

# Gastritis Treated by Chinese Medicine

*Xiaomei Wang, Guang Ji and Huangan Wu*

## Abstract

Chronic gastritis is one of the common diseases of the digestive system characterized by many uncomfortable clinical symptoms, and the patient with chronic gastritis has a lower quality of life. Chinese medicine is a branch of medicine in the world, and it has special theory; different methods have been used to treat gastritis for more than 1000 years. We aimed to introduce the special theory and the different methods of Chinese medicine and about its syndrome classification, syndrome differentiation and treatment, diagnosis and treatment process, and criterion of therapeutic effect of chronic gastritis. The mechanism of Chinese medicine on chronic gastritis needs further research.

**Keywords:** gastritis, Chinese medicine, diagnosis, syndrome classification, syndrome differentiation, treatment

## 1. Introduction

Chronic gastritis is one of the common diseases of the digestive system and a chronic inflammatory reaction of gastric mucosa caused by several factors, such as *Helicobacter pylori* infection, alcoholism, smoking, stress conditions, and the use of some conventional medicines such as some anti-inflammatory drugs; the infection of *Helicobacter pylori* is its main cause [1, 2]. Chronic non-atrophic gastritis, atrophic gastritis (atrophy, intestinal metaplasia), dysplasia, and carcinogenesis may occur after *Helicobacter pylori* infection [3, 4].

Chronic gastritis is usually divided into chronic superficial gastritis and chronic atrophic gastritis. Chronic superficial gastritis is characterized by no obviously pathological changes. Its common symptoms are abdominal discomfort after eating, dull pain, accompanying belching, and pantothenic acid. Chronic atrophic gastritis is characterized by atrophy and decrease of gastric mucosal epithelium and glands, thinness of gastric mucosa, thickening of the mucosal base, or metaplasia of pyloric gland and intestinal gland or atypical hyperplasia. Chronic atrophic gastritis occurs in approximately 2% of the general population in the United States [5], particularly those older than 60 years and with higher prevalence in females [5, 6], and a Swedish study reported an increased incidence in the population aged between 35 and 45 years [6]. The common symptoms of chronic gastritis are a dull pain in the upper abdomen, abdominal fullness and distention, belching, inappetence, or being thin and anemic. The symptoms of gastritis are easy to relapse which seriously affect their quality of life. Chronic atrophic gastritis with intestinal metaplasia and intraepithelial neoplasia increases the risk of gastric cancer, and more attention has been paid to gastritis clinically.

Traditional Chinese medicine (TCM) has accumulated many years of clinical experience in the diagnosis and treatment of this disease. In 2009, spleen-stomach disease branch of China Association of Chinese Medicine (CACM) organized and formulated the “consensus opinions on TCM diagnosis and treatment of chronic superficial gastritis” and “consensus opinions on TCM diagnosis and treatment of chronic atrophic gastritis,” which played a normative role in the diagnosis and treatment of chronic gastritis. In recent years, there are a lot of progress of TCM in the diagnosis and treatment of chronic gastritis. It is necessary to update the consensus opinions to meet clinical needs and better guide clinical work.

Based on the principles of evidence-based medicine, team members of spleen-stomach disease branch of CACM extensively collected evidence-based information, and they successively organized domestic experts of spleen and stomach diseases to summarize and discuss a series of key issues such as syndrome classification, syndrome differentiation and treatment, diagnosis and treatment process, and criterion of therapeutic effect for chronic gastritis. Based on an expert opinion, three rounds of voting followed under internationally accepted Delphi law, the drafting group has fully discussed, revised, and approved the consensus in 2017 (Consensus opinions of TCM diagnosis and treatment experts on chronic gastritis, 2017 edition) [7].

## **2. TCM diagnosis of chronic gastritis**

TCM diagnosis of chronic gastritis is mainly based on symptom diagnosis. Patients with stomachache as the main symptom were diagnosed as “epigastric pain,” and patients with epigastric distention as the main symptom were diagnosed as “distention and fullness.” If the symptoms of stomachache or epigastric distention are not obvious, it can be diagnosed as “acid regurgitation,” “hubbub,” and other diseases according to the main symptoms [8, 9].

## **3. Diagnosis of chronic gastritis by western medicine**

The diagnosis of chronic gastritis mainly depends on endoscopy and pathological examination, especially the latter is of greater value. The etiology of chronic gastritis should be determined as far as possible, and endoscopic diagnosis of special gastritis must combine etiology and pathology [10].

### **3.1 Clinical manifestations**

Chronic gastritis is a chronic inflammatory reaction of the gastric mucosa, and most patients with chronic gastritis may have no obvious clinical symptoms. Patients with symptoms mainly manifested a non-specific dyspepsia, such as discomfort in the upper abdomen, fullness, pain, loss of appetite, belching, acid regurgitation, etc. A part also can have forgetfulness, anxiety, depression, and other psychological symptoms [8–10]. There was no significant correlation between the presence and severity of dyspepsia and the histological findings and endoscopic grading of chronic gastritis [8–10].

### **3.2 Endoscopic and pathological examination**

Endoscopic diagnosis: For non-atrophic gastritis, endoscopic examination showed the basic manifestations of mucosal erythema, mucosal hemorrhagic spots or plaques, rough mucosa with or without edema, hyperemia, and exudation. For atrophic

gastritis, endoscopic examination showed that the mucosa was red and white, mainly white, with folds flattened or even disappeared. Some mucosal vessels were exposed, which may be accompanied by mucosal granules or nodules. It is described as atrophic gastritis or non-atrophic gastritis with bile reflux, erosion and mucosal bleeding, etc.

Histopathologic diagnosis: Two or more biopsy tissues can be selected as required. The endoscopic physician should provide the site of sampling, endoscopic examination results, and brief medical history to the pathology department. The pathological changes should be reported in each biopsy specimen in each biopsy specimen, such as the grade of *Helicobacter pylori* infection, chronic inflammatory response, activity, atrophy, intestinal metaplasia, and dysplasia (intraepithelial neoplasia). Chronic gastritis biopsy shows atrophy of the inherent glands (including metaplasia atrophy and non-metaplasia atrophy), which can be diagnosed as atrophic gastritis, regardless of the number and degree of atrophy of the biopsy specimen. The clinician may combine the pathological result and the endoscopic view, making the lesion scope and the degree judgment [10].

### **3.3 Lab examination**

*Helicobacter pylori* is the most important cause of chronic gastritis. Routine detection is recommended. Vitamin B12 and autoantibodies are recommended for diagnosis of atrophic gastritis. Serum gastrin G17, pepsin I and II may help determine whether gastric mucosa atrophy and atrophy [10].

## **4. Etiology and pathogenesis of chronic gastritis**

### **4.1 Etiology**

The stomach is physiologically harmonious, but pathologically it is sluggish [11]. This disease is mainly related to the weakness of spleen and stomach, emotional disorders, improper diet, drugs, exogenous pathogens (*Helicobacter pylori* infection), and other factors; the above factors damage the spleen and stomach, resulting in transport and loss of division, rise and fall disorders, and the occurrence of Qi stagnation, wet resistance, cold coagulation, fire depression, blood stasis, etc., manifested as stomachache, bloating, and other symptoms.

### **4.2 Disease location**

Chronic gastritis is located in the stomach and is closely related to the liver and spleen in TCM theory.

### **4.3 Pathogenesis**

The pathogenesis of chronic gastritis can be divided into two aspects: deficient essential and excessive superficial. This deficiency is mainly manifested as qi (Yang) deficiency and stomach yin deficiency. The main manifestations of excessive superficial are stagnation of qi, dampness and heat, and blood stasis. Spleen deficiency and qi stagnation are the basic pathogenesis of chronic gastritis.

### **4.4 Change of pathogenesis**

The syndrome differentiation of chronic gastritis should examine the evidence and seek the cause. The pathogenesis is related to the specific clinical type. In general, it is

often clinically manifested as the syndrome of the combination of the original and the false and the real [8, 9]. In the early stage, the patients were mainly positivistic, while the patients who had been ill for a long time became the deficiency syndrome or the mixture of deficiency and reality. Chronic non-atrophic gastritis is characterized by weakness of the spleen and stomach and disharmony of the liver and stomach [12]. Chronic atrophic gastritis is characterized by weakness of the spleen and stomach, qi stagnation, and blood stasis [13, 14]. Chronic gastritis with bile reflux is more common with disharmony between the liver and stomach [15]. Spleen and stomach dampness-heat syndrome is common in patients with *Helicobacter pylori* infection [16, 17]. For patients with precancerous lesions, qi and yin deficiency, qi stagnation and blood stasis, and damp-heat internal obstruction syndromes are common [18, 19].

## **5. Syndrome differentiation type of chronic gastritis**

Combined with existing consensus and standards, quantitative literature statistical methods were used to conduct statistics on the relatively common clinical single syndromes. The common syndromes were identified as the syndrome of liver-stomach disharmony which includes the syndrome of liver-stomach qi stagnation and the syndrome of liver-stomach heat retention, the syndrome of damp-heat of the spleen and stomach, the syndrome of spleen-stomach weakness including the syndrome of spleen-stomach qi deficiency and the syndrome of spleen-stomach cold syndrome, the syndrome of deficiency of stomach yin, and the syndrome of obstruction of stomach collaterals. The above syndromes can appear alone or in combination, and the clinical diagnosis should be based on the identification of single syndromes.

### **5.1 Standard of syndrome differentiation**

#### *5.1.1 Syndrome of liver-stomach disharmony*

##### *5.1.1.1 Syndrome of liver-stomach qi stagnation*

Main symptoms are full or painful epigastric distention, distension, or pain in the flanks. Minor symptoms are induced or exacerbated by emotional factors and frequent belching. Symptoms in the tongue and pulse include pink tongue, thin and white moss, and wiry pulse.

##### *5.1.1.2 Syndrome of liver-stomach heat retention*

Main symptoms are epigastric burning pain, distension, or pain in the flanks. Minor symptoms are upset and irritability, acid reflux, dry mouth, bitter mouth, and dry stool. Symptoms in the tongue and pulse include red tongue, yellow moss, wiry pulse, or rapid pulse.

##### *5.1.2 Syndrome of damp-heat of the spleen and stomach*

Main symptoms are distention and fullness of stomach and abdomen, trapped and heavy body, and loose or sticky stool. Minor symptoms include eating less, anorexia, bitter mouth, bad breath, and drowsy mental. Symptoms in the tongue and pulse include red tongue, yellow and greasy moss, slippery pulse, or rapid pulse.

### 5.1.3 *Weakness of the spleen and stomach*

#### 5.1.3.1 *Syndrome of spleen-stomach qi deficiency*

Main symptoms are epigastric distension or faint stomachache, postprandial aggravation, tired, and weak. Minor symptoms are indigestion and loss of appetite, cold limbs, and thin and sloppy stool. Symptoms in the tongue and pulse include pale tongue or tooth marks, thin and white moss, and weak pulse.

#### 5.1.3.2 *Syndrome of deficiency of the spleen and stomach*

The main symptom is dull and insistent stomachache, preferring warmth and pressure. Minor disease: stomachache attack or aggravation after fatigue or take cold, spit water, mental fatigue, limb lassitude, diarrhea or with indigestible food. Symptoms in the tongue and pulse include pale and fat tongue with tooth mark, white and slippery moss, and deep and weak pulse.

#### 5.1.4 *Syndrome of deficiency of stomach yin*

Major symptoms include epigastric burning pain and noise in the stomach. Minor symptoms include hunger and not wanting to eat, dry mouth, and dry stool. Symptoms in the tongue and pulse include red tongue and little saliva, no or little moss, and thin or rapid pulse.

#### 5.1.5 *Syndrome of stomach collateral stasis*

Main symptoms are fullness in the stomach or pain with definite location. Minor symptoms are stomach pain for a long time and sting pain. Symptoms in the tongue and pulse include dark red tongue or petechiae, ecchymosis, and wiry and unsmooth pulse.

Syndrome diagnosis: with two main symptoms and two minor symptoms, the diagnosis can be made by referring to tongue and pulse.

## 5.2 **Microscopic syndrome differentiation of chronic gastritis**

Gastroscope is a tool to observe the color, texture, secretion, peristalsis of gastric mucosa, and mucosal blood vessels to identify the type of syndrome differentiation. Syndrome differentiation under gastroscopy has certain clinical value, especially for patients with no clinical symptoms or poor efficacy after long-term treatment. The classification standards of microscopic syndrome differentiation are as follows [20].

### 5.2.1 *Syndrome of disharmony between liver and stomach*

Syndromes are acute and active inflammatory reaction in gastric mucosa, or with bile reflux, gastric peristalsis faster.

### 5.2.2 *Syndrome of spleen-stomach dampness and heat*

Syndromes are congestion and edema in gastric mucosa and obvious erosion of thick and turbid mucus.

### 5.2.3 Syndrome of spleen-stomach weakness

Syndromes include pale gastric mucosa, thinning mucosa, thin and more mucus or mucosal edema, visible submucosal blood vessels, and decreased gastric motility.

### 5.2.4 Syndrome of stomach yin deficiency

Syndromes are rough mucosal surface, thin and brittle, less secretion, thinner or disappeared plica, fissure-like changes, or visible small vascular network under the mucous membrane.

### 5.2.5 Syndrome of stomach collateral stasis

Syndromes are granular or nodular gastric mucosa, with intramucosal hemorrhage; gray or brown mucus; visible vascular network; and dark red vascular veins.

## 6. Clinical treatment of chronic gastritis

The main aim to treat chronic gastritis with traditional Chinese medicine focuses on improving the symptoms and quality of life of the patients and paying close attention to the lesions of erosion and atrophy of gastric mucosa, intestinal metaplasia, and intraepithelial neoplasia (dysplasia).

### 6.1 Therapeutic principles

The main therapeutic methods of TCM for chronic gastritis include medication, acupuncture, moxibustion therapy, etc. In clinic, appropriate treatment methods can be selected according to the specific situation and combined with dietary adjustment, psychological counseling, and other methods of comprehensive treatment. In the course of treatment, etiologic factors based on differentiation and treatment based on syndrome differentiation should be determined.

### 6.2 Treatment based on syndrome differentiation

#### 6.2.1 Syndrome of disharmony between the liver and stomach

##### 6.2.1.1 Syndrome of qi stagnation between the liver and stomach

The therapeutic principle is to soothe the liver to smoothen qi and harmonize the stomach. Main prescription includes Chaihu Shugan powder (*Jingyue Quanshu*). Chinese herbal medicine include Bupleurum, tangerine peel, *Fructus aurantii*, peony, *Rhizoma ciperi*, *Ligusticum striatum*, and liquorice. Patient with epigastric pain can add Sichuan neem seed and *Rhizoma corydalis*. Patient with apparent belch can add agarwood and inula flower.

##### 6.2.1.2 Syndrome of heat stagnation in the liver and stomach

Treatment includes cooling the liver and soothing the stomach. Main prescription includes Huanggan decoctum (*Jingyue Quanshu*) and Zuo Jin Wan (*Danxi Xinfu*). Medication includes Pericarpium citri reticulatae viride, tangerine peel, white peony root, peony peel, Gardenia, *Alisma*, fritillary bulb of Zhejiang, *Rhizoma coptidis*, and *Evodia officinalis*. Patient with obvious acid reflux can add squid bone and

concha arcae. Patient with fullness and discomfort in the chest and hypochondrium can add *Bupleurum* and *Radix curcumae*.

### 6.2.2 Syndrome of damp-heat in the spleen and stomach

Treatment includes clearing heat and removing dampness. Main prescription includes the soup of Huanglian Wendan (Discrimination of Six Causes). Chinese herbal medicine include *Pinellia ternata*, orange peel, *Poria cocos*, immature bitter orange, bamboo shavings, *Rhizoma coptidis*, jujube, and liquorice. Patient with abdominal distension can add *Magnolia officinalis* and betel nut. Patient with belching acid decay can add radish seed, Divine comedy, and hawthorn.

### 6.2.3 Syndrome of deficiency of the spleen and stomach

#### 6.2.3.1 Syndrome of the spleen and stomach qi deficiency

Treatment includes reinforcing qi to strengthen the spleen. Main prescription includes Xiangsha Liujunzi decoction (*Ancient and Modern Famous Medical Prescription*). Chinese herbal medicine includes costustoot, orange peel, *Pinellia ternata*, *Codonopsis*, *Atractylodes*, *Poria cocos*, and liquorice. Patient with fullness and distention can add citron. Patient with shortness of breath and sweating can add *Radix Astragali Preparata*. Patient with cold limbs can add cassia twig and *Angelica*.

#### 6.2.3.2 Syndrome of deficiency and cold in spleen and stomach

Treatment includes warming and strengthening the spleen. Prescription includes Huangqi Jianzhong decoction (*Synopsis of the Golden Chamber*) and Lizhong decoction (*Treatise on Febrile Diseases*). Chinese herbal medicines include *Astragalus*, peony, cassia twig, ginger, jujube, maltose, *Codonopsis*, white *Atractylodes rhizome*, dried ginger, and liquorice. Patient with loose stool can add cannon ginger charcoal and fried coix seed. Patient with obvious chills can add aconite.

### 6.2.4 Syndrome of yin deficiency of stomach

Treatment includes nourishing yin, benefiting the stomach. The main prescription is Yiguan Decoction (*Xu Mingyi Lei'an*). Chinese herbal medicines include radix ginseng, *Radix ophiopogonis*, *Rehmanniae*, *Angelica sinensis*, *Fructus lycii*, and Szechwan Chinaberry fruit. Patient with obvious stomachache can add *Paeonia lactiflora* and liquorice. Patient with constipation can add snake gourd fruit and semen cannabis.

### 6.2.5 Syndrome of stomach collaterals stasis

The treatment includes activating blood circulation and removing blood stasis. Main prescription includes Shixiao powder (*Taiping Huimin Heji Jufang*) and Danshen decoction (*Shifang Gekuo*). Chinese herbal medicines include Wuling zhi, Typhae pollen, *Salvia miltiorrhiza*, Sandalwood, and *Amomum*. Patient with obvious pain can add *Rhizoma corydalis* and *Radix curcumae*. Patient who has shortness of breath and is weak can add *Astragalus* and *Codonopsis*. For patients with complex clinical symptoms and multiple syndromes, the combination of prescriptions corresponding to the pathogenesis can improve the treatment effect. For example,

if the pathogenesis of gastritis patient is the deficiency of the spleen and stomach and the disharmony between the liver and stomach, the main prescription should be Xiangsha Liujunzi decoction and Bupleurum Shugan powder.

### 6.3 Treatment based on disease differentiation

Treating chronic gastritis by disease differentiation is an important part of TCM clinical practice. The principle is to formulate the prescription based on the understanding of the basic pathogenesis of chronic gastritis and then prescribe the prescription according to the syndrome. From the composition of clinical prescriptions, most of them are composed of single syndrome prescriptions. For those without obvious clinical symptoms, treatment can be carried out based on disease differentiation combined with the syndrome differentiation results of the tongue and pulse and gastric mucosa manifestation under endoscope.

In chronic gastritis patients with positive *Helicobacter pylori*, eradication of *Helicobacter pylori* is necessary if there are obvious clinical symptoms or accompanied by atrophy, erosion, intestinal metaplasia, intraepithelial neoplasia, or family history of gastric cancer [8, 10]. The eradication of *Helicobacter pylori* guidelines and drug regimen were need.

Based on the syndrome differentiation, when chronic gastritis is accompanied by gastric mucosa congestion and erosion, Notoginseng powder, *Rhizoma bletillae* powder, and Pearl powder can be added for treatment, and it can be taken with decoction or with warm water after making a paste and taken on an empty stomach. For patients with intramucosal hemorrhage, the herbs to remove blood stasis and stop bleeding can be added, such as *Panax notoginseng* powder and *Rhizoma bletillae* powder. For chronic gastritis patient with precancerous lesions and syndrome of non-spleen-stomach deficient cold can add *Hedyotis diffusa*, *Scutellariae barbatae*, and Chinese lobelia into the compound prescription or use the herbs for promoting circulation and removing stasis, such as *Salvia miltiorrhiza*, *Panax notoginseng*, and Zedoary turmeric.

### 6.4 Commonly used Chinese patent medicine

#### 6.4.1 Qizhi Weitong granules

It can smooth liver qi and harmonize the stomach to alleviate stomachache. It was usually used for patients with depression or irritability, sigh, belching, chest stuffiness and fullness, and epigastric pain.

#### 6.4.2 Weishu granules

It can regulate qi and eliminate distension and alleviate stomachache. It was usually used for patients with epigastric pain caused by qi stagnation with epigastric distension pain, which extends to two sides, pain relief after belching or flatus, pain aggravation after emotional depression and anger, eating less food, chest distress, and poor defecation.

#### 6.4.3 Wenweishu capsule

It can nourish the stomach and promote Qi circulation to relieve pain. It was usually used for patients with stomachache caused by deficiency and cold in the middle Jiao with epigastric cold pain, abdominal distension and belching, poor appetite, less food, intolerance of cold, and weakness.

#### 6.4.4 *Xuhan Weitong granule*

It can tonify Qi and the spleen and warm the stomach to relieve pain. It is usually used for patients with stomachache caused by deficiency of the spleen and stomach. The symptoms are epigastric dull pain, tolerance of warmth and pressure, aggravation after catch cold, eating cold food, or stomach empty.

#### 6.4.5 *Jianwei Xiaoshi oral liquid*

It can tonify the stomach and improves digestion. It was usually used for patients with dyspepsia caused by deficiency of the spleen and stomach. The symptoms are dyspepsia, belching, putrid belching and acid swallowing, abdominal fullness, and distention.

#### 6.4.6 *Yangweishu capsule*

It can nourish the yin and stomach. It was usually used for patients with epigastric burning pain caused by deficiency of the yin and stomach. The further symptoms are dull pain, feverishness in palms and soles, dry mouth, bitter mouth, poor appetite, and emaciation.

#### 6.4.7 *Cubeb Weitong granules*

It can activate Qi to promote blood circulation and harmonize stomach to relieve pain. It was usually used for epigastric distension and pricking pain caused by Qi stagnation and blood stasis.

#### 6.4.8 *Molodan (concentrated pills)*

It can harmonize the stomach and calms the adverse-rising energy, strengthens the spleen to relieve distension and dredge collateral to relieve pain. It was usually used for patients with symptoms of stomachache, fullness, stuffy, indigestion, and loss of appetite and belching.

#### 6.4.9 *Wei Fuchun capsule*

It can strengthen the spleen and nourish qi and promote blood circulation and detoxification. It was usually used for patients with the precancerous lesions of gastric cancer of chronic atrophic gastritis or adjuvant treatment after gastric cancer surgery.

#### 6.4.10 *Dalitong granules*

It can clear heat and relieve depression, regulate the stomach and calm the adverse-rising energy, and eliminate stagnation. It was usually used for patients with epigastric fullness and distention syndrome caused by heat stagnation of the liver and stomach. The symptoms include epigastric distension and fullness, belching, poor appetite, heartburn in the stomach, noisy pantothenic acid, epigastric pain, and dry and bitter mouth. The dyskinetic type of functional dyspepsia seen above symptoms.

#### 6.4.11 *Weitai granules*

It can promote Qi circulation and relieve stomachache. It is usually used for patients with stomachache caused by qi stagnation and blood stasis and dampness

and heat stasis. The symptoms are abdominal dull pain, fullness, sour regurgitation, nausea, and vomiting; the discomfort is lessened after eating.

#### *6.4.12 Jin Weitai capsule*

It can promote qi circulation and relieve pain in the stomach. It is usually used for patients with acute and chronic gastroenteritis, ulcer in the stomach and duodenum caused by qi stagnation of the liver and stomach or dampness and heat stasis.

#### *6.4.13 Weikang capsule*

It can promote Qi circulation and invigorate the stomach, remove blood stasis and hemostasis, and relieve hyperacidity and pain. It is usually used for patients with epigastric pain caused by Qi stagnation and blood stasis. The further symptoms are pain fixation, acid swallowing noise, and gastric and duodenal ulcers.

#### *6.4.14 Jinghua Weikang Jiaowan*

It can regulate Qi to dissipate cold and clear heat and disperse blood stasis. It is usually used for patients with epigastric distension pain or duodenal ulcer caused by mixed coldness and heat syndrome and Qi stagnation and blood stasis and belching; the further symptoms are acid regurgitation, noise, and bitter mouth.

#### *6.4.15 Ganhai Weikang capsule*

It can strengthen the spleen and stomach and relieve pain with convergence. It was usually used for patients with chronic gastritis stomach and duodenal ulcer and reflux esophagitis caused by spleen deficiency and qi stagnation.

#### *6.4.16 Dongfang Weiyao capsule*

It can soothe the liver and harmonize stomach, regulate Qi and promote blood circulation, clear heat, and relieve pain. It is usually used for patients with epigastric pain caused by liver-stomach disharmony and heat stasis blocking collaterals; the symptoms are stomachache, belching, acid swallowing, noise, poor appetite, and irritability.

#### *6.4.17 Yanshen Jianwei capsule*

It can strengthen the spleen and harmonize the stomach, regulate cold and heat, and relieve fullness and pain. It was usually used for patients with stomachache caused by deficiency in origin and enrichment in symptom and mixed coldness and heat; the symptoms are epigastric fullness, stomachache, poor appetite, belching, noise, fatigue, and weakness.

#### *6.4.18 Danweikang capsule*

It can soothe the liver and gallbladder and clear dampness and heat. It was usually used for patients with hypochondriac pain and jaundice caused by the damp-heat in the liver and gallbladder. It can also be used for patients with bile reflux gastritis and cholecystitis that have the same symptoms.

## 6.5 Acupuncture and moxibustion therapy

Acupuncture and moxibustion therapy have an effect on improving the symptoms of chronic gastritis. Acupuncture and moxibustion can effectively relieve the symptoms of gastritis in patients with syndrome of deficiency of the spleen and stomach and improve their quality of life [21–24].

Acupoints in acupuncture treatment include Zusanli (ST36), Zhongwan (RN12), Weishu (BL21), Pishu (BL20), and Neiguan (PC6). Patient with liver-stomach disharmony syndrome plus Ganshu (BL17), Taichong (LR4), Qimen (LR14). Patient with hot stasis syndrome plus Tianshu (ST25), Fenglong (ST40). Patient with weakness of spleen and stomach syndrome should add Pishu (BL20), Liang qiu (ST34), Qihai (RN6). Patient with deficiency of stomach Yin syndrome should add Sanyinjiao (SP6), Taixi (KI3). For those with severe cold and deficiency of spleen and stomach syndrome, moxibustion should be performed at Shangwan (RN13), Zhongwan (RN12), Xiawan (RN10), and Zusanli (ST36). Patient with nausea, vomiting, or belching should add Shangwan (RN13), Neiguan (PC6), Geshu (BL17). Patient with severe pain plus Liangmen (ST21), Neiguan (PC6), Gongsun (SP4). Patient with dyspepsia should add Hegu (LI4), Tian shu (ST25), Guanyuan (ST34), Sanyinjiao (SP6). Patient with Qi stagnation and blood stasis syndrome should add Taichong (LR4), Xuehai (SP10), Hegu (LI4). Patient with qi deficiency and blood stasis syndrome should add Xuehai (SP10) and Geshu (BL17). Acupuncture was used for patient with excess syndrome and moxibustion for those with deficiency syndrome. Patient with intermingled deficiency and excess syndrome, acupuncture should combine moxibustion.

## 6.6 Psychological intervention

Mental stimulation is an important factor causing chronic gastritis, and the scores of anxiety and depression of patients with chronic gastritis are also higher than normal people. Common psychological disorders include loss of confidence in treatment, fear of cancer, and fear of special examinations. Strengthening psychological counseling for gastritis patients is helpful for alleviating the incidence of chronic gastritis, alleviating symptoms, and improving the quality of life [25–27].

## 7. Criterion of therapeutic effect

### 7.1 The criteria of therapeutic effect of chronic gastritis include evaluation of syndrome efficacy, symptom evaluation, endoscopic evaluation of gastric mucosa, histopathological evaluation, and evaluation of quality of life

#### 7.1.1 Evaluation of syndrome efficacy

It reflects the characteristics of clinical efficacy evaluation of TCM, and the efficacy is often evaluated by nimodipine method according to the clinical symptoms and manifestations of the tongue and pulse. Clinical recovery: The main symptoms and signs disappear or almost disappear, and the curative effect index was equal or greater than 95%. Significant efficacy: The main symptoms and signs were significantly improved, and curative effect index was equal or greater than 70% or smaller than 95%. Clinical effective: The main symptoms and signs improved, and curative effect index was equal or greater than 30% or smaller than 70%. Ineffectiveness: The main symptoms and signs have no obvious improvement or even worse, curative effect index or smaller than 70%.

### *7.1.2 Symptom evaluation*

It is mainly aimed at the evaluation of dyspepsia symptoms of chronic gastritis, such as upper abdominal pain, fullness or early fullness, loss of appetite, etc. The method was that the symptoms were classified into main symptoms and minor symptoms according to degree and frequency and assign the value according to the weight function, further specification was needed.

### *7.1.3 Endoscopic evaluation of gastric mucosa*

Level I: Branch of Digestive endoscopy of Chinese Medical Association [28] Scattered or discontinuous linear erythema, single erosion, local mucosal hemorrhage, granular gastric mucosal atrophy, partial visible blood vessel, or single gray nodules of intestinal metaplasia. Level II: Dense or continuous linear erythema, more than five local multiple erosion, multiple mucosal hemorrhage, medium gastric mucosal atrophy, continuous visible blood vessel, or multiple gray nodules of intestinal metaplasia. Level III: Extensive fused erythema, more than five extensive multiple erosion, diffuse mucosal hemorrhage, big gastric mucosal atrophy, disappeared mucosal folds, visible blood vessel to mucosa surface, or diffused gray nodules of intestinal metaplasia.

### *7.1.4 Histopathological evaluation*

It includes mucosal trophic, intestinal metaplasia, intraepithelial neoplasia, inflammatory response, and disease activity. They were divided to none, mild level, medium level, and severe level [10]. None level: There are no more than five mononuclear cells in each high-power field. Mild level: There are a few neutrophils in the lamina propria of the gastric mucosa. Chronic inflammatory cells are few and limited to the superficial mucosa, no more than one third of the mucosa. The number of proper mucosal glands decreased by no more than one third of the original glands. Intestinal metaplasia accounts for less than one third of the total glandular and surface epithelial area. Medium level: Neutrophils are more common in the mucosa and can be found in surface epithelial cells, small concave epithelial cells, or glandular epithelium. Chronic inflammatory cells are relatively dense, no more than two thirds of the mucosal layer. The number of proper mucosal glands decreased between one third and two thirds of the original glands. Intestinal metaplasia accounts for one third-two thirds of the total glandular and surface epithelial area. Severe level: The neutrophils are more dense, or pit abscesses may be seen in addition to the medium. Chronic inflammatory cells are dense and occupy the entire mucosal layer. The number of proper glands decreased by more than two thirds, and only a few glands remained or even disappeared completely. Intestinal metaplasia accounts for more than two thirds of the total glandular and epithelial surface area. The visual analogue scoring method combined with histopathological evaluation can be referred to for grading of each lesion.

### *7.1.5 Evaluation of quality of life*

The patient reported outcomes (PRO), and SF-36 health questionnaire scales can be used to evaluate the quality of life. PRO proceeds from the characteristics of TCM treatment of spleen and stomach diseases. Patients were evaluated from six dimensions including dyspepsia, reflux, defecation, social, psychological, and general state [29, 30].

### *7.1.6 Anxiety and depression evaluation*

Hospital anxiety and depression scale (HAD), anxiety self-rating scale (SAS), and depression self-rating scale (SDS) can be used to evaluate the state of anxiety and depression.

## **7.2 Long-term efficacy**

Clinical efficacy evaluation of chronic gastritis should combine short-term efficacy with long-term efficacy evaluation. The course of chronic gastritis is a long-term, chronic, and repeated process. In addition to symptoms, atrophy, intestinal metaplasia, intraepithelial neoplasia, and other lesions should be the important content of observation. The clinical efficacy evaluation time of chronic gastritis is recommended to be more than 3 months in order to accurately evaluate the efficacy. Long-term follow-up was conducted after the treatment to observe the incidence of gastric cancer and other endpoint outcome indicators and disease recurrence.

## **7.3 Marking targeting biopsy**

Marking targeting biopsy of gastric mucosa is of high value for the evaluation of chronic atrophic gastritis and chronic atrophic gastritis with intestinal metaplasia and intraepithelial neoplasia.

# **8. Prevention and maintenance**

## **8.1 Alimentary control**

Research on the relationship between eating behavior and chronic gastritis shows that habits of irregular meals, eating too fast, overeating, eating hot food, eating and drinking too much, salty taste are risk factors for chronic gastritis [29, 30]. Chronic gastritis patients should try to avoid taking stimulating food, such as spicy food, food containing nitrite, etc., and drugs, such as nonsteroidal anti-inflammatory drugs, that may damage the gastric mucosa.

## **8.2 Psychological adjustment**

Patients with chronic gastritis should keep a good mood and avoid the stimulation of bad emotions. If necessary, they can consult a psychologist.

## **8.3 Lifestyle adjustment**

Patients with chronic gastritis should avoid long-term overwork. In winter and spring, we need to pay special attention to life adjustment.

## **8.4 Follow-up monitoring**

Patients with chronic atrophic gastritis accompanied by intraepithelial neoplasia and intestinal metaplasia were followed up and monitored to have a certain probability of cancer. Studies have shown that the time required for 95% of the population with precancerous lesions to become cancerous is 11.6 years for atrophic gastritis, 11.4 years for intestinal metaplasia, 5.7 years for dysplasia, and 4.5 years for moderate to severe intestinal metaplasia with moderate to severe dysplasia [31].

So, the advice of “Chronic gastritis consensus in China” is patients of chronic atrophic gastritis with moderate to severe atrophy and intestinal metaplasia need around 1-year follow-up. Patients of chronic atrophic gastritis without intestinal metaplasia or intraepithelial neoplasia need appropriate follow-up of endoscopy and pathology. Patient accompanied by low-level intraepithelial neoplasia and proved that it doesn't come from adjacent tissues of cancer need once endoscopy every 3 months follow-up according to the endoscopic and clinical situation. However, high-grade intraepithelial neoplasia requires immediate confirmation and endoscopic or surgical treatment after confirmation.

## **9. Conclusions**

The core contents of traditional Chinese medicine (TCM) theory are holism concept and syndrome differentiation; the treatment based on syndrome differentiation is the basic principle of TCM in understanding and treating diseases. So based on the treatment of *Helicobacter pylori* infection, chronic gastritis was treated by Chinese medicine based on disease differentiation. Patients with different syndromes are treated differently with different medicines. Usually, Chinese medicine to treat chronic gastritis is administered orally in decoction or proprietary Chinese medicine. In the recent years, improvement of gastritis drug dosage forms appeared [32], and it was a modern directed drug release preparation with gastric organ flotation and adhesion functions, but more clinical evidence of its effectiveness is lacking.

In conclusion, TCM plays a certain role in improving the clinical symptoms and signs of chronic gastritis. Although the mechanism of its action is not very clear, it still has important clinical value and needs further research and discussion.

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## **Conflict of interest**

There is no conflict of interest among authors.

## Author details

Xiaomei Wang\*, Guang Ji and Huangan Wu  
Shanghai University of Traditional Chinese Medicine, Shanghai, China

\*Address all correspondence to: [wxm123@vip.sina.com](mailto:wxm123@vip.sina.com)

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## References

- [1] González CA, Figueiredo C, Lic CB, et al. *Helicobacter pylori* cagA and vacA genotypes as predictors of progression of gastric preneoplastic lesions: A long-term follow-up in a high-risk area in Spain. *The American Journal of Gastroenterology*. 2011;**106**(5):867-874. DOI: 10.1038/ajg.2011.1
- [2] Sharma PK, Suri TM, Venigalla PM, et al. Atrophic gastritis with high prevalence of *Helicobacter pylori* is a predominant feature in patients with dyspepsia in a high altitude area. *Tropical Gastroenterology*. 2014;**35**(4):246-251
- [3] de Vries AC, van Grieken NC, Looman CW, et al. Gastric cancer risk in patients with premalignant gastric lesions: A nationwide cohort study in the Netherlands. *Gastroenterology*. 2008;**134**(4):945-952. DOI: 10.1053/j.gastro.2008.01.071
- [4] Song H, Ekhedden IG, Zheng Z, et al. Incidence of gastric cancer among patients with gastric precancerous lesions: Observational cohort study in a low risk Western population. *BMJ*. 2015;**351**:h3867. DOI: 10.1136/bmj.h3867
- [5] Jacobson DL, Gange SJ, Rose NR, Graham NM. Epidemiology and estimated population burden of selected autoimmune diseases in the United States. *Clinical Immunology and Immunopathology*. 1997;**84**(3):223-243
- [6] Song H, Held M, Sandin S, et al. Increase in the prevalence of atrophic gastritis among adults age 35 to 44 years old in Northern Sweden between 1990 and 2009. *Clinical Gastroenterology and Hepatology*. 2015;**13**(9):1592-1600.e1. DOI: 10.1016/j.cgh.2015.04.001
- [7] Spleen and Stomach Disease Branch of China Association of Chinese Medicine. Consensus opinions of TCM diagnosis and treatment experts on chronic gastritis (2017). *Chinese Journal of Traditional Chinese Medicine*. 2017;**32**(7):3060-3064
- [8] Tang XD, Li BS, Zhou LY, et al. Clinical practice guideline of Chinese medicine for chronic gastritis. *Chinese Journal of Integrative Medicine*. 2012;**18**(1):56-71
- [9] Spleen-stomach disease branch of Chinese medical association. Consensus opinions on TCM diagnosis and treatment of chronic atrophic gastritis. *Chinese Journal of Integrative Chinese and West Medicine Digestion*. 2010;**18**(5):345-349
- [10] Gastroenterology breach of Chinese medical association. Consensus on chronic gastritis in China. *Chinese Journal of Gastroenterology*. 2013;**18**(1):24-36
- [11] Xudong T. Academic thoughts on health of Dong Jianhua. *Journal of Peking University of Traditional Chinese Medicine*. 1995;**18**(2):45-48. DOI: 10.3321/j.issn:1006-2157.1995.02.015
- [12] Shengsheng Z. *Clinical Study on TCM Syndrome of Chronic Gastritis*. Beijing: Peking University of Traditional Chinese Medicine; 2005
- [13] Xuewen Z. TCM syndrome treatment of chronic atrophic gastritis. *Chinese Archives of Traditional Chinese Medicine*. 2002;**20**(5):558-559,587. DOI: 10.3969/j.issn.1673-7717.2002.05.005
- [14] Xudong T. Discussion on pathogenesis of blood stasis and treatment of chronic atrophic gastritis. *Journal of Traditional Chinese Medicine*. 1998;**39**(11):687-689
- [15] Li H. Discussion on etiology and pathogenesis of bile reflux gastritis. *Shandong Journal of*

Traditional Chinese Medicine.  
2007;**26**(5):294-295. DOI: 10.3969/j.  
issn.0257-358X.2007.05.002

[16] Yuyan F, Qian Y, Jianping L, et al.  
Correlation of syndrome differentiation  
of TCM and *Helicobacter pylori*  
infection. Liaoning Journal of  
Traditional Chinese Medicine.  
2005;**32**(8):754-755. DOI: 10.3969/j.  
issn.1000-1719.2005.08.005

[17] Changhong W, Yuping L, Lixin W,  
et al. Control observation of correlation  
between *Helicobacter pylori* infection  
and inflammatory cell coating on the  
tongue and syndrome of TCM of 1052  
cases of gastritis. Chinese Archives  
of Traditional Chinese Medicine.  
2004;**22**(8):1396-1397. DOI: 10.3969/j.  
issn.1673-7717.2004.08.017

[18] Suofang S, Weimin L. Professor  
Shan Zhaowei's experience in treating  
precancerous lesions of chronic  
atrophic gastritis. Education of Chinese  
Medicine. 1998;**17**(4):44-46

[19] Ling H, Jianying M. Professor  
Lao shaoxian's experience in  
the diagnosis and treatment of  
precancerous diseases of gastric cancer.  
Journal of New Chinese Medicine.  
2006;**38**(5):7-9. DOI: 10.3969/j.  
issn.0256-7415.2006.05.004

[20] Branch of Digestive System Disease  
of Chinese Association of Integrative  
Medicine. Consensus on the diagnosis  
and treatment of chronic gastritis  
with integrated Chinese and western  
medicine. Chinese Journal of Integrative  
Medicine. 2012;**32**(6):738-743

[21] Wenjie J, Lianying C, Jing L,  
et al. Meta analysis of acupuncture  
treatment for chronic atrophic gastritis.  
Shanghai Journal of Acupuncture and  
Moxibustion. 2016;**35**(7):886-892

[22] Juan X, Zhihui X, Guo C, et al.  
Meta analysis of acupuncture in the  
treatment of chronic atrophic gastritis.

Guiding Journal of Traditional  
Chinese Medicine and Pharmacology.  
2016;**22**(15):75-78,83

[23] Yinhu X, Xiaoling C. Treating  
52 cases of chronic superficial  
gastritis with deficiency of spleen  
and stomach. Shaanxi Journal of  
Traditional Chinese Medicine.  
2005;**26**(9):959-960. DOI: 10.3969/j.  
issn.1000-7369.2005.09.073

[24] Yun Q. Clinical observation on 78  
cases of epigastric pain due to deficiency  
of spleen and stomach with warm  
acupuncture and ginger moxibustion.  
Journal of Guiyang College of  
Traditional Chinese Medicine.  
2004;**26**(4):37-38. DOI: 10.3969/j.  
issn.1002-1108.2004.04.028

[25] Xianling P, Jing M, Houzhi M.  
Effects of psychological intervention on  
the curative effect of chronic atrophic  
gastritis in the elderly. West China  
Medical Journal. 2014;**29**(4):751-753.  
DOI: 10.7507/1002-0179.20140226

[26] Xiaoju Z, Xia Z. Effect of nursing  
intervention on curative effect  
and mental state of patients with  
chronic atrophic gastritis. Modern  
Journal of Integrated Traditional  
Chinese and Western Medicine.  
2015;**24**(10):1130-1132. DOI: 10.3969/j.  
issn.1008-8849.2015.10.042

[27] Xu J. Effect of comprehensive  
nursing care on curative effect  
and mental state of patients  
with chronic atrophic gastritis.  
Modern Digestion & Intervention.  
2016;**21**(3):492-494. DOI: 10.3969/j.  
issn.1672-2159.2016.03.047

[28] Branch of Digestive Endoscopy of  
Chinese Medical Association. Standard  
of endoscopic classification and  
classification of chronic gastritis and  
opinions on trial treatment. Chinese  
Journal of Digestive Endoscopy.  
2004;**21**(2):77-78. DOI: 10.3760/cma.j.i  
ssn.1007-5232.2004.02.001

[29] Wei G, Zengzhen W, Xu H, et al. Eating behavior and chronic gastritis. *Medicine and Society*. 1996;**9**(4):18-19,26

[30] Lan L, Kuicheng Z, Wen W, et al. Case control study on risk factors of chronic atrophic gastritis. *Strait Journal Prevetion Medicine*. 2016;**22**(4):1-3,7

[31] Shaobo Y, Mengwei W, Ziqi Z, et al. Study on the natural evolution of mucosal changes before gastric cancer. *Clinical Medicine of China*. 2005;**21**(3):193-194

[32] Lihua L. Research of the Compound Sustained-Release Floating Tablet. Yanji: Yanbian University; 2006