

# Progress in the Study of Chronic Atrophic Gastritis in Chinese and Western Medicine

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**Abstract:** *Chronic Atrophic Gastritis (CAG) is a common chronic disease of the digestive system, which is mainly characterized by atrophy of gastric mucosal epithelium and glands, reduction in number, thinning of gastric mucosa, often accompanied by intestinal epithelial hyperplasia and inflammatory reaction. In recent years, with the accelerated pace of life and changes in dietary habits, the incidence of chronic atrophic gastritis has been increasing year by year, seriously threatening human health. The aim of this paper is to provide a comprehensive understanding of the research progress of chronic atrophic gastritis by reviewing the literature on the subject in recent years.*

**Keywords:** Chronic atrophic gastritis, Chinese medicine, Chinese and Western medicine, Research progress.

## 1. Pathogenesis

The pathogenesis of chronic atrophic gastritis is complex and involves multiple factors. According to its Chinese and Western medicine, *Helicobacter pylori* (Hp) infection is considered to be the most important etiologic factor [1]. Zhang Yu, Zhao Ying et al [2] pointed out in their study that Hp infection can lead to gastric mucosal inflammation, immune response and gastric mucosal damage, which in turn triggers gastric mucosal atrophy. A study found that [3] DNA methylation and related gene variants are also important causes of the formation and development of chronic atrophic gastritis. In addition, autoimmune reactions may also play an important role in some patients [4], leading to the destruction of gastric mucosal glands. Genetic and environmental factors also play a role in the development of chronic atrophic gastritis.

The Spiritual Pivot Meridian and Pulse: “The pulse of the spleen and the foot of the tai yin ..... The Ling Shu Jing Fu states: “Pain in the stomach and epigastric region, abdominal distension, and good yelping”, which defines this disease as “pain in the stomach and epigastric region”. The Jingyue Quanshu defines this disease as “plumpness”. Chronic atrophic gastritis is categorized as “gastric pain”, “fullness”, “noisy” and so on. Most of the evidence for this deficiency standard solid, spleen and stomach weakness is the root of the disease, phlegm and dampness, Qi stagnation and blood stasis for the standard. Therefore, clinical treatment should follow the principles of tonifying the spleen and stomach, regulating qi and resolving phlegm, and eliminating dampness and phlegm.

## 2. Clinical Manifestations and Diagnosis

Patients with chronic atrophic gastritis tend to present with symptoms such as epigastric discomfort, fullness, belching, and acid reflux. Diagnosis mainly relies on gastroscopy and gastric mucosal biopsy. Li Kun [5] mentioned in the study that gastroscopy can visualize the morphological changes of the gastric mucosa, and through the observation of the patients' gastroscopic manifestations, it was found that the following phenomena could be seen in the patients: (1) thinning of the mucosa of the stomach. (2) The white phase is dominant, and

blood vessels are visible. (3) The mucosa is granular and rough. Gastric mucosa biopsy is the gold standard for the diagnosis of chronic atrophic gastritis. Through pathological examination, the degree and extent of gastric mucosal atrophy and whether it is accompanied by intestinal epithelial hyperplasia can be clarified. Therefore, the diagnosis of chronic atrophic gastritis by means of gastroscopy can effectively improve the detection rate of the disease, obtain examination results that are basically consistent with the pathological diagnosis, and provide guidance for clinical treatment.

## 3. Combined Chinese and Western Medicine

### 3.1 Western Medical Treatment

Western medical treatments for chronic atrophic gastritis include medication, endoscopic treatment, and surgery. Pharmacological treatment mainly uses antibiotics, proton pump inhibitors, and gastric mucosal protectors to eradicate Hp infection, relieve symptoms, and promote gastric mucosal repair. In the study of Rezaei Tavarani M et al [6], it was found that eradication of Hp could increase the rate of atrophy reversal of the gastric sinus mucosa, so the treatment of chronic atrophic gastritis with Hp eradication method has a certain effect. Some research data show [7] that gastric mucosa damage is another factor leading to CAG, so in clinical treatment, it is advocated to apply gastric mucosa protection drugs to enhance the gastric mucosa cell barrier function and accelerate the repair and regeneration function of the mucosa. Clinical use of drugs to promote gastrointestinal dynamics, such as mosapride, is often used to relieve the feeling of fullness and discomfort in the upper abdomen, and to improve nausea and vomiting and other symptoms of gastrointestinal emptying relaxation. In addition, endoscopic treatment is mainly used to deal with gastric mucosal lesions, such as resection of gastric mucosal elevated lesions and excavation of gastric submucosal masses. Minimally invasive endoscopic treatment for patients with CAG is currently a more advanced, effective and safe treatment [8]. For some patients with severe disease or ineffective drug treatment, surgical treatment may need to be considered. Endoscopic resection may be performed if high-grade intraepithelial neoplasia is reached.

### 3.2 Traditional Chinese Medicine (TCM)

Many classical formulas and self-proposed formulas have been proven to be effective and precise in the treatment of CAG. Lu Hui [9] randomly divided 50 patients with CAG of spleen and stomach deficiency and cold type into reference group and experimental group, each with 25 cases. The reference group was treated with Xiangsha Nourishing Stomach Pill, and the experimental group was treated with Sanjiu Gastrointestinal Pellets combined with Xiangsha Nourishing Stomach Pill, and the results showed that the total effective rate of the experimental group was 92.0%, which is higher than that of the reference group of 68.00%, with a statistically significant difference ( $P < 0.05$ ) and the effect is significant in improving the clinical symptoms of patients. symptoms. Chu Xuefei et al. [10] treated 110 cases of CAG identified as gastric yin insufficiency by traditional Chinese medicine, the control group orally took Nourishing Gastric Relief Capsule, and the treatment group orally took Paeonia lactiflora and Licorice Soup combined with Consistent Decoction plus Reduction, and the results showed that the total effective rate of the treatment group was 83.92%, which was higher than that of the control group of 79.62%, and the difference was statistically significant ( $P < 0.05$ ). In addition, there are many other treatment methods that can reflect the characteristics of Chinese medicine, such as acupuncture, Chinese patent medicines and other external treatments, which can reflect the diagnostic and therapeutic effects of Chinese medicine, but also have their own limitations.

### 3.3 Combination of Chinese and Western Medicine

Combination of Chinese and Western medicine in the treatment of chronic atrophic gastritis has become a hot spot in clinical research. Lac Mei [11] found through comparative studies that the combination of Chinese and Western medicine treatment has significant advantages in improving the symptoms and promoting the repair of gastric mucosa in patients with chronic atrophic gastritis. The combination of Chinese and Western medicine can not only inhibit the growth of *Helicobacter pylori*, but also regulate the body's immune function and promote the regeneration and repair of gastric mucosa cells. Chronic atrophic gastritis can be treated with a combination of Chinese and Western medicine [12], which can effectively reduce the inflammatory response of the body and improve the clinical therapeutic effect, and the combination of traditional Chinese medicine can reduce the adverse reactions, which has a high therapeutic safety and effectiveness. For patients with chronic atrophic gastritis [13], the combination of Chinese and Western medicine treatment program can effectively improve the clinical symptoms of patients, clinical efficacy is ideal, and can give full play to the advantages of traditional Chinese medicine, to ensure the safety of medication.

## 4. Research Progress and Challenges

In recent years, with the in-depth study of chronic atrophic gastritis, more and more scholars have begun to pay attention to the study of its pathogenesis and treatment methods. Wang Zewen, Zhao Yiran et al. [14] pointed out in their study that the pathogenesis of chronic atrophic gastritis is associated with the abnormal activation of multiple signaling pathways,

such as NF- $\kappa$ B and PI3K/Akt. This provides a new target for the treatment of chronic atrophic gastritis. However, the current treatment of chronic atrophic gastritis still faces many challenges, such as drug side effects, poor patient compliance, and recurrent episodes. Therefore, new therapeutic approaches and drugs need to be further explored to improve the therapeutic efficacy and patients' quality of life.

## 5. Prevention and Care

The key to preventing chronic atrophic gastritis is to maintain good living and eating habits. Avoid excessive drinking, smoking and consumption of irritating foods, keep a regular diet and eat more fresh vegetables and fruits. In addition, regular gastroscopy to detect and treat *Helicobacter pylori* infection in time is also an important means of preventing chronic atrophic gastritis. For patients who have been diagnosed with chronic atrophic gastritis, in addition to active treatment, they also need to pay attention to care and recuperation. Maintaining a good state of mind and avoiding overwork and mental stress will help the disease recover.

## 6. Conclusion and Outlook

In summary, chronic atrophic gastritis is a complex chronic disease whose pathogenesis involves many factors. Combined Chinese and Western medicine treatment has become a hot spot in clinical research and has achieved certain results. However, there are still many problems and challenges to be solved. In the future, basic research efforts should be further strengthened to deeply explore the pathogenesis and treatment of chronic atrophic gastritis; at the same time, the research and development of new therapeutic methods and drugs should be actively carried out; in addition, the improvement of the prevention and treatment system should also be strengthened to improve the prevention and treatment of chronic atrophic gastritis. Through the promotion and implementation of multidisciplinary intersection and integration as well as international cooperation and exchanges, it is believed that greater progress and breakthroughs will be made in the research and treatment of chronic atrophic gastritis.

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