

Current Status of Traditional Chinese and Western Medicine Diagnosis and Treatment of Chronic Pelvic Pain Caused by Digestive Diseases

Hui Su¹, Jun Zhou^{2,*}, Xijing Gao¹

¹ *The First Clinical Medical College of Shaanxi University of Traditional Chinese Medicine, Xianyang, Shaanxi, 712000, China*

² *General Surgery, Affiliated Hospital of Shaanxi University of Traditional Chinese Medicine, Xianyang, Shaanxi, 712000, China*

**Corresponding Author*

Keywords: Digestive system diseases, Chronic pelvic pain, Research progress

Abstract: The etiology of chronic pelvic pain (CPP) is complex and involves multiple system diseases. Digestive system diseases, mainly inflammatory bowel disease, irritable bowel syndrome, and colorectal cancer, are the common causes of CPP. Drug or surgical treatment is the main treatment, with many adverse drug reactions, long cycle, and easy recurrence. Some patients still do not relieve CPP after surgical treatment. Chinese medicine can treat pain by regulating immunity, inflammatory response, intestinal flora imbalance, and promoting gastrointestinal motility. Chinese medicine in the treatment of CPP-related digestive diseases has the characteristics of short cycle, positive effect, and not easy to relapse. This article reviews the relevant understanding of CPP and the traditional Chinese and Western medicine treatment of CPP caused by digestive system diseases, so as to provide reference for clinical diagnosis and treatment.

1. Introduction

Chronic pelvic pain (CPP) is a group of pain syndromes lasting more than 6 months due to various functional or (and) organic causes. The pain often involves the pelvis, abdomen below the navel, back and buttocks ^[1]. By definition, chronic persistent pain in the lower abdomen caused by diseases of the digestive system also belongs to the category of CPP. It is well known that many chronic pains can lead to anxiety and depression. More than 50% of CPP patients suffer from moderate to severe anxiety disorders, and more than 25% % of patients suffer from moderate to severe depression ^[2]. Digestive system-related CPP often manifests as dull pain, dull pain, non-periodic and persistent attacks, often accompanied by symptoms of reproductive system, autonomic nervous system or urinary system, and sometimes manifested as loss of appetite, fatigue, inability to concentrate, etc. ^[3]. It causes great distress to people's work and study, and the diagnosis and treatment process is difficult, requiring multidisciplinary assistance in diagnosis and treatment. With the continuous improvement of people's understanding of CPP, CPP caused by non-gynecological-related digestive system diseases cannot be ignored. This article reviews the

research progress of chronic pelvic pain caused by digestive system diseases and its treatment with traditional Chinese and western medicine, and provides references for clinical diagnosis and treatment.

2. A Western Medicine's Understanding of CPP

CPP is a group of syndromes, involving gynecological diseases, urinary system, gastrointestinal diseases, motor system, neuroendocrine system and many other related disciplines ^[4]. Digestive system diseases are one of the common causes of CPP, which cannot be ignored in clinical practice. Inflammatory bowel disease, irritable bowel syndrome, colorectal cancer, etc. are common in the digestive system, and non-digestive system diseases are common in endometriosis, pelvic inflammatory disease, adhesions after gynecological surgery, interstitial cystitis, urinary Infections, musculoskeletal system diseases, nervous system diseases, etc. ^[5]. The etiology of CPP is complex, and the diagnosis and treatment requires multidisciplinary assistance, which is a major challenge for clinicians. Therefore, research on CPP has important clinical significance. Pain caused by digestive diseases may be related to diet and lesion site, so the pain is often different.

2.1 CPP Caused by Digestive System Diseases

Inflammatory bowel disease (IBD), including Crohn's disease (CD) and ulcerative colitis (UC), is a chronic inflammatory disease with exacerbation and remission periods that mainly affects the gastrointestinal tract. It often presents with abdominal pain and chronic diarrhea, of which abdominal pain is the most serious symptom prompting a patient to seek medical attention. Chronic abdominal pain has been reported in 20-25% of patients during remission, and up to 70% of patients develop abdominal pain as the disease worsens. Acute inflammation is secondary to the development of the disease, and organic diseases such as stricture, adhesion, intestinal obstruction, intestinal peristalsis, intestinal fistula or abscess formation can all cause abdominal pain and discomfort. At the same time, the use of drugs, depression, and anxiety can also increase the frequency of abdominal pain. ^[6]. UC lesions often involve the sigmoid colon and rectum, and a few lesions can invade the terminal ileum, often manifesting as intermittent lower abdominal pain. CD can involve the entire digestive tract, often involving the terminal ileum. The onset of the disease is slow, the course of the disease is long, and the abdominal pain is often mild, showing spastic pain in the right lower quadrant or around the umbilicus. Because IBD lesions often involve the lower abdomen, it is manifested as pelvic pain symptoms. The pathogenesis of pain in IBD patients remains unclear, but several potential pathological mechanisms have been proposed, including inflammatory, ileus, psychological, psychosocial, neurobiological, and genetic factors ^[7]. Identifying this pathological mechanism of pain seems to provide a new idea for the treatment of chronic pain caused by IBD.

Irritable bowel syndrome (IBS) is a chronic relapsing, remitting disease, including defecation-related abdominal pain and changes in bowel habits, with a global incidence of up to 11.7%, typical IBS manifestations in early adulthood, in women more common in ^[8]. Pain is the most distressing of IBS symptoms and seriously affects the quality of life. Most patients are not satisfied with the existing treatment methods for IBS pain, and it is urgent to find new and more effective treatment methods. Therefore, understand the pathogenesis of abdominal pain in IBS patients. The mechanism is crucial and offers us new directions in the treatment of abdominal pain. IBS-related abdominal pain is associated with sensitization of the central and peripheral nervous systems and mechanisms in the gut. The central mechanism is based on the brain-gut axis, and external stimuli affect the gut-brain axis, thereby releasing inflammatory cytokines. It was found that the content of cytokines such as IL-1 β , IL-L1, TNF α and IL-6 in the supernatant of IBS patients

was increased, and the concentration of these cytokines was positively correlated with the frequency and severity of abdominal pain ^[9]. Studies have found that bacterial infections and bacterial toxins in the gut mechanism can trigger an immune response, causing mast cells to release histamine receptor H1 (H1R), which increases visceral sensitivity, resulting in neural excitation and smooth muscle contraction, which can lead to intestinal transit disorders and abdominal pain ^[10]. IBS often has a gas-filled tube-like sensation in the cecum and sigmoid colon. When the lesion involves the lower abdomen, it manifests as pelvic pain, or colic in severe cases, which can be relieved after exhausting and defecation.

Colorectal cancer (CRC) It is the third most common cancer. About 41% occur in the proximal colon, 22% in the distal colon, and 28% in the rectum ^[11]. Abdominal pain and changes in the nature of bowel habits are considered common symptoms, especially in the advanced stages of the disease, with more than 70% of abdominal pain, often chronic persistent pain ^[12]. In colon cancer, lesions on the right side of the colon generally do not cause abdominal pain. When the colon cancer on the left side becomes thinner and the tumor infiltrates the serosal layer, there is often a dull pain in the left side or lower abdomen. Rectal cancer is generally painless. When the tumor penetrates the intestinal wall and reaches the pelvic wall, sacrum or sacral nerve plexus, it will cause lumbosacral bulge and severe pain, often involving the lower abdomen, waist and thighs, and pelvic pain symptoms. Pain in patients with colorectal cancer may be receptor-mediated (nociceptive), neuropathic, or psychogenic. Receptor-mediated pain is the direct excitation or sensitization of nociceptors due to the action of pain factors. Tumor cells are also rich in pain mediators, and these molecules are released into the extracellular fluid and bind to receptors expressed by primary afferent nerve fibers A and C ^[13]. A large number of studies have shown that the expression of transient receptor potential (Trp) family members in cancer tissues is significantly deregulated, which leads to increased proliferation and metastasis of colorectal cancer cells, thereby inducing pelvic pain ^[14].

2.2 Western Medicine Treatment of CPP Caused by Digestive System Diseases

symptoms of CPP caused by digestive diseases are the result of the interaction between psychological factors and dysfunction of the immune, neurological and endocrine systems, so the treatment of CPP should follow a multidisciplinary collaboration. A large number of clinical studies have shown that diet, exercise, cognitive behavioral therapy, and drug intervention are all effective in the treatment of CPP.

Diet therapy: Diet therapy should be considered first in the treatment of CPP caused by digestive diseases. In view of the fact that food first enters the digestive tract, an unpleasant diet will affect the prevalence to a certain extent and cause abdominal pain, diarrhea, and changes in stool, among which abdominal pain is a common cause of distress for patients. It is well known that the composition of the gut microbiota is influenced by diet, and there is a mutually beneficial symbiotic relationship between the gut microbiota and the host, which is crucial for human health ^[15]. Inflammatory states and immune responses are important contributors to the pathogenesis of CPP. Diet plays a crucial role in the etiology of intestinal inflammation and has been shown to affect the gut microbiota, mucosal barrier, and mucosal immunity, all of which contribute to Modulate susceptibility to intestinal inflammation ^[16]. Saez-Gonzalez et al ^[17] showed that a Westernized high-fat diet rich in refined carbohydrates can increase the occurrence of IBD, in contrast to a diet rich in fruits, vegetables, and omega-3 polyunsaturated fatty acids, which can prevent IBD. Westernized high-fat diets are low in micronutrients with anti-inflammatory and antioxidant properties, which may be related to the high incidence of inflammatory diseases in Western countries. A clinical study by Altobelli et al.^[18] showed that a diet reduced in fermentable

oligosaccharides, disaccharides, and monosaccharides and polyols (FODMAP) can provide adequate relief of symptoms in approximately 70% of IBS patients and is equally effective in IBD patients, especially in abdominal pain. , In terms of abdominal distension, FODMAP is a short-chain carbohydrate (SCC) with osmotic activity, which is poorly absorbed by intestinal bacteria and rapidly fermented to produce gas, causing intestinal lumen to expand and induce gastrointestinal symptoms in susceptible individuals. Low FODMAP diet can reduce Serum levels of pro-inflammatory interleukins (ILs) IL-6 and IL-8, and levels of fecal bacteria. In recent years, it has been recognized that diet plays an important role in the development of colorectal cancer, and there is increasing evidence that diet can affect the gut microbiota, and that gut microbiota dysbiosis can be affected by the production of harmful metabolites and changes in host physiological processes. Promote the occurrence and development of CRC. A study found that people who eat a Western-style diet rich in animal fat, meat, and low in fiber have an increased risk of CRC The production of multi-site carcinogens ^[19]. Diet therapy can not only be used to treat IBD, IBS, CRC, but also can affect the occurrence and development of the disease, and a healthy diet has been paid more and more attention by people.

Exercise therapy: It is well known that proper physical activity can relieve fatigue and control obesity, which is beneficial to human health. Physiologically, exercise can enhance immune responses and reduce pro-inflammatory cytokines, and play an integral role in the management of various autoimmune diseases ^[20]. In gastrointestinal diseases such as IBS, IBD, and CRC, inflammation and immune response play an important role. Appropriate physical activity has been proven to improve CPP-related digestive diseases. There is substantial epidemiological evidence that people who participate in higher levels of physical activity are less likely to develop various cancers than those who lack physical activity, and physical activity is also a useful adjunct to improving fatigue and pain during cancer treatment ^[21]. In daily life, it is not difficult to find that physical activity can promote intestinal peristalsis, relieve fatigue and improve pain symptoms. Sadeghian and team ^[22] found a significant negative correlation between physical activity and the risk of IBS and IBD. This may be due to the positive effects of physical activity on the brain-gut axis by promoting neurogenesis, neuroadaptation, and neuroprotective processes, alleviating CPP symptoms.

Cognitive behavioral therapy (CBT): Cognitive behavioral therapy has been widely recognized for the treatment of CPP. CPP is often accompanied by varying degrees of anxiety or depression, and mental and psychological disorders in turn affect the severity and treatment of CPP. and prognosis. CBT is a goal-oriented psychotherapy that enables patients to properly recognize how their thoughts and behaviors affect their pain and functioning, and to learn how to change those thoughts and behaviors ^[23]. In addition to treating CPP, CBT is used to treat pain-related depression, anxiety, digestive disorders, and more. Kwekkeboom et al ^[24] selected 86 CRC patients, and by understanding their CPP and psychosocial stress, developed a CBT program of relaxation, imagination or distraction exercises provided by MP3 players, and found that the pain of the patients was significantly improved after 2 weeks of treatment. , the pain score was significantly reduced. CBT is an emerging therapy that is completely different from drugs and physical therapy. It is commonly used in CPP patients without obvious contraindications.

Drug therapy: Drugs for the treatment of CPP include antidepressants, non-steroidal anti-inflammatory drugs and analgesics. Antidepressants are considered the first-line treatment for CPP, and two major classes of antidepressants are currently used: tricyclic antidepressants (TCAs) and serotonin norepinephrine reuptake inhibitors (SNRIs) ^[25]. Studies have shown that TCA can treat neuropathic pain, headaches, migraines, gastrointestinal pain, fibromyalgia, pelvic pain, insomnia, and other psychiatric disorders besides depression. TCA not only inhibits the release of histamine from mast cells, but also relieves pain centrally by inhibiting the descending pathway of

pain signaling in the spinal cord, as well as peripheral pain relief through complex anti-neuroimmune effects ^[26]. Duloxetine hydrochloride is a novel (SNRI) antidepressant, and studies have shown that duloxetine can significantly relieve chronic pelvic pain, headache, and back pain associated with major depressive disorder ^[27]. Analgesics are part of cancer pain management. The current strategy for cancer pain treatment is a three-step analgesic ladder, using non-steroidal analgesics and opioids according to the degree of pain ^[28].

3. The Understanding of TCM on CPP

3.1 Understanding of TCM on the Etiology and Pathogenesis of CPP

Inflammatory bowel disease (IBD), irritable bowel syndrome (IBS), and colorectal cancer (CRC) have no corresponding disease names in traditional Chinese medicine, because they are all digestive diseases, and the clinical symptoms are similar and different. The common manifestation is CPP, and according to its symptoms, it is mostly classified as “diarrhea”, “abdominal pain”, “blood in the stool”, “intestinal wind” and so on. The etiology is mostly related to diet, emotion, feeling evil and so on. The disease site is mainly in the intestine, and it is connected with the liver, spleen, kidney, lung and other organs ^[29].

Inflammatory bowel disease (IBD) belongs to the category of “diarrhea” and “abdominal pain” in traditional Chinese medicine. The disease is located in the intestine and is closely related to the liver, spleen, lung and kidney. Mutual Bo, causing the body's qi to be stagnant, qi stagnation unable to flow blood, blood blocking intestinal collaterals, spleen deficiency and water dampness stop, phlegm refining over time, turning into dampness, heat, blood stasis and poison in the body, waiting for an opportunity to develop, resulting in IBD is easy to recur and difficult to heal ^[30].

Irritable Bowel Syndrome (IBS) belongs to the category of “diarrhea” and “abdominal pain” in traditional Chinese medicine. Liver and spleen disorders. Many reasons lead to the dysfunction of the spleen to transport and transform water and dampness, which can produce pathological products such as phlegm, dampness, and drink, resulting in diarrhea; The disease is protracted and difficult to heal ^[31].

Colorectal cancer (CRC) belongs to the categories of “abdominal pain”, “blood in the stool” and “intestinal wind” in traditional Chinese medicine. , heat toxin and so on each other for a long time to form a tumor ^[32].

3.2 Digestive System Causes CPP Chinese Medicine Treatment

Internal treatment of traditional Chinese medicine: The internal treatment of traditional Chinese medicine has a significant effect on chronic pelvic pain caused by digestive system diseases. Ni Menggan et al ^[33] showed that taking Anchang Decoction combined with conventional western medicine treatment can effectively improve abdominal pain and diarrhea symptoms and reduce inflammatory factors in IBS patients with liver depression and spleen deficiency diarrhea, with a total effective rate of 91.30%. The effect of liver- relieving depression makes up for the shortcomings of poor western medicine treatment, promotes the recovery of gastrointestinal function, and relieves abdominal pain symptoms. Internal treatment of traditional Chinese medicine also has significant advantages in cancer pain, which can relieve pain and improve the quality of life of patients. Huang Jian et al ^[34] and other studies have shown that patients with colorectal cancer who take Fuzheng Xiaoi Decoction combined with chemotherapy as adjuvant therapy have significantly reduced tumor markers, TCM syndrome scores, and pain scores, with a total effective rate of 76.92 %, which is significantly higher than that of the control group. Traditional Chinese medicine believes that colorectal cancer is mostly due to spleen deficiency and toxin stagnation, and

the treatment should focus on strengthening the spleen and replenishing qi, removing dampness and eliminating toxins, which reflects the basic principle of syndrome differentiation and treatment in traditional Chinese medicine.

External treatment of traditional Chinese medicine: There are many kinds of external treatment of traditional Chinese medicine, which have the characteristics of positive curative effect, rapid onset of effect, and not easy to recur. Chen Rubing et al. [35] applied moxibustion on the Du meridian to reduce the pain score of CPP patients with cold blood stasis syndrome. This method can warm the meridians and dredge the collaterals, raise the yang and dispel the cold. The so-called failure causes pain. In addition, moxibustion on the Du meridian can also support the righteous qi, regulate the immune function, and improve the immune function. Relieving inflammatory pain, the application of this method can achieve the effect of treating CPP. In addition, massage, manual reduction, and pelvic floor function exercises are all effective for the treatment of CPP. Fu Jinrong et al. [36] applied self-prepared enema of Sanleng, Curcuma, Polygonatum, Corydalis, and Chuan Neem to significantly reduce pelvic pain symptoms in CPP patients with damp-heat stasis syndrome, and improve depression and anxiety to a certain extent. The clinical symptoms of IBD are mainly CPP, chronic diarrhea, and the pain is often intermittent or spasmodic. Li Yuling et al. showed that in the treatment of IBD, a variety of traditional Chinese medicine treatment methods such as acupuncture, acupoint catgut embedding and sticking, ear acupuncture, anus plugging, enema and other traditional Chinese medicine have achieved good curative effects, making Chinese medicine increasingly valued in the treatment of IBD.

4. Conclusion

Pelvic pain caused by digestive diseases is difficult and easy to repeat. Simple western medicine treatment methods are limited, and the effect of drugs or surgery is often unsatisfactory. In recent years, diet, exercise, and cognitive behavioral therapy have been paid more and more attention, which can not only relieve pain symptoms, but also improve depression and anxiety to a certain extent. Traditional Chinese medicine has the advantages of multi-channel, multi-link, and multi-means for the treatment of chronic pelvic pain-related digestive diseases. Traditional Chinese medicine oral administration, enema, acupuncture, massage, acupoint application, ear acupuncture and other characteristic therapies are definitely effective in treating pain and improving quality of life. In the future treatment of CPP, the advantages of traditional Chinese medicine should be brought into play, and both Chinese and Western medicine should be encouraged to better serve the people.

References

- [1] Cheng Fang, Ma Le. *Research progress of physical therapy for chronic pelvic pain [J]. Chinese Journal of Obstetrics and Gynecology*, 2021, 22(02): 205-206.
- [2] TILL SR, AS-SANIE S, SCHREPF A. *Psychology of Chronic Pelvic Pain: Prevalence, Neurobiological Vulnerabilities, and Treatment[J]. Clin Obstet Gynecol*, 2019, 62(1): 22-36.
- [3] Zhou Kainan, Zhang Ying. *Current status of traditional Chinese and Western medicine diagnosis and treatment of chronic pelvic pain caused by gynecological pelvic tumors [J]. Cancer Prevention and Treatment Research*, 2021, 48(02): 196-200.
- [4] Li Yanru, Ran Qingzhen, Liang Junmei. *Analysis of the distribution of physical fitness in female patients with chronic pelvic pain [J]. World Latest Medical Information Digest*, 2017, 17(77): 6-8.
- [5] Chen Juan, Zhu Lan. *Classification of chronic pelvic pain [J]. Journal of Practical Obstetrics and Gynecology*, 2016, 32(05): 321-323.
- [6] COATES MD, JOHRI A, GORREPATI VS, et al. *Abdominal pain in quiescent inflammatory bowel disease[J]. Int J Colorectal Dis*, 2021, 36(1): 93-102.
- [7] ZIELINSKA A, SALAGA M, WLODARCZYK M, et al. *Focus on current and future management possibilities in*

- inflammatory bowel disease-related chronic pain[J]. *Int J Colorectal Dis*, 2019, 34(2): 217-227.
- [8] WOUTERS M M, BALEMANS D, Van WANROOY S, et al. Histamine Receptor H1-Mediated Sensitization of TRPV1 Mediates Visceral Hypersensitivity and Symptoms in Patients With Irritable Bowel Syndrome[J]. *Gastroenterology*, 2016, 150(4): 875-887.
- [9] ZIELINSKA A, SALAGA M, WLODARCZYK M, et al. Chronic abdominal pain in irritable bowel syndrome - current and future therapies[J]. *Expert Rev Clin Pharmacol*, 2018, 11(7): 729-739.
- [10] AGUILERA-LIZARRAGA J, FLORENS M V, VIOLA M F, et al. Local immune response to food antigens drives meal-induced abdominal pain[J]. *Nature*, 2021, 590(7844): 151-156.
- [11] THANIKACHALAM K, KHAN G. Colorectal Cancer and Nutrition[J]. *Nutrients*, 2019, 11(1).
- [12] SAEED R S, BAKIR Y Y, ALKHALIFAH K H, et al. Knowledge and Awareness of Colorectal Cancer among General Public of Kuwait[J]. *Asian Pac J Cancer Prev*, 2018, 19(9): 2455-2460.
- [13] ZIELINSKA A, WLODARCZYK M, MAKARO A, et al. Management of pain in colorectal cancer patients[J]. *Crit Rev Oncol Hematol*, 2021, 157: 103122.
- [14] STOKLOSA P, BORGSTROM A, KAPPEL S, et al. TRP Channels in Digestive Tract Cancers[J]. *Int J Mol Sci*, 2020, 21(5).
- [15] CARUSO R, LO B C, NUNEZ G. Host-microbiota interactions in inflammatory bowel disease[J]. *Nat Rev Immunol*, 2020, 20(7): 411-426.
- [16] SUGIHARA K, KAMADA N. Diet-Microbiota Interactions in Inflammatory Bowel Disease[J]. *Nutrients*, 2021, 13(5).
- [17] SAEZ-GONZALEZ E, MATEOS B, LOPEZ-MUNOZ P, et al. Bases for the Adequate Development of Nutritional Recommendations for Patients with Inflammatory Bowel Disease[J]. *Nutrients*, 2019, 11(5).
- [18] ALTOBELLI E, DEL N V, ANGELETTI P M, et al. Low-FODMAP Diet Improves Irritable Bowel Syndrome Symptoms: A Meta-Analysis[J]. *Nutrients*, 2017, 9(9).
- [19] LI J, ZHANG A H, WU F F, et al. Alterations in the Gut Microbiota and Their Metabolites in Colorectal Cancer: Recent Progress and Future Prospects[J]. *Front Oncol*, 2022, 12: 841552.
- [20] SHARIF K, WATAD A, BRAGAZZI N L, et al. Physical activity and autoimmune diseases: Get moving and manage the disease[J]. *Autoimmun Rev*, 2018, 17(1): 53-72.
- [21] BROWN J C, WINTERS-STONE K, LEE A, et al. Cancer, physical activity, and exercise[J]. *Compr Physiol*, 2012, 2(4): 2775-2809.
- [22] SADEGHIAN M, SADEGHI O, HASSANZADEH K A, et al. Physical activity in relation to irritable bowel syndrome among Iranian adults[J]. *PLoS One*, 2018, 13(10): e205806.
- [23] ROZICH J J, HOLMER A, SINGH S. Effect of Lifestyle Factors on Outcomes in Patients With Inflammatory Bowel Diseases[J]. *Am J Gastroenterol*, 2020, 115(6): 832-840.
- [24] KWEKKEBOOM K L, ABBOTT-ANDERSON K, CHERWIN C, et al. Pilot randomized controlled trial of a patient-controlled cognitive-behavioral intervention for the pain, fatigue, and sleep disturbance symptom cluster in cancer[J]. *J Pain Symptom Manage*, 2012, 44(6): 810-822.
- [25] FARMER A D, AZIZ Q. Mechanisms and management of functional abdominal pain[J]. *J R Soc Med*, 2014, 107(9): 347-354.
- [26] SCHNEIDER J, PATTERSON M, JIMENEZ X F. Beyond depression: Other uses for tricyclic antidepressants[J]. *Cleve Clin J Med*, 2019, 86(12): 807-814.
- [27] ZHANG M, LI H, JI Z, et al. Clinical study of duloxetine hydrochloride combined with doxazosin for the treatment of pain disorder in chronic prostatitis/chronic pelvic pain syndrome: An observational study[J]. *Medicine (Baltimore)*, 2017, 96(10): e6243.
- [28] ZIELINSKA A, WLODARCZYK M, MAKARO A, et al. Management of pain in colorectal cancer patients[J]. *Crit Rev Oncol Hematol*, 2021, 157: 103122.
- [29] Zhang Beiping , Cheng Yi , Zhao Xiyang . Research progress on the efficacy and mechanism of traditional Chinese medicine in inflammatory bowel disease [J]. *Beijing Chinese Medicine*, 2020, 39(03): 216-219.
- [30] Zhang Tianhan, Shen Hong. Thinking of TCM Differentiation and Treatment of Inflammatory Bowel Disease [J]. *Journal of Traditional Chinese Medicine*, 2019, 60(14): 1191-1193.
- [31] Zhang Shengsheng, Wei Wei, Yang Jianqin. Expert consensus on TCM diagnosis and treatment of irritable bowel syndrome (2017) [J]. *Journal of Traditional Chinese Medicine*, 2017, 58(18): 1614-1620.
- [32] He Wenting, Zhang Tong, Yang Yufei, et al. Meta -analysis of clinical efficacy and syndrome type analysis of traditional Chinese medicine in the treatment of colorectal cancer [J]. *Journal of Traditional Chinese Medicine*, 2018, 59(22): 1929-1936.
- [33] Ni Mengxi, Zhang Hui, Zhu Junyi. Effects of Anchang Decoction on symptoms, signs and quality of life in patients with diarrhea-type irritable bowel syndrome with liver stagnation and spleen deficiency syndrome [J]. *China Journal of Integrated Traditional Chinese and Western Medicine*, 2022, 30(01): 6-10.
- [34] Huang Jian, Hu Ke. The efficacy of Fuzheng Xiaoi Decoction combined with chemotherapy in patients with

colorectal cancer and its effects on immune function, clinical symptoms and quality of life [J]. Zhonghua Journal of Traditional Chinese Medicine, 2017, 35(06): 1617-1620.

[35] *Chen Rubing, Wang Zulong, Zhao Panpan, et al. Du Meridian Moxibustion in Treating Chronic Pelvic Pain Syndrome with Cold Blood Stasis Syndrome [J]. Journal of Traditional Chinese Medicine, 2019, 34(12): 2674-2678.*

[36] *Fu Jinrong, Shen Yufeng, Zhang Junjie, et al. Clinical evaluation of the treatment of chronic pelvic pain with different diseases and the same treatment with Pentonglingfang enema [J]. Journal of Shanghai University of Traditional Chinese Medicine, 2018, 32(06): 34-39.*