symptoms such as infection, incontinence, bleeding, pain and swelling can have a significant impact on the patient's postoperative recovery and daily life. Chinese medicine has accumulated rich experience in the treatment of postoperative complications of rectal and intestinal diseases, with the unique advantages of simplicity, fewer side effects and high efficacy. The main objective of this study was to investigate the use of Chinese medicine in the prevention and treatment of anal and intestinal diseases in terms of postoperative complications.

Keywords: Traditional Chinese medicine, Anorectal diseases, Complications, Review.

1. Introduction

Anorectal disorders are diseases that affect the rectum and anal region, such as hemorrhoids, anal fissures, anal fistulas, perianal abscesses, rectal polyps, and even rectal cancer, which are more common in everyday life. These diseases [1] are often accompanied by pain, bleeding, constipation and other symptoms, which seriously affect the quality of life of patients. Chinese medicine categorizes them as hemorrhoids and fistulas. The disadvantages are frequent postoperative symptoms such as infection, urinary retention, pain, blood in the stool, mucus discharge and perianal moisture, which can cause physical and psychological discomfort to the patient. Traditional Chinese Medicine (TCM) surgery has a long history of rich theoretical and practical experience with unique advantages, focusing on the overall body conditioning and using personalized treatment plans. This article explores the etiology, pathogenesis and Chinese medicine treatment of postoperative complications of anal and intestinal diseases, providing reference for clinical diagnosis and treatment.

2. Etiopathogenesis of Postoperative Complications in Anorectal Diseases

Postoperative complications of anorectal diseases are mainly caused by qi and blood obstruction, qi and blood deficiency, and dampness and heat injection [1]. Current medical research has shown that postoperative complications of anorectal diseases are caused by a variety of factors, including anorectal anatomy, surgery and anesthesia, postoperative trauma, psycho-emotional factors, nutrition, and infections, which interact with each other to lead to these conditions.

3. Treatment of Post-operative Complications of Anal Diseases

3.1 Internal Treatment

3.1.1 Damp-Heat Embedded Type

Patients often have symptoms such as dry mouth and bitterness, chest pressure discomfort, constipation, and short, reddish urine. The tongue is often red, the tongue coating is yellow and greasy, and the pulse is slippery. The patient's habitual dietary irregularities or emotional worry too much, frequent sex life, etc., leading to the deficiency of positive qi, the spleen is not healthy and transportation, dampness and heat within the birth. Damp-heat condensation is characterized by a red tongue, yellow moss, and a slippery pulse [2]. Its treatment should be to clear heat and eliminate dampness, can be used gentian diarrhea liver Tang chemical cut orally. Damp-heat under the liver meridian can be seen as itching and sweating in the yin. Longdian Diarrhea Liver Tang can clear the dampness and heat of the liver meridian, so that the dampness and heat in the lower body can be discharged out of the body through urine, and the dampness can be discharged out of the body when it is appropriate to do so, and it will not impede the transportation of the spleen to reduce the production of endogenous dampness.

ISSN: 2006-2745

3.1.2 Qi and blood deficiency type

Surgery is categorized as a "gold wound" or "injury by a gold blade" in traditional Chinese medicine, and when a gold blade injures someone, the loss of qi and blood is the inevitable result [1]. Although the bladder meridian contains a large amount of qi and blood, the rectum is a remote place where qi and blood can't get to, which not only makes it difficult to heal, but also causes pain and many other problems. This not only makes it difficult for the wound to heal, but also causes pain and many other problems. Patients are often accompanied by less colorful face, poor diet, fatigue, pale white tongue, thin white moss, and fine pulse, tonifying the middle and benefiting qi soup is the main treatment [3] for malnutrition, yin deficiency and fever, and qi deficiency and fatigue, which is effective in solving the complications such as difficulty in bowel movement after anorectal disease surgery. Hu Liangsheng took 150 patients diagnosed with constipation after anal and intestinal diseases by excluding other diseases, and took Jiawei tonifying zhong yi qi pill internally, and found that most of the symptoms and signs of the patients

were relieved after this treatment, which determined that the internal use of traditional Chinese medicine has significant curative effect [4].

3.1.3 Qi stagnation and blood stasis type

Chinese medicine believes that the physiological characteristics of the anorectum have poor local blood circulation, poor qi and blood operation, and the pathological characteristics of being sick with much moisture and susceptible to dampness and evil qi. Surgery will lead to perianal veins and collaterals damage, poor circulation of qi and blood, blood stasis and water stop, so postoperative patients are often accompanied by edema, pain and other symptoms, and both dark color, tongue with ecchymosis, the tongue under the collaterals purple and dark is especially obvious and other characteristics [5]. Professor Hu Haihua seems to think that traumatic edema and pain in anal and intestinal diseases have the pathological characteristics of "water stagnation" and "blood stasis" coexisting, which should be treated by transforming qi to promote water retention, activating blood circulation and removing blood stasis, therefore, the basic formula of Wu Ling San is used, and the additions of products that activate blood circulation are used to promote blood circulation, such as Angelica sinensis, radix Paeonia lactiflora, rhubarb, Rhubarb, etc. Tiger Cane, Chuanxiong, etc. are used,

3.2 External Treatments

Traditional Chinese medicine external treatment has a long history of treating anal and intestinal diseases, in the treatment of postoperative complications of anal and intestinal diseases, compared with modern medicine, traditional Chinese medicine external treatment has the obvious advantages of simple operation, easy acceptance by the patients, and small side effects. Specifically, it includes acupuncture treatment, traditional Chinese medicine fumigation, acupoint injection, moxibustion therapy, auricular acupuncture point pressure bean method and other treatment methods, and is not limited to this.

3.2.1 Acupuncture treatment

Acupuncture therapy is through the acupuncture points of the meridian sensory transmission makes the "qi to the place of disease", with dredging the meridians and channels, running gi and blood, vin and yang secret, replenish the deficiency and diarrhea, eliminate swelling and pain, activate blood circulation and remove blood stasis, it is an important therapeutic method for the clinical treatment of postoperative complications of anorectal disease [6]. Postoperative sensitivity to pain response in anorectal disease is a result of persistent spasm of the sphincter muscle caused by postoperative release of inflammatory mediators, stimulation of the wound surface by activities such as defecation and dressing change [7]. Ping Zhang [8] divided 80 patients equally into observation and control groups using single and double number method, one group used specific therapy in addition to external treatment with Chinese herbs and needling of the point of subsarcolemma. The other group used only the external treatment of traditional Chinese medicine. As far as the above data are concerned, it seems that Chinese

medicine fumigation sitz bath combined with acupuncture on Tsios point has good efficacy in relieving traumatic pain and making the edema of the wound margins reduce after the operation of anal diseases. The most common postoperative complications of anorectal diseases may be complicated by bleeding or bladder rupture, and in severe cases, peritonitis, if not treated in time, while catheterization causes more pain and may produce side effects such as infection or damage to the urethra [9]. Jinhua et al [10] treated patients with postoperative urinary retention after anorectal disease with acupuncture, and the control group took western medicine, and found that the amount of residual urine in the bladder of the patients treated with acupuncture was significantly reduced, while at the same time, the duration of urination was shortened, and compared with the control group, the efficacy of the patients treated with acupuncture was significant. Thus, it seems that acupuncture is an effective treatment for postoperative urinary retention in anal and intestinal diseases. Thus, it seems that acupuncture plays a key role in the treatment of traditional Chinese medicine, and acupuncture acts on the surface of the whole body, up and down, smooths the bladder meridian qi, restores qi and blood to normal, relaxes the bladder sphincter muscle, and can effectively relieve urinary retention [11].

ISSN: 2006-2745

3.2.2 Chinese medicine fumigation

The specific method of Chinese medicine fumigation sitz bath Chinese medicine is decomposed in the medicinal liquid, and the patient's rectum and perianal area is disinfected through the vaporization of steam and medicinal liquid, and the temperature of the water is lowered to the temperature that is acceptable to the patient, and then the patient can take a sitz bath. In recent years, herbal sitz baths have been widely accepted by the clinic for their safety, effectiveness and simplicity, and have been shown to have significant efficacy in the treatment of postoperative pain, swelling, itching, eczema, infections, and other complications of anal and intestinal diseases [12]. Fang Fang and Zhu Jianhong [13] divided 80 patients with postoperative anal surgery complications into 2 groups. One group of patients used postoperative traditional potassium permanganate. The other group of patients used hemorrhoidal relief soup (horse-teeth water pipe, duck-top grass, xuanming powder, asparagus, and five-fold seeds). Both were treated with sitz bath. After 7 days, the therapeutic effect of the two groups of patients showed that the traditional Chinese medicine sitting bath method was more effective. Liu Dan et al. divided 3000 patients into two groups [14], both using the treatment method of sitz bath, one group used potassium permanganate for control, and the other group used traditional Chinese medicine fumigation for treatment, and the study showed that, compared with potassium permanganate sitz bath, the traditional Chinese medicine fumigation and sitz bath treatment method was significantly better than the former in terms of eliminating edema, relieving pain, etc. In February 2014 - July 2015, the first study was carried out in Shanghai, China, and the first study was carried out in Shanghai, China. July 2015, 70 patients with postoperative complications of circumferential mixed hemorrhoids who underwent surgical treatment for the first time in Longhua Hospital affiliated with Shanghai University of Traditional Chinese Medicine. Zhang Qiang et al. [15] divided the 70 patients into two groups equally, one

group was the treatment group and the other group was the control group. After anesthesia was administered to both groups, surgical treatment was used. Five-fold soup (Wu Bei Zi 30 g, Park Nit 30 g, Sang Mang Sheng 30 g, Thorny Thistle 30 g, Lian Fang 30 g) fumigation sitz bath combined with anal dilatation was used in the treatment group, while the control group only used five-fold soup fumigation sitz bath. Comparing the clinical efficacy of the two groups, it can be found that the postoperative recovery process of the patients in the treatment group was significantly shortened, and effectively reduced their anal stenosis and anal distension. Yuan Quanliang et al. [16] conducted a postoperative study of anal fistula in rats, 40 SD rats were bred for specificity, and 10 rats were placed in the control group, in addition to the establishment of the model, after the modeling was successful, the rats were randomly divided into three groups, the first group was treated with saline only on the traumatic surfaces, the traumatic surfaces of the rats in the second group were scrubbed with five-fold broth, and the third group used potassium permanganate on the treatment of rats, the results showed that all the other groups had a significant reduction in the recovery process, and effectively reduced their anal stenosis and anal distension. The results showed that except for the first group, the other two groups of drugs improved the recovery of the wounds of rats, and the inflammatory reaction in the body of rats in the group of the first five times the seeds soup was significantly reduced, and the pain was also reduced. Thus, it seems that Wu Bei Zi Tang plays the role of improving the level of inflammatory factors and can inhibit the postoperative pain response to a certain extent.

3.2.3 Moxibustion therapy

Moxibustion can prevent and cure diseases, as one of the earliest methods of curing diseases in China, moxibustion is a compound effect of drugs and physics, which can play the role of dredging meridians, regulating qi, warming and dispersing the cold in the body [17]. Moxibustion is made of moxa leaves, moxa produced by the moxa heat through the stimulation of body surface points or specific parts, can stimulate the meridian qi and then adjust the body's physiological function, to achieve the purpose of prevention and treatment of disease. In clinical application, moxibustion is often used as a complement to acupuncture. Compared with acupuncture, moxibustion has the advantages of less pain and easy acceptance by patients. As the "Spiritual Pivot" cloud, "the needle is not, moxibustion is appropriate". Lin Yufang [18] divided 60 cases of postoperative urinary retention in line with anorectal disease into two groups. The patients in the control group were treated with psychological comfort and hot compresses, while the patients in the observation group were treated with moxibustion (acupoints: Qihai, Guanyuan, and Zhongji), and the patients felt warmth and the skin was slightly flushed. After the two groups of patients were treated, the healing of patients in the observation group was significantly better than that of the control group. It was found that the application of moxibustion combined with traditional Chinese medicine intervention is beneficial to reduce the degree of pain in the trauma of postoperative anorectal surgery patients, effectively reduce the trauma edema, enhance the serum EGF level, accelerate the growth of fresh granulation, and then effectively promote the healing of the trauma [19].

3.2.4 Auricular therapy

Auricular pressure bean is one of the characteristic treatment methods of traditional Chinese medicine, which is low cost, easy to operate, and highly accepted by the public, and is now widely used in the clinical treatment of postoperative analgesia after anal and intestinal surgery and insomnia and other diseases [20]. According to the study, among the auricular points for analgesia, the first ranked auricular point or auricular sensitive point and corresponding to the site of disease accounted for 21. 70% [21]. Zhu Jianhong et al. divided 100 patients with postoperative complications after anal surgery into an observation group and a control group using the randomized numerical table method. Both patients in the control group and the control group were treated with traditional therapies, and one day after the surgery, patients in the observation group were treated with auricular pressure beans related points. Compared with only traditional therapy, the addition of auricular pressure beans to relevant acupoints played a favorable role in eliminating edema and relieving pain in the recovery of postoperative anorectal wounds, and promoted the rapid recovery of patients [22]. Some studies have shown that auricular acupoint pressure bean can make the pain score of postoperative anorectal disease decrease substantially, with the advantages of good analgesic effect and few adverse reactions. However, considering its limitations, multi-center, multi-sample, high-quality studies are needed to provide further detailed and accurate basis for clinical application [23].

ISSN: 2006-2745

3.3 Combination of Chinese and Western Medicine

The internal treatment of Chinese medicine recognizes the evidence, which makes the treatment with Chinese herbal tonics more targeted and shortens the recovery process [24]. However, the disadvantage of using only oral treatment with traditional Chinese medicine is that it cannot reach the lesion directly and the therapeutic effect is poor, so it should be used in combination with other treatment methods. With the rapid development of modern medicine, the use of combined Chinese and Western medicine treatment can accelerate the recovery process of patients, which is beneficial to the treatment of postoperative complications of anal diseases. Yang Yu [25] selected patients undergoing surgical treatment in Minhou County People's Hospital as the study object, and 34 patients were randomly divided into two groups. Postoperative rh-aFGF treatment was given as a control, and on the basis of the control group, patients treated with dioscorea villosa were added as an observation group, and the two groups were compared. It was concluded that the combination of rh-aFGF with dioscorea villosa has the effect of accelerating wound healing and reducing pain. Thus, it seems that the use of combination therapy is very beneficial to the postoperative recovery of patients with anorectal disease.

4. Summary and Outlook

Various therapies in Chinese medicine are clinically effective in treating common postoperative complications of anorectal diseases, which can effectively reduce adverse reactions and improve the safety of treatment, especially acupuncture, moxibustion, ear acupuncture and other therapies, which are uniquely advantageous. However, Chinese medicine scholars have their own views on the disease, based on personal clinical experience in the identification of evidence-based treatment, in the treatment of different aspects. The disadvantage is that it is difficult to form a unified standard for TCM therapies, and the standardization and standardization of TCM has yet to be perfected in comparison with modern medicine. In addition, the lack of preventive research on TCM in intervening with patients who have developed complications requires relevant researchers to explore the application of TCM in preventing and treating postoperative complications of anorectal surgery, and TCM can play a more effective role in assisting the prevention and treatment of common postoperative complications of anal and intestinal diseases.

References

- [1] Zeng Shun'an, Xu Bin, Fang Xucheng. Current status of research on the prevention and treatment of postoperative complications of anal and intestinal surgery by traditional Chinese medicine [J]. Xinjiang Traditional Chinese Medicine, 2021, 39(03):122-125.
- [2] ZHANG Mengdi, BAI Keyun. Treatment of postoperative anal itching in anorectal diseases from the perspective of dampness [J]. Chinese medicine clinical research, 2021, 13(29):126-128.
- [3] Shen Yao. Research on formula evidence of tonifying Zhong Yi Qi Tang [D]. Shanxi University of Traditional Chinese Medicine, 2017.
- [4] HU Liangsheng. Treatment of 150 cases of postoperative constipation after hemorrhoidal surgery by adding flavor to tonify the middle and benefit qi soup [J]. Hubei Journal of Traditional Chinese Medicine, 2010, 32(12):64.
- [5] FAN Yitang, HU Haihua, DING Zhaoliang. Application of the meridian wuling san heterogeneous diseases in anorectal department [J]. China Traditional Chinese Medicine Modern Distance Education, 2023, 21(23): 90-92+102.
- [6] HAN Xiaoyu, WANG Kewei, LU Jin. Progress of clinical research on the treatment of postoperative complications of anal and intestinal diseases by acupuncture [J]. Jiangsu Traditional Chinese Medicine, 2023, 55(06):73-76.
- [7] YANG Zhitao, ZHANG Jitao, WANG Dengxiu. Efficacy of internal and external combined treatment of hemorrhoids in traditional Chinese medicine and its effect on serum IL-17, IL-6, and TNF-α levels [J]. Chinese Journal of Traditional Chinese Medicine, 2018, 36(8):1933
- [8] Zhang P, Xue JH, Kou WP. Study on the effect of acupuncture at the point of "Tsi-siao" to improve pain and edema after anal and intestinal surgery and changes in the levels of related pain mediators and inflammatory factors [J]. Chinese Journal of Traditional Chinese Medicine: 1-10.
- [9] GUO Songming, SHEN Qun, TONG Hongbin. Clinical observation of acupuncture plus moxibustion Guanyuan acupoint method for the treatment of postoperative urinary retention after mixed hemorrhoids [J]. Surgical Research and New Technology, 2018, 7(3):115-117.

[10] HUANG Bin, ZHANG Yuru, LIU Liancheng, et al. Research progress of acupuncture and moxibustion in the treatment of postoperative complications of anorectal surgical diseases [J]. Chinese Journal of Integrated Chinese and Western Medicine Surgery, 2020, 26(05):1019-1022.

ISSN: 2006-2745

- [11] Li H, Zhou CK, Song J, et al. Curative efficacy of low frequency electrical stimulation in preventing urinary retention after cervical cancer operation [J]. World J Surg Oncol, 2019, 17 (1): 141.
- [12] Yang Zhuo, Li Shuxia. Progress of clinical research on the treatment of postoperative complications of anal and intestinal diseases by Chinese medicine fumigation sitz bath [J]. Journal of Gansu University of Traditional Chinese Medicine, 2022, 39(01):93-96.
- [13] FANG Fang, ZHU Jianhong, DAI Qiu'an, et al. The effect of hemorrhoid relief soup sitz bath on postoperative wound healing of mixed hemorrhoids [J]. Shaanxi Traditional Chinese Medicine, 2017, 38(3): 349-350.
- [14] LIU Dan, LIU Zelin, TAO Jiaxu. Traditional Chinese medicine fumigation sitz bath for postoperative infection pain and edema in anorectal department [J]. Chinese and Western Medicine Cardiovascular Disease Electronic Journal, 2020, 8(22):149.
- [15] ZHANG Qiang, HE Chunmei, LU Jingen. Evaluation of the efficacy of preventing postoperative complications of circumferential mixed hemorrhoids based on the "Cure the Future Disease" anal expansion method combined with traditional Chinese medicine fumigation [J]. Chinese general medicine, 2017, 20(S2): 332-334.
- [16] YUAN Quanliang, ZHANG Qingdong, GUO Yue, et al. Study of the mechanism of action of self-propagating five-fold soup on analgesia and inflammation inhibition after anal fistula surgery in rats based on NF-κB p65 pathway [J]. Journal of Chinese Medicine, 2023, 38(10): 2175-2181.
- [17] Rui Li. Observation on the efficacy of moxibustion in the treatment of postoperative urinary retention in anal and intestinal diseases [J]. Inner Mongolia Traditional Chinese Medicine, 2017, 36(03):121.
- [18] Lin YF. Clinical observation of moxibustion in the treatment of postoperative urinary retention after anorectal disease [J]. Pharmacology and Clinics of Traditional Chinese Medicine, 2015, 31(01):326-327.
- [19] ZHANG Qiao, ZHAO Ying, LI Chungeng, et al. Study on the effect of moxibustion combined with traditional Chinese medicine intervention on pain level and wound healing in postoperative patients with perianal abscess [J]. Hebei Traditional Chinese Medicine, 2023, 45(11): 1815-1818+1823.
- [20] XU Zhigang, WANG Zhenquan, JIANG Tao. Therapeutic progress of Chinese and Western medicine for postoperative analgesia in anal and intestinal diseases [J]. Hunan Journal of Traditional Chinese Medicine, 2018, 34(9):199-201.
- [21] YU Xiaohua, ZHANG Chunping, ZHANG Zhiwen. Literature study on the law of using auricular points for analgesia [J]. Shandong Journal of Traditional Chinese Medicine, 2015, 34(2):112-113.
- [22] Jiang Ziwei. Clinical efficacy observation of auricular pressure bean on common postoperative complications of damp-heat-infiltrating type of circumferential mixed

ISSN: 2006-2745

- hemorrhoids [D]. Fujian University of Traditional Chinese Medicine, 2023.
- [23] Zeng Lian, Sheng Li, Yang Shanying, et al. Meta-analysis of the efficacy of auricular pressure beans on postoperative analgesia in anal and intestinal diseases [J]. Chinese Journal of Traditional Chinese Medicine, 2022, 46(02):22-28.
- [24] ZHOU Haozhong, SHI Yuefan, ZHANG Rujie, et al. Research progress of Chinese and western medicine in treating postoperative anal margin edema of mixed hemorrhoids [J]. Chinese Journal of Integrative Medicine and Surgery, 2023, 29(03):393-397.
- [25] Yang Y. Analysis of the effect of Dioscorea villosa combined with rh-aFGF in the treatment of postoperative patients with high complex anal fistula [J]. Chinese and Foreign Medical Research, 2023, 21(20): 156-160.