Discussion on Shen Shuwen’s experience in treating precancerous gastric lesions based on the “three-dimensional six-pronged method”

Jinxiu Zhu¹,a, Jian Song¹,b,*

¹Shaanxi University of Chinese Medicine, Xianyang, Shaanxi, 712046, China
a1224591675@qq.com, b871593608@qq.com
*Corresponding author

Keywords: Three-dimensional six-pronged approach; famous doctor's experience; Shen Shuwen; gastric precancerous lesions; diagnosis and treatment

Abstract: On the basis of the eight principles of traditional Chinese medicine, Prof. Shen Shuwen, with more than 50 years of clinical experience, proposed a "three-dimensional and six-pronged" method of identification and treatment for gastric precancerous lesions, in which the six principles of identification of cold and heat, emptiness and solidity, and stagnation and reversal are integrated into the three-dimensional system of identification of the cause, nature, and condition of digestive diseases, and the treatment is based on the principle of detoxification and elimination of toxins and nodules, tonifying Qi and nourishing Yin. To detoxify and dissipate the knot and replenish qi and nourish yin as the main method, treatment to benefit qi and nourish yin, detoxification and elimination of blood stasis, etc., in the treatment of especially attach importance to the protection of gastric qi, which has remarkable clinical efficacy. The author introduces the experience of Prof. Shen in treating gastric precancerous lesions based on the "three-dimensional and six-pronged approach" according to a case of Shen Lao, and attaches an experimental case, in order to provide ideas of identification and treatment for Chinese medicine in treating gastric precancerous lesions.

1. Introduction

Chronic atrophic gastritis (CAG) is a common chronic disease of the digestive system, which may be characterized by the reduction or disappearance of the intrinsic glands of the gastric mucosa, or accompanied by intestinal metaplasia (IM) and/or intraepithelial neoplasia (IN) of varying degrees. Intestinal metaplasia and/or intraepithelial neoplasia are the main clinical features [1]. Currently, the medically recognized gastric precancerous lesions refer to intestinal metaplasia and intraepithelial neoplasia. Helicobacter pylori refers to damp-heat toxin in Chinese medicine, which is a pathogenic product involved in Chinese medicine that causes different degrees of damage to the gastric mucosa, and is currently recognized as an important pathological factor in triggering atrophic gastritis and even cancer [2]. Scientific Correa cascade reaction [3] also pointed out that the clinical evolution of gastric adenocarcinoma is as follows: the gastric mucosa receives damage and evolves into chronic non-atrophic gastritis, which further aggravates and evolves into chronic atrophic gastritis, and then
leads to intestinal epithelial metaplasia and heterogeneous hyperplasia of gastric mucosa, and finally leads to invasive gastric cancer.

CAG does not have a clear name in Chinese medicine, but according to its clinical symptoms such as epigastric distension, belching, gastric fullness, even pain, poor appetite and dullness, acidity and heartburn, dryness and bitterness of the mouth, noisy stomach, nausea, etc., the internal medicine of traditional Chinese medicine identifies it as "fullness", "gastric pain" or "noisy". The internal medicine science of Chinese medicine recognizes these clinical symptoms as "plumpness", "stomach pain" or "noisy", etc. [4]. "Plankton" refers to distension and discomfort in the upper abdomen. Jingyue Quanshu - Plankton" also points out that "Plankton" means congestion and blockage. In addition, precancerous lesions of the stomach are categorized as "carbuncle evidence", "gastric distension" and "stagnation" in Chinese medicine literature.

Prof. Shen Shuwen is one of the sixth batch of famous old Chinese medicine experts in gastroenterology who has been practicing medicine for more than 50 years and has rich clinical experience. He is good at applying the theory of Chinese medicine to treat digestive system-related diseases, especially proposing the method of "three-dimensional six-pronged" [5], adopting different treatments for different stages of pathogenicity and patients' status, and implementing the simplicity and complexity of treatment for gastric pre-cancerous lesions. In the treatment of precancerous gastric lesions, the method is simple and simple, and the therapeutic effect is outstanding.

2. Three-dimensional six-pronged approach to diagnosis

Prof. Shen Shuwen has established the "three-dimensional and six-pronged" method in his long-term clinical diagnosis and treatment of spleen and gastric diseases, i.e., according to the three different dimensions of the cause of the disease, the nature of the disease, and the situation of the disease, the six prongs of the eight prongs of the theory of traditional Chinese medicine, i.e., the deficiency of the positive qi of the disease and the solidity of the evil qi of the disease, the coldness and heat of the disease, as well as the stagnation and reversal of qi, are integrated with each other and applied to each other in judging the nature and observing the situation of the disease. The combination of dimensions and outlines and their application to each other in judging the nature of disease and observing the situation of disease is a complete system of identification structure, which further and better integrates the method of identification and treatment into diagnosis and treatment, and combines with the performance of tongue and pulse to increase the accuracy of diagnosis and treatment. Prof. Shen Shuwen emphasized that gastric precancerous lesions are located in the stomach, and their lesions may involve the liver, spleen and kidney. The etiology of the disease is based on the lack of positive qi, and dietary and emotional factors are the symptoms. Shen believed that the deficiency in this disease is mainly due to deficiency of both qi and blood, while the empirical evidence is mostly due to stagnation of qi and blood, and obstruction of dampness and heat. Deficiency lies mainly in the spleen qi deficiency, the spleen is not enough to transport, not through the transportation of water and grain is stagnation, including stagnation of gas, dampness, food stagnation, stagnation of blood and other solid manifestations. Yin deficiency lies in the stomach, the lack of yin will cause the stomach to lose its moistening, and yin deficiency is seen in conjunction with liquid stagnation. The "three-dimensional and six-pronged" method pioneered by Shen based on his long-term clinical practice and ancient medical texts not only has a positive significance on the treatment of gastric precancerous lesions, but also gives new inspiration to the current measures of preventing and treating gastric cancer, and has a positive significance on the prevention and treatment of lowering the incidence of gastric cancer.
2.1. Etiology

Prof. Shen believes that the loss of positive qi is the basic factor for the development of gastric precancerous lesions. The pathogenesis of this disease is characterized by deficiency, and the deficiency and the actual evidence interact with each other to cause the disease. At a certain stage, the deficiency leads to the actuality, and at a certain stage, the actuality leads to the deficiency, and the deficiency and the actuality affect each other and transform into each other, and both of them coexist in a complex contradiction and unity of symptoms. Deficiency can be differentiated between qi deficiency and yin deficiency, with qi deficiency located in the spleen and yin deficiency in the stomach. In the early stage of the disease, solid evidence is predominant, with mixed deficiency in the solid; in the middle and late stages of the disease, deficiency is predominant, with mixed solid in the deficiency [6]. He believes that this disease is mainly accompanied by internal injuries due to injury to food and labor. Some studies have also pointed out that in clinical statistics, spleen and stomach weakness accounts for the majority of pre-cancerous gastric lesions in Chinese medicine [7]. In addition, it is accompanied by Qi stagnation and blood stasis, as well as liver and stomach heat depletion, etc. Among them, spleen deficiency is the etiological basis of CAG. Secondly, physiologically speaking, the spleen and stomach, is the source of qi and blood, the two are connected to the membrane, lifting and lowering the cause, the transport and chemical, dryness and wetness, jointly responsible for the function of the nature of the day after tomorrow. The course of this disease is generally longer, gastric mucosal epithelium suffered repeated damage can occur after the change, Shen emphasized that the disease is generally for the elderly, deficiency evidence is common, coupled with dietary disorders spleen and stomach function is impaired, lack of source of qi and blood, so further aggravate the course of the disease.

Prof. Shen Shuwen believes that the labeling is a secondary factor of the disease, and its main manifestation is the intersection of poison and stasis. Professor Shen Shuwen believes that the main manifestation of the disease is the interlocking of poison and stasis, and the poison is the HP present in the stomach, and he believes that when the stomach is infected with HP, the disease is characterized by dampness-heat, and the symptoms include bitter taste in the mouth, dryness in the mouth, acid reflux, heartburn, constipation, and so on. Heat is a yang evil easy to depletion of qi and yin, dampness for the disease viscous and difficult to dispel, dampness and heat for a long time in the spleen and stomach, depletion of spleen and stomach yin spleen and stomach qi, ultimately leading to qi and yin injuries. The stomach contains evil for a long time will affect the blood flow, resulting in stagnation of qi and blood stasis. When the stagnation is not smooth, the stomach and epigastric area will become full and painful, and the tongue will be purple and dark, etc. Blood stasis manifests. With further research on chronic atrophic gastritis, it is confirmed that the causative factor of gastric precancerous lesions is due to HP infection, which is the result of dampness, heat, and toxicity in the spleen and stomach, so the clinical course of the disease is slow and long, and it is easy to be repeated and difficult to be cured.

2.2. Disease characterization

Chinese medicine believes that the disease character includes cold, heat, emptiness and solidity, spleen and stomach disease also has cold, heat, emptiness and solidity, of which the identification of cold and heat in the diagnosis of spleen and stomach disease is of great significance. Generally speaking, patients with gastric and epigastric discomforts are often accompanied by the sensation of coldness or baking heat, or even the symptoms of coldness and heat co-exist at the same time, and this time, it is especially important to identify the cold and heat. If the patient is usually afraid of heat, sweating, disturbed and likes cold drinks, dry mouth, bitter mouth, red tongue with little moss and stringy pulse, then it is recognized as heat. If the stomach and epigastric region has hidden pain, noisy
discomfort is reduced after rubbing, then it is a deficiency syndrome, and if the stomach and epigastric region has severe pain, and the symptoms are aggravated after rubbing, then it is a solid syndrome. Prof. Shen Shuwen believes that CAG is a disorder of elevation and movement of stomach qi and dysfunction of transportation. It is a chronic disease, which often recurs due to irregular diet and emotional disorders, and therefore clinically manifests as complex symptoms of cold, heat, deficiency, and solidity. On the one hand, the spleen and stomach qi rise and fall out of order, phlegm and qi intermingle and obstruct for a long time, blood stasis is not smooth, resulting in phlegm condensation and stagnation of blood and blood intertwined, and the yin is consumed and fluid is injured, easy to produce evidence of yin deficiency and heat toxicity; the course of the disease for a long time will be the loss of yin and yang, and the cold is born from it, the dampness and phlegm condensation, which can form the gastric polyps and intestinal metastases; on the other hand, the qi and blood stagnate in the stomach, and the spleen and stomach dysfunction of the function of transport and digestion, then there is a lack of sources of qi and blood, and then the solid may be transformed into the virtual, and the qi deficiency In the long run, the manifestation of deficiency of both qi and blood, yin and yang will appear. Therefore, in the pathogenic process of this disease, cold, heat, deficiency and reality are often transformed by the patient's physique and other factors, and cold, heat, deficiency and reality are often intermingled in the same unity, which exacerbates the complexity of the disease and its lingering nature. Huang Di Nei Jing" clearly put forward the academic point of view, "Yang Hua Qi, Yin shaping", if "Yang not Hua Qi", there will be a whole body viscera warm function is insufficient, the qi to promote the powerlessness of fluid transmission and excretion of the malfunction, and further aggregation of the body will be manifested in the form of phlegm, Water dampness, blood stasis and other pathological products, its accumulation in the body over time and hair into a swelling [8].

2.3. Identification of Disease Potential

Professor Shen Shuwen emphasized that the most prominent disease potential of gastric precancerous lesions is the disorder of qi, among which qi stagnation and qi reversal are the most prominent. He emphasized that the stagnation of the disease is in four aspects, i.e., qi stagnation in the meridians, blood stasis in the collaterals, dampness stagnation in the spleen, and stagnation of the stomach and intestines by persistent food; and the stagnation of qi is in the gastric inversion and the stagnation of qi in the splenic inversion, with qi stagnation and qi inversion being the important pathogenic factors leading to the occurrence of CAG. On the one hand, qi stagnation is the main etiologic factor triggering CAG, or emotional disorders, worry and anger, or dietary disorders, cold and heat discomfort, can cause qi blockage, or qi disorders, blood flow is not smooth, and stasis becomes stasis over time; or qi stagnation, blood stasis, phlegm and turbidity intertwine and interlock in the stomach, resulting in dampness, heat, phlegm and stagnation. Phlegm, blood stasis and dampness block the spleen and stomach, so the qi of the spleen and stomach does not run smoothly, resulting in stagnation of qi and the production of phlegm and toxin, and the stagnation of qi and phlegm and toxin are intertwined with each other, thus making the development of CAG show a trend that is not easy to be reversed, and the disease is recurring and difficult to be cured. That is to say, the disease potential of spleen and stomach disease refers to the inverse and stagnation of disease qi, spleen and stomach is the hub of qi lifting and lowering, spleen and stomach qi abnormality is abnormal function of the spleen and stomach, generally speaking, the spleen and stomach qi malfunction is manifested in the qi reversal, qi stagnation and qi trapping in three aspects, qi stagnation with fullness, distension and pain as the main manifestation; qi reversal with nausea and vomiting, hiccups, eructation as the main manifestation; qi trapping with prolapse of the organ, prolonged diarrhea, etc. as the main manifestation.
3. Three-dimensional six-pronged approach to guide treatment

In order to further improve the precision of CAG treatment, Prof. Shen proposed the treatment principles based on the three-dimensional six-pronged diagnosis and treatment: combining the microscopic treatment of traditional Chinese medicine with the macroscopic diagnosis of traditional Chinese medicine; firstly, identifying the deficiency and solidity, and based on nourishing yin, benefiting qi and replenishing the deficiency, detoxifying and removing blood stasis in order to treat the symptom; secondly, identifying the cold, heat and yin and yang and regulating the yin and yang and cold and heat to achieve balance of yin and yang and to enhance the level of clinical treatment on the basis of treating the root cause.

3.1. Soothe the liver and stomach

In the five elements of traditional Chinese medicine, if the liver and spleen are in conflict with each other excessively, there will be gastric and epigastric pains, accompanied by contractures of the limbs, which are caused by the deficiency of liver yin and disharmony between the liver and spleen, Shen often used the prescription of Paeonia lactiflora and licorice soup to nourish blood and knead the liver to alleviate the urgency and relieve the pain, and the pain is severe with the addition of Mucuna pruriens, Yuanhu, and Chuanxiong Zi. If the liver qi is detached from the stomach, then gastric pain, vomiting, dystocia and other clinical symptoms occur, followed by qi depression and fire, liver qi against the stomach, Shen often used Zuo Jin Wan as a treatment, adding a small amount of Huanglian and Hanxia for vomiting, and adding Yu Jin and Yuan Hu for dystocia.

3.2. Nourishing Yin and clearing heat

Yin deficiency and internal heat is a common type of CAG, the disease mechanism of the nineteen articles pointed out that "all vomiting acid ...... are all belong to heat", the lack of yin fluid in the stomach often appear dry mouth, bitter mouth, stomach and heartburn and other symptoms, this is a yin deficiency and internal heat, Shen Lao commonly used Sha Shen Maidong soup modified treatment. Shen old commonly used saxifrage and maitake soup treatment, bitter mouth plus a small amount of Huanglian, gardenia, dry mouth obvious plus dendrobium, acid reflux heartburn plus wu juju, hedgehog bark.

3.3. Strengthening the spleen and stomach

Weakness of the spleen and stomach is the most common cause of CAG, and patients often show symptoms such as lingering and recurring digestive diseases, physical weakness, lack of desire for food and drink, and epigastric distension and fullness, etc. Shen Lao often uses modified Sijunzi Tang for treatment. If the mouth is sticky and greasy, add Perulan, Huoxiang, and Coix seed. If the appetite is poor, add Jiaosanxian, Fructus Aurantii, and Fructus Raphani. If the stomach is cold, add Liangjiang, Xiangfu, Qi deficiency and blood deficiency, add Astragalus, Angelica sinensis, and Qi depression, add Cimicifuga.

3.4. Regulating Qi

Qi is one of the important causes of spleen and stomach diseases, Shen Lao believes that regulating Qi is an important method throughout the beginning and end of the treatment of spleen and stomach diseases, Shen Lao often added an appropriate amount of Xiangshu, Zanthoxylum, Platycodonopsis, Mentha piperita and so on to soothe the Qi during treatment.
Shen pointed out that CAG treatment factors in the mixture of deficiency and reality, should be both symptomatic and fundamental treatment, if in the early stage of the disease, at this time the poison is heavier than the stasis, the treatment of Zuo Jin Wan as the basis of the formula with dandelion, half a branch of lotus, gardenia, scutellaria, the intention of clearing heat and drying dampness and solving the heat and poison, and at the same time to resolve the blood stasis. Shen Lao thinks that the disease in the middle and late stage of the disease mechanism for stasis is heavier than poison, poison and stasis mutual obstruction, in the treatment, he makes good use of curcuma, hedgehog bark, make andrographis paniculata, yellow herbs, vermillion seven, three prongs, and other traditional Chinese medicines, focus on the activation of blood, eliminate stasis and clear up the collaterals. If the course of the disease lingers for a long time with the deficiency evidence and gas and conjunction or both wet food stagnation, so to nourish the yin to supplement the deficiency, he commonly used drugs are yellow essence, American ginseng, lily of the valley, tai zi ginseng, such as the sweetness and calmness of the products used to replenish gastric yin, especially commonly used in half-summer and maitake or dendrobium just and soft, regulating the spleen and stomach qi. Shen also emphasized that in the middle and late stages of the disease, the HP virus is not strong positive, and anti-evil poison is not the main purpose, at this time, the pathogenic stage is manifested as qi stagnation and stasis, so the middle and late stages of the disease emphasize on tonifying the deficiency and removing the stasis, which is intended to improve the patient's ability of resisting the disease and evil, and the method also reflects the theoretical thought of Chinese medicine, "protecting the gastric qi".

4. Case examples

Cao, female, 45 years old, was first seen on 5/29/2019. The main complaint was "stomach and epigastric pain with noisy discomfort for more than 10 years, aggravated for more than a year". History: the patient has had frequent gastric and epigastric pain with acidity for more than 10 years, which was relieved after taking gastric relaxation granules and other medications, but in the past year, gastric and epigastric pain has reappeared again, especially aggravated after consuming cold and greasy things, accompanied by abdominal distension, vectors of gas, intestinal sounding, with occasional nausea, without acid reflux, with acceptable natriuretic properties, with poor sleep, difficulty in falling asleep, and many dreams, with normal bowel movements and a tongue that is red with white moss. Ancillary checks: Electron gastroscopy (April 10, 2019, Luonan County Hospital of Traditional Chinese Medicine) suggests chronic atrophic gastritis.

Western medical diagnosis: chronic atrophic gastritis.

Chinese medicine diagnosis: Stomach plumpness (cold condensation of stomach qi, liver and stomach depression and heat syndrome).

Chinese herbal prescription: Xiangshu 10g, Gaoliangjiang 12g, Shouwu Teng 30g, Sha Ren 5g (after the next), Huanglian 6g, Wu Zhuyin 4g, Sheng Pu Huang 15g (decoction), Wuling Lip 10g (decoction), Xu Changqing 20g, Bai Shao 30g, Zhi Gan Cao 6g Danshen 15g, Hedgehog Pi 15g, Jujubae Radix 15g, Haplophora Pi 15g. 12 dosages, one dose per day, decocted with water and taken in the morning and evening warmly.

The Second consultation on June 19, 2019. Stomach pain relief after the medicine, now there is heartburn after meals, noisy discomfort during fasting, occasional hiccups, stomach cooler, stomach can be, often ringing in the abdomen, abdominal pain and diarrhea during the medication, after stopping the medication the stool is normal, urine can be, difficult to sleep, dreamy, red tongue with white greasy coating and a sunken pulse with fine strings.

Chinese medicine prescription: gao liang ginger 15g, fragrant adder 12g, Huanglian 8g, Zhimu 7g, fried white atractyloides 15g, Wu Zhu 4g, Codonopsis 20g, gardenia 10g, cloves 4g, persimmon
15g, hedgehog bark 15g, white peony 15g, Poria 15g, wood incense 10g, baked licorice 6g. 12 pays, one dose per day, decocted with water, morning service divided service.

The Third consultation on July 15, 2019. Stomach pain, heartburn significantly reduced, still appeared in the stomach and epigastric noisy discomfort in the empty stomach, occasional hiccups, abdominal intestinal tinnitus to reduce the medication did not appear abdominal pain diarrhea and other symptoms, sleep improved, urine and feces can be, the tongue is red with white greasy coating, the pulse is sunken and fine strings.

Chinese medicine prescription: gao liang jiang 15g, 12g of adenosine, Wu Zhu 4g, system hedgehog skin 15g, Codonopsis pilosula 20g, fried atractylodes macrocephala 15g, Zhi Mu 12g, cloves 4g, persimmon 15g, fried white peony 15g, Poria 15g, Acacia bark 15g, Shouwu Vine 30g, Wood Fragrance 10g, roasted licorice 6g. 12 payments, a dose per day, decoction of water in the morning and evening to serve.

After three follow-up visits, the patient's symptoms such as heartburn and noisy hiccups disappeared, and the repeat gastroscopy suggested chronic superficial gastritis, and he was instructed to have a regular diet, unimpeded emotions, and regular follow-up.

5. Press releases

This patient had PLGC caused by cold condensation of stomach qi and liver-stomach stagnation and heat, and the formula contains galangal to warm the stomach, disperse cold and relieve pain, and studies have confirmed that [9] galangal can inhibit the further growth of gastric cancer cells MGC-803. Xiangshu has the effect of regulating qi and relieving pain. Chen Zhijian [10] and other researchers have confirmed that Xiangshu has anti-inflammatory, antibacterial, anti-tumor, antioxidant, antidepressant, analgesic and sedative effects in modern Chinese pharmacology. The combination of Rhizoma Coptidis, Cornu Cervi Pantotrichum and Hedgehog Bark has the efficacy of clearing heat in the liver and stomach, suppressing acid and relieving pain. Zheng Qi [11] et al. showed that the combination of Rhizoma Coptidis and Cornu Cervi Pantotrichum could have anti-tumor necrosis and other factor signaling pathways through the enrichment analysis of KEGG pathway. Danshen activates blood circulation, removes blood stasis and relieves pain. Wan Xinhuan [12] et al. showed that the Chinese medicine danshen has anti-inflammatory, antioxidant and anti-tumor effects. Radix et Rhizoma Gastrodiae has the effect of regulating qi and eliminating flatulence. Jiang Chunlan [13] et al. demonstrated that Radix et Rhizoma Gradifoliae has the effects of anti-ulcer, antibacterial, regulating bacterial flora, hypoglycemia, and antioxidant. Wu Ling Lipid and Pu Huang have the efficacy of activating blood circulation, removing blood stasis and relieving pain. Shen Xun Nan [14] et al. observed the effects of raw Pu Huang and Pu Huang charcoal on platelets in rats with blood stasis model by combining them with Wu Ling Lipid, and found that the combined use of Pu Huang and Wu Ling Lipid in high dose group, especially using Pu Huang charcoal, could increase the platelet aggregation rate of experimental rats. Sour jujube seed and nightshade vine are paired to nourish blood and calm the mind for the treatment of insomnia. Combined with Shen Lao's three-dimensional six-pronged method, this patient's morbidity is due to dietary irregularities, cold condensation in the stomach, depression and heat, the nature of the disease is cold and heat mismatch, is a real disease, the disease is qi upward reversal, the dialectic of this disease is accurate, combined with the patient's other symptoms, the whole formula is reasonable, just in the pathogenesis of the disease, in line with the patient's actual situation, so the therapeutic effect is obvious.

Acknowledgements

Fund projects: National famous old Chinese medicine experts inheritance studio construction project (National Chinese medicine human education hair [2016] No. 42); the sixth batch of national
old Chinese medicine experts academic experience inheritance work project (National Chinese medicine human education hair [2017] No. 29).

References