

Expert Consensus on TCM Diagnosis and Treatment of Irritable Bowel Syndrome (2017)

Branch of Gastrointestinal Diseases, China Association of Chinese Medicine

Irritable bowel syndrome (IBS) is a functional bowel disease characterized by recurrent abdominal pain accompanied by abnormal bowel movements or changes in bowel habits. The symptoms occur at least 6 months before diagnosis and persist in the past 3 months. The disease lacks morphological changes and abnormal biochemical examinations that can explain the symptoms and is a common and frequently-occurring disease in the Gastroenterology Department. The incidence of IBS in Asian countries is 5% - 10% ^[1]. Despite the absence of epidemiological data for a large sample population, it has been confirmed that the prevalence of this disease varies with regions, 0.82% in Beijing ^[2], and 5.16% in Guangzhou ^[3]. In Wuhan, 10.7% of the patients in the Gastroenterology Department clinic were diagnosed with IBS ^[4]. In the past ten years, with the improvement of living standards and changes in dietary structure, living habits and changes in the environment, the number of patients diagnosed with this disease has been increasing year by year. As one of the dominant diseases treated by traditional Chinese medicine (TCM), TCM has shown a good curative effect on IBS. Branch of Gastrointestinal Diseases, China Association of Chinese Medicine issued the *Consensus Opinions on the TCM Diagnosis and Treatment of Irritable Bowel Syndrome* in 2009.[5]. In recent years, with the deepening of the understanding of TCM research on IBS, it is necessary to update *the Consensus Opinions on the TCM Diagnosis and Treatment of IBS* to meet the needs of clinical diagnosis and treatment and scientific research.

Branch of Gastrointestinal Diseases, China Association of Chinese Medicine took the lead in establishing a drafting team for the *Expert Consensus on TCM Diagnosis and Treatment of Irritable Bowel Syndrome* in Hefei in August 2014. Based on the principles of evidence-based medicine, the team members collected the evidence-based data extensively, organized the domestic experts on spleen and stomach diseases to summarize and discuss a series of key issues such as IBS syndrome classification, syndrome differentiation treatment, diagnosis and treatment procedures and efficacy standards, forming the first draft of this *Consensus Opinion*, and thereafter, conducted three rounds of voting in accordance with the internationally accepted Delphi method.

The first vote was held in Chongqing in September 2015, when this consensus was revised based on expert opinions. In December 2015, the second vote was held in Beijing. In June 2016, the Branch of Gastrointestinal Diseases, China Association of Chinese Medicine, held a core expert review meeting in Xiamen. More than 20 well-known experts on spleen and stomach diseases from all over the country voted on this consensus (draft) for the third time, conducted a full discussion and revision. In July 2016, at the 28th National Academic Conference on Spleen and Stomach Diseases in Harbin, the experts discussed, revised and reviewed the draft again. In September 2016, the final expert meeting of this *Consensus* was held in Beijing to finalize this consensus, completing the formulation of this consensus (Voting options: ① Completely agree;

② Agree, but with certain reservations; ③ Agree, but with larger reservations; ④ Disagree, but with reservations; ⑤ Completely disagree. If more than 2/3 of the participants choose ①, or more than 85% of the participants choose ①+②, the Consensus Opinions will be passed as a clause). The full text is now published as follows for the reference of colleagues at home and abroad, and is expected to be improved continuously in application.

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1 Overview

1.1 Disease Name

According to the main clinical manifestations of IBS, the TCM disease name falls into the categories of “diarrhea”, “constipation” and “abdominal pain”. Those with abdominal pain and abdominal discomfort as the main symptoms should fall into the category of "abdominal pain", and can be named "abdominal pain;" Those with thin stools as the main symptoms should fall into the category of "diarrhea", and can be named "diarrhea;" Those with difficulty in defecation and dry stool as the main symptoms should fall into the category of "constipation" and can be named "constipation"

1.2 Western Medicine Diagnosis

In western medicine diagnosis, first select the auxiliary examinations specifically on the basis of detailed collection of medical history and physical examination, exclude organic diseases and metabolic abnormalities, and ascertain the diagnosis of IBS. For patients with good general condition and typical IBS symptoms, stool routine (red blood cells, white blood cells, occult blood test, and parasites) is a necessary examination, and colonoscopy is recommended as an important means to exclude organic diseases. Other auxiliary examinations include an abdominal ultrasound examination, complete blood count, fecal culture, liver function, kidney function, erythrocyte sedimentation rate, digestive system tumor markers and other biochemical examinations. CT scan of the abdomen is performed if necessary, and barium enema examination is used as appropriate. For patients with suspected diagnosis, stubborn symptoms, and ineffective treatment, tongue coating tests such as blood calcium, thyroid function test, lactose hydrogen breath test, 72h fecal fat quantification, gastrointestinal transit time measurement, anorectal pressure measurement, etc. should be selectively performed to assess their dynamic and sensory functions to guide the adjustment of treatment protocols.

According to the Rome IV Standard ^[6], the typical clinical manifestation of IBS is recurrent abdominal pain, at least one day per week in the last 3 months, accompanied with 2 or more of the following items: 1) Related to defecation; 2) Accompanied with changes in the defecation

frequency at the onset; 3) At the onset, there is a change in the traits (appearance) of stool. Symptoms are present for at least 6 months before diagnosis, and persist in the past 3 months. On the basis of the main abnormal bowel habits of patients, IBS can be divided into 4 main subtypes^[6], namely: 1) IBS constipation type (IBS-C): at least 25% of defecation is of Bristol 1-2 type, and defecation of Bristol 6-7 type is less than 25%; 2) IBS diarrhea type (IBS-D): at least 25% of defecation is of Bristol 6-7 type, and defecation of Bristol 1-2 type is less than 25%; 3) IBS mixed type (IBS-M): at least 25% of defecation is of Bristol 1-2 type, and at least 25% of defecation is of Bristol 6-7 type; 4) IBS uncertain type (IBS-U): If a patient meets the diagnostic standard of IBS, but the bowel habits are abnormal and do not meet any one of the above three. This subtype is not common, and the reason may be frequent changes in diet or drugs, or the inability to stop using drugs that affect gastrointestinal motility.

The classification standard for subtypes must be based on the patient report of at least 14 days, and the "25% principle" (that is, according to the main abnormal defecation habits at the time of abnormal defecation, combined with Bristol classification table^[6], the fecal traits are recorded to determine which subtype it is of) is used to carry out subtype classification of IBS. The main defecation habits are based on the number of days when there is at least one abnormal defecation; abnormal fecal traits include: Bristol 1-2 type (hard or bulky stool), or Bristol 6-7 type (loose or watery stool); abnormal frequency of stool including: more than 3 defecations per day, or less than 3 defecations per week. Factors that trigger the onset or aggravation of IBS symptoms include previous gastroenteritis, food intolerance, chronic stress, diverticulitis, and surgery, etc.

In China, diarrhea type IBS is the most common clinically, while constipation type, mixed type and uncertain type IBS are relatively less^[7]. The medical history is essential for diagnosis, and attention should be paid to the presence or absence of signs of alarm. Signs of alarm include: fever, weight loss, anemia, abdominal mass, frequent vomiting, vomiting blood or black stools, new-onset patients >40 years of age, and family history of tumors (colon cancer). Patients with signs of alarm are recommended to receive relevant examinations in time, and patients with psychological mental disorders are recommended to go through timely psychological assessment according to the relevant psychological scales. Clear exclusion of organic diseases is more beneficial to explanation of the state of an illness. According to the requirements for multi-dimensional clinical data analysis of functional gastrointestinal diseases, at present, it is necessary to perform multi-dimensional description and evaluation of the disease status from 5 dimensions, refine the information collection, fully improve the clinical data, and develop personalized treatment regimens. The five dimensions are: 1) Roman IV standard diagnostic classification of functional gastrointestinal diseases; 2) Additional information that prompts more relevant diagnostic subtypes of targeted treatment, such as diarrhea type and constipation type of IBS; 3) The impact of physical discomfort on the personal life of the patient; 4) Social psychological impact; 5) Physiological abnormalities or biomarkers.

2. Etiology and Pathogenesis

2.1 Etiology

The pathological base of IBS is mostly due to insufficient congenital endowment and/or acquired infertility. Emotional disorders, improper diet, and feeling of exogenous pathogens are the main

causes of the onset of illness [9-10].

2.2 Disease Location

IBS is located in the intestine, mainly involving the liver, spleen (stomach), kidneys and other organs, and has a certain relationship with the lungs and heart [11-14].

2.3 Pathogenesis

There are three main links in the pathogenesis of IBS: Weakness of the spleen and stomach and/or liver dysfunction are important links in the pathogenesis of IBS. Depressed liver and deficient spleen are important pathogenesis leading to the occurrence of IBS. The spleen and kidney yang deficiency and a mixture of intermingled deficiency and excess are the key factors which cause the disease to persist and hardly heal. Many reasons result in dysfunction of spleen and formation of such pathological factors as water dampness, hot and humid condition, phlegm stagnation and dyspepsia, and blockage of qi function, leading to intestinal dysfunction; liver dysfunction, transverse dysfunction and failure of liver qi, failure of spleen qi to ascend leading to diarrhea; abdominal pain and bloating due to obstruction of abdominal qi; intestinal conduction failure leads to constipation; prolonged disease often leads to spleen and kidney yang deficiency and a mixture of intermingled deficiency and excess [14-16].

In the early stage of this disease, it is mostly manifested by the liver qi stagnation due to the loss of venting and loss of catharsis, and liver-qi perversion; followed by dysfunction of the spleen and generation of dampness; long-term spleen deficiency causes spleen yang deficiency over time, and subsequently the kidney-yang will be affected. Therefore, the disease is centered on dampness, stagnated with liver qi throughout the course. The imbalance in qi is the symptom, spleen and kidney yang deficiency is the root cause. Throughout the course of the disease, the liver loses its flow, the spleen loses its vitality, and spleen yang and kidney yang are lost in warmth. Eventually, the pathogenesis of IBS turns from excess to insufficiency with a mixture of intermingled deficiency and excess.

3. Syndrome Differentiation Classification

3.1 IBS-D is divided into 5 types

3.1.1 Liver Depression and Spleen Deficiency Syndrome Main Symptoms: 1) Diarrhea follows abdominal pain, and pain is relieved after diarrhea; 2) Impatience and irritability. Secondary symptoms: 1) Bloating on both ribs; 2) Anorexia; 3) Fatigue. Tongue and pulse: The tongue is pale and fat, and may also have indentations or tooth marks and the coating is thin and white; the pulse is thin.

3.1.2 Syndrome of Spleen Deficiency with Overabundance of Dampness Main Symptoms: 1) Loose stools; 2) Faint abdominal pain. Secondary Symptoms: 1) Onset or exacerbation after fatigue or cold; 2) Fatigue; 3) Anorexia. Tongue and pulse: The tongue is pale, with indentations on the sides and white and greasy coating; weak pulse

3.1.3 Spleen and Kidney Yang Deficiency Syndrome Main Symptoms: 1) Diarrhea occurs immediately after abdominal pain, mostly taking place when getting up early in the morning; 2) Abdominal pain when feeling cold Pain is relieved after warming up. Secondary Symptoms: 1) Feeling sore and weak in the waist and knees; 2) Not feeling like eating; 3) Cold limbs and body. Tongue and pulse: The tongue is pale and fat, with white and slippery coating ; the pulse is feeling deep and gentle.

3.1.4 Spleen and Stomach Damp-heat Syndrome Main Symptoms: 1) Faint pain in the abdomen; 2) Urgent or uncomfortable diarrhea; 3) Smelly stool. Secondary Symptoms: 1) Abdominal bloating and feeling uncomfortable; 2) Dry mouth, unwilling to drink or bitter mouth, or bad breath; 3) Burning pain in anus. Tongue and pulse: Red tongue, yellow and greasy coating ; soggy pulse or slippery pulse.

3.1.5 Mixed Cold and Heat Syndromes Main Symptoms: 1) Loose stools and diarrhea; 2) Abdominal pain before defecation and is relieved after defecation; 3) Abdominal bloating or bowel irritation. Secondary Symptoms: 1) Bitter mouth or bad breath; 2) Chills. It happens when catching a cold. Tongue and pulse: Pale tongue, thin yellow coating; thin pulse or slippery pulse.

3.2 IBS-C is divided into 5 types

3.2.1 Liver Qi Stagnation Syndromes Main Symptoms: 1) Unsmooth defecation; 2) Abdominal pain or bloating. Secondary Symptoms: 1) Chest tightness and uncomfortable feeling; 2) Frequent belching; 3) Swelling pain on both ribs. Tongue and pulse: dark red tongue; pulse string.

3.2.2 **Gastrointestinal Fever Syndrome** Main Symptoms: 1) Difficult defecation, once every several days; 2) Stool like sheep dung, wrapped in mucus; 3) Lateral lower abdomen **bloating or pain** Secondary Symptoms: 1) Dry mouth or bad breath; 2) Dizziness or fullness in head; 3) Body weight loss. Tongue and pulse: Red tongue, yellow coating, less body fluid; thready rapid pulse.

3.2.3 Yin Deficiency and Intestinal Dryness Syndrome Main Symptoms: 1) Induration of stools, like sheep dung; 2) Lateral lower abdominal pain or swelling pain when pressed. Secondary Symptoms: 1) Dry mouth; 2) Less fluid. Tongue and pulse: Red tongue, with little coating and few yellow roots; weak pulse.

3.2.4 Spleen and Kidney Yang Deficiency Syndrome Main Symptoms: 1) Feces is either dry or not dry, difficult to defecate; 2) Feeling cold and pain in the abdomen, relieved in warm state. Secondary Symptoms: 1) Clear and abundant urine, 2) 4 Limbs not warm, 3) Pale complexion. Tongue and pulse: pale tongue and white coating; slow and sunken pulse.

3.2.5 Lung and Spleen Qi Deficiency Syndrome Main Symptoms: 1) The stool is not dry and hard. Difficult defecation despite the desire to defecate; 2) Abdominal pain before defecation. Secondary Symptoms: 1) Fatigue and timidity; 2) Laziness to speak; 3) Fatigue after defecation. Tongue and pulse: pale tongue with white coating; weak pulse.
Syndrome diagnosis: 2 Main symptoms, 2 secondary symptoms. The pulse can be diagnosed by

referring to the tongue and pulse.

4. Clinical Treatment

4.1 Treatment Goals

1) Relieve the disease, including the relief of clinical symptoms, especially psychological symptoms; 2) Reduce the recurrence of the disease; 3) Improve the quality of life.

4.2 Principles of Treatment

The TCM treatment of IBS should be based on syndrome typing and syndrome differentiation and treatment. Patients should be treated based on the different characteristics of diarrhea type, constipation type, mixed type and uncertain type combined with changes in types of syndromes, appropriately accompanied by laxative and antidiarrheal methods.

4.3 Treatment based on Syndrome Differentiation

4.3.1 IBS-D 1) Liver Depression and Spleen Deficiency Syndrome: The treatment method supports the spleen and suppresses the liver. Main Prescription: The essential prescription for pain and diarrhea relief (*Danxi's Experiential Therapy*). Drugs: Atractylodes, white peony root, parsnip, tangerine peel. Modification: for severe abdominal pain, add corydalis tuber, and Rotundus; for frequent belching, add persimmon calyx, and cardamom; for severe diarrhea, add codonopsis, smoked plum, and papaya; for obvious abdominal bloating, add betel nut, and pericarpium arecae; for impatience and irritability, add moutan bark and gardenia.

2) Spleen Deficiency with Overabundance of Dampness Syndrome: Treatment Method: I Invigorate the spleen and nourish qi, dissipate dampness and stop diarrhea. Main Prescription: Shenling Baishu Powder (*Prescriptions of Peaceful Benevolent Dispensary*). Drugs: Lotus seed meat, coix seed, Amomum, platycodon (Campanulaceae), white lentils, Poria, ginseng, licorice, Atractylodes, and yam. Modification: for white and greasy tongue, add Mangnolia officinalis, and Agastache rugosus; for those with loose stools, add Atractylodes, and Alisma; for poor sleep at night, add fried jujube seed and tuber fleecflower stem.

3) Spleen and Kidney Yang Deficiency Syndrome: Treatment Method: Tonify the spleen and kidney. Main Prescription: Aconite Center-Rectifying Decoction (*Prescriptions of Peaceful Benevolent Dispensary*) and Sishen Pills (*Internal Medicine Abstract*). Drugs: Aconite, Ginseng, Dried Ginger, Licorice, Atractylodes, Psoralen, Nutmeg, Evodia, and Schisandra. Modification: For melancholy feelings, add albizia flower, and roses; for patients with abdominal pain and who fear cold and have loose stool, increase the amount of dried ginger, and add cinnamon.

4) Spleen and Stomach Dampness Heat Syndrome: Treatment Method: Clear heat and promote diuresis. Main Prescription: Radix Puerariae Scutellaria Baicalensis Coptis Chinensis Decoction (*Treatise on Febrile Diseases*). Drugs: Radix Puerariae, Licorice, Scutellaria baicalensis, and Coptis chinensis. Modification: for thick tongue coating, add calamus, Agastache and cardamom; for sweet taste in mouth and thick and greasy tongue coating, add eupatorium; for abdominal bloating, add Mangnolia officinalis, and tangerine peel; for abdominal pain, add fructus aurantii and pericarpium arecae.

5) Complex Syndromes of Cold and Heat: Treatment Method: Mildly regulate cold and heat, replenishing qi and warming the middle. Main Prescription: Ebony or Smoked Plum Pill (*Treatise on Febrile Diseases*). Drugs: Ebony, asarum, dried ginger, Coptis chinensis, aconite, angelica, phellodendron, cassia twig, ginseng and pepper. Modification: For those with less abdominal cold pain, remove Coptis chinensis, and add fennel and lychee core; For those with burning stomach or bitter mouth, remove Chinese pepper, dried ginger, and aconite, and add gardenia, and Evodia; For those with sticky stools and tenesmus, add Betel nut, Magnolia officinalis, and charred crataegus.

4.3.2 IBS-C 1) Liver Qi Stagnation Syndrome: Treatment Method: Soothing the liver and regulating qi, promoting qi and removing stagnation. Main Prescription: Simo Decoction (*Symptoms, Causes, Pulses and Treatment*). Drugs: fructus aurantia, betel nut, agarwood, and radix linderae. Modification: For patients with obvious abdominal pain, add Corydalis tuber, and Radix Paeoniae Rubra; For those with bitter mouth or dry throat due to liver depression and heat, add Scutellaria baicalensis, chrysanthemum, and Prunella vulgaris; For patients with indurated stools, add edestan, almonds, and peach kernels.

2) Gastrointestinal Heat Accumulation Syndrome: Treatment method: Exhaust heat and clear intestines, moisten the intestines and relax bowel. Main Prescription: Maziren Pills (*Treatise on Febrile Diseases*). Drugs: Fructus cannabidis, white peony root, Citrus aurantium or immature bitter orange, rhubarb, Magnolia officinalis, and almond. Modification: for severe constipation, add Scrophulariaceae, Radix Rehmanniae and Ophiopogon japonicus; for those patients with obvious abdominal pain, add corydalis tuber, with white peony root used again in the original prescription.

3) Yin Deficiency and Intestinal Dryness Syndrome: Treatment Method: Nourish yin to relieve heat, moisten the intestines and relax bowel. Main Prescription: Fluid-Increasing Decoction (*Treatise on Differentiation and Treatment of Epidemic Febrile Disease*). Drugs: Scrophulariaceae, Ophiopogon Rehmannia glutinosa. Modification: For those who suffer from fever or dry mouth or red tongue and less body fluid, add rhizoma anemarrhenae; For those who feel dizzy, add fructus aurantii and angelica.

Spleen and Kidney Yang Deficiency Syndrome: Treatment Method: Warm and moisturize the bowel movement and relax bowel. Main Prescription: Jichuan Decotion (*Complete Works of Zhang Jingyue*). Drugs: Angelica, Achyranthes, Cistanche, Alisma, Rhizoma Cimicifugae, and fructus aurantii. Modification: If there are indentations on the tongue and the tongue is fat, add roasted Rhizoma Atractylodis Macrocephalae and roasted rhizoma atractylodis; For those patients with cold limbs or cold pain in lower abdomen, add fructus psoraleae and nutmeg.

5) Lung and Spleen Qi Deficiency Syndrome: Treatment Method: To invigorate or tonify Qi and moisturize the intestines. Main Prescription: Astragalus Decoction (*Jin Gui Yi*). Drugs: Astragalus, dried tangerine peel, white honey, fructus cannabidis. Modification: For those patients with obvious qi deficiency, add Codonopsis and Atractylodes; For those with chronic diarrhea and insufficient qi, add cohosh, Bupleurum, and Astragalus; For patients with abdominal pain and who prefer to press the painful point, For patients who fear cold and have loose stools, add baked

ginger and cinnamon; For patients with spleen deficiency with overabundance of dampness, add *Atractylodes*, *Agastache rugosa*, and *Alisma*. .

4.4 Commonly Used Chinese Patent Medicines

4.4.1 Shenling Baishu Granules (Pills) To invigorate the spleen, replenish qi, used for fatigue, reduced appetite and loose stools.

4.4.2 Buzhong Yiqi Granules (Pills) To tonify the middle qi, replenish qi, promote yang and is used for diarrhea caused by weakness of the spleen and stomach and the collapse of middle qi.

4.4.3 Roukou Sishen Pills To warm the middle and dispel the coldness, nourish the spleen and relieve diarrhea, it is used for stool disorders, diarrhea at dawn, intestinal diarrhea, abdominal pain, reduced appetite, yellow face, thin body, and aching back and limp legs.

4.4.4 Fuzi Lizhong Pills It is used to warm the middle and tonify the spleen, used for treating the abdominal coldness and pain, vomiting and diarrhea, and cold limbs caused by spleen and stomach deficiency and coldness.

4.4.5 Bupi Yichang Pills To nourish the middle, replenish qi, invigorate the spleen and stomach and , relieve diarrhea with intestinal astringents, used for treating diarrhea due to spleen deficiency.

4.4.6 Ginseng Jianpi Pills invigorate the spleen and replenish qi, harmonize stomach and relieve diarrhea in the stomach. It is used for treating the abdominal pain, loose stools, reduced appetite and fatigue caused by weak spleen and stomach.

4.4.7 Shenbei Guchang Capsules Strengthening the intestines and relieving diarrhea, invigorating the spleen and warming the kidney. It is used for chronic diarrhea, abdominal pain, limb fatigue, fatigue, laziness to speak, cold limbs, reduced appetite, and feeling sore and weak in the waist and knees caused by spleen and kidney yang deficiency. For irritable bowel syndrome (diarrhea type), see the above syndrome.

4.4.8 Guben Yichang Tablets Invigorating the spleen, warming the kidney, and relieving diarrhea with intestinal astringents, used for chronic diarrhea caused by spleen deficiency or spleen and kidney yang deficiency.

4.4.9 Fengliao Changweikang Granules Clearing heat, dehumidifying and relieving stagnation. It is used for indigestion diarrhea and damp heat diarrhea.

4.4.10 Tongxiening Granules Softening the liver and relieving the emergency, soothing the liver, promoting qi, regulating the spleen and dissipating dampness, used for abdominal pain, diarrhea, abdominal distension and abdominal discomfort caused by liver qi invading spleen; for irritable bowel syndrome (diarrhea type), see the above syndrome.
promotes dampness. It is used for abdominal pain, diarrhea, bloating, and abdominal discomfort caused by liver-qi invading the spleen; irritable bowel syndrome (diarrhea type) See the above syndrome.

4.4.11 Guchang Zhixie Pills Reconciling the liver and spleen, relieving pain with intestinal astringents, used for diarrhea and abdominal pain caused by liver and spleen discord.

4.4.12 Maren Soft Capsules It moisturizes the intestines and relaxes the bowels and is used for intestinal dryness and constipation.

4.4.13 Maren Runchang Pills Moisturizing the intestines and relaxing the bowels as laxatives, used for treating the chest and abdominal bloating and constipation caused by gastrointestinal heat accumulation.

4.4.14 Intestinal Clearing, Laxative Capsules Clearing the heat and relaxing the bowels, promoting qi and relieving pain, used for constipation caused by qi stagnation due to heat.

4.4.15 Nourishing Yin and Moisturizing the Intestines Oral Liquid Nourishing yin and clearing the heat, moisturizing the intestines and relaxing the bowels, used for treating dry stools, unsmooth defecation, dry mouth and tongue, red tongue and less fluid caused by yin deficiency and internal heat.

4.4.16 Qirong Moisturizing the Intestines Oral Liquid Tonifying qi and nourishing yin, invigorating the spleen and nourishing the kidney, moisturizing the intestines and relaxing the bowels, used for treating the deficiency - syndrome constipation caused by deficiency in both qi and yin, insufficient spleen and kidney and loss of moisture in intestines.

4.5 Acupuncture

For diarrhea, take Zusanli, Tianshu and Sanyinjiao, use the catharsis method for the excess syndrome, and use the supplementary method for deficiency syndrome. For the spleen deficiency with overabundance of dampness, add Pishu and Zhangmen; for the Spleen and Kidney Yang Deficiency, add Shenshu, Mingmen and Guanyuan, moxibustion method can also be used; for blockage of the stomach duct and anorexia, add Gongsun; for liver depression, add Ganshu and Xingjian. For constipation, mainly take the Beishu acupoint, Fubumu acupoint, and Xiahe acupoint, and generally take Dachangshu, Tianshu, Zhigou and Fenglong. Diarrhea is suitable for excess syndrome, and supplementation for deficiency syndrome. For cold syndrome, moxibustion is added, and for intestinal dryness, Hegu and Quchi are added; for qi stagnation, Zhongwan and Xingjian are added, and the catharsis method is used; for yang deficiency, Jiushenque is added [5, 18-19].

4.6 External Therapy

The external therapies such as TCM massage, medicated bath, acupoint injection, and acupoint catgut embedding are conducive to improvement of clinical symptoms of patients. It is recommended to use the application therapy based on Shenque acupoint: 1) Deficiency constitution: Angelica, cohosh, Codonopsis etc. 2) Solid constitution: rhubarb, astragalus, moutan bark, etc. Application time and treatment course: once a day, every 2 - 4 hours each time, with 7 days as a treatment course. The use of multi-dimensional comprehensive treatment method can improve clinical efficacy [20-21].

4.7 Difficulties in IBS Treatment and Treatment Strategies of Integrated Traditional Chinese and Western Medicine

The difficulty in IBS treatment is how to improve the long-term symptoms while improving individual symptoms such as abdominal pain, diarrhea or constipation. In addition to intestinal symptoms, many IBS patients are often accompanied by mental symptoms. It has been confirmed that IBS patients are more prone to anxiety, depression, and somatization disorders than normal people and patients with other gastrointestinal organic diseases [17]. At present, the concept of psychosomatics has been introduced into the treatment concept of IBS. The use of anti-anxiety and depression drugs has increasingly aroused attention from the digestive

community. However, the starting point and node of the use are still the focus of current attention. Because of its combination of disease differentiation and syndrome differentiation and overall adjustment, TCM can make up for the shortcomings of modern medicine for IBS overlapping symptoms and patients with anxiety and depression disorders, and reduce the adverse reactions of long-term use of anti-anxiety and depression drugs. The flow chart of IBS TCM diagnosis and treatment is shown in Figure 1.

5. Efficacy Evaluation

5.1 Single Symptom Evaluation

5.1.1 Degree of abdominal pain 1) 0 point, no abdominal pain; 2) 1-3 points, mild abdominal pain, not affecting work and life; 3) 4-6 points, moderate abdominal pain, affecting work, not affecting life; 4) 7-10 points, severe abdominal pain, acute pain, affecting work and life.

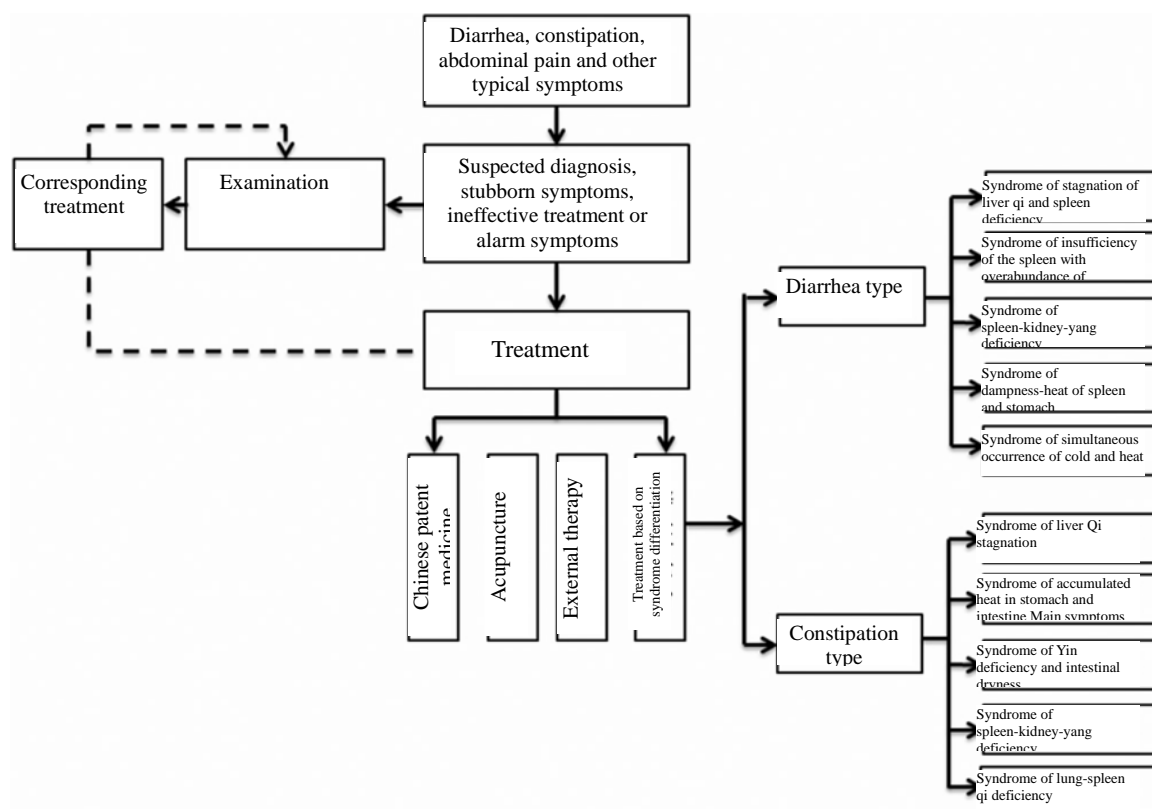


Figure 1 Flow chart of TCM diagnosis and treatment of irritable bowel syndrome

Response Rate Evaluation: The abdominal pain score is improved by at least 30% compared with the baseline, and those who meet 50% of the standard during the entire observation time are defined as respondents.

5.1.2 Abnormal Defecation For IBS-D, the fecal traits are scored according to the Bristol score table [22-23]. Response rate evaluation: compared with the baseline, the number of days when the stool traits belong to the Bristol 6-7 type is reduced by at least 50%, and during the entire observation period, those who meet 50% of this standard are defined as responders. For IBS-C, constipation is evaluated according to the complete spontaneous bowel movement (CSBM) [22-23] reported by the patient. Response rate evaluation: Compared with the baseline, the CSBM increases at least once a week, and during the entire observation period, those who meet

50% of this standard are defined as responders.

5.2 Overall Symptom Evaluation

- It is recommended to use the IBS Symptom Severity Scale (IBS-SSS) ^[24], including five aspects: abdominal pain degree, abdominal pain frequency, abdominal distension degree, defecation satisfaction, and impact on life. The full score of each item is 100 points, and the total score is 500 points. Evaluation standard: 1) Normal: ≤ 75 points; 2) Mild: 76 - 175 points; 3) Moderate: 176 - 300 points; 4) Severe: >300 points. Response rate evaluation: Ask the patient every week: "Did your IBS symptoms significantly decrease in the past week?" The patient answers "Yes" or "No". During the entire observation period, those who answered "yes" $\geq 50\%$ are defined as respondents

5.3 Syndrome Efficacy Evaluation

It is recommended to follow the *Guidelines for the Clinical Research of Chinese Medicine New Drugs (Trial)*, and also the TCM Reporting Outcome Scale for Patients with Spleen and Gastric Diseases can also be selected ^[26]. Calculation is made by nimodipine method: efficacy index = [(pre-treatment score - post-treatment score)/pre-treatment score] x 100%, divided into four levels, clinically recovered, markedly effective, effective and ineffective. 1) Clinically recovered: The Main symptoms and signs disappear or basically disappear, and the Treatment effect index is $\geq 95\%$; 2) Markedly effective: the Main symptoms and signs improve significantly, $70\% \leq$ efficacy index $< 95\%$; 3) Effective: the Main symptoms and signs significantly take a turn for the better, $30\% \leq$ efficacy index $< 70\%$; 4) Ineffective: the Main symptoms and signs fail to improve significantly, or even get worse, efficacy index $< 30\%$.

5.4 Quality of Life Evaluation

The Chinese version of SF-36 Health Survey Scale ^[27] can be selected for evaluation; for IBS special scale, refer to IBS-QOL scale ^[28].

5.5 Psychological Evaluation

The Hamilton Anxiety Scale (HAMA) and the Hamilton Depression Scale (HAMD) can be used to evaluate the mental state of IBS patients.

6 Prevention and Adjustment of Intake

Maintaining mental health, regular daily life, and developing good eating habits can reduce the incidence of IBS. Educating patients to fully understand the nature, characteristics and treatment knowledge of this disease is very important for the treatment of the disease. Principles of diet: 1) Eating regularly, having bland, easily digested and less greasy food, and avoiding cold, spicy, and raw food. Three meals a day are taken regularly at fixed amount, and hunger or fullness or overeating shall be avoided. This is conducive to intestinal digestion and absorption balance and prevents intestinal dysfunction caused by irregular diet. 2) Patients with IBS-C can supplement fruits, vegetables, cereals, corn and other plant fiber-rich food in an appropriate amount to speed up the operation of food, add fecal capacity, and make defecation smooth. Patients with IBS-D

should try to avoid food rich in cellulose, which may promote intestinal tract movement and tongue coating that aggravate the symptoms of diarrhea. 3) Food that have been confirmed to cause symptoms should be avoided, such as products containing sorbitol (low-calorie gum), food containing high fiber or fat, and excessive amounts of caffeine and alcohol; lactose intolerance can be considered as one of the causes of symptoms; intake of gas-producing food, such as coffee, carbonated drinks, alcohol, beans, cabbage, apples, grapes, potatoes, and sweet potatoes, should be limited. 4) A low FODMAP diet, i.e., reduction of the intake of difficult-to-absorb short-chain carbohydrates such as sugar, lactose, polyols, fructans, and low-galactan, may help improve IBS symptoms [29].

7. Outcome and Follow-up

With repeated or intermittent symptoms, IBS takes on a benign process, affects the quality of life but generally does not seriously affect the general condition. The prognosis is good. Clinically, it has been found to have affected the general condition due to the long course of disease and repeated attacks in a small number of patients with functional gastrointestinal diseases. In the course of treatment of IBS, attention should be paid to the role of health education (lifestyle, diet, psychological counseling). The onset of IBS is mostly induced by emotional factors. Symptoms are often accompanied by the relevant manifestations of upset, insomnia and other emotional abnormalities. Therefore, the role of emotion in IBS must be emphasized. In addition to psychological counseling for IBS patients, the advantages of traditional Chinese emotional medicine may also be utilized. Besides drug treatment, music therapy and traditional Chinese medicine guiding technique can also be used cooperatively. Because IBS is affected by many psychological and social factors, it is recommended that the follow-up be performed 4 weeks after the symptoms disappear.

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