

# *Professor Chang Zhanjie's Experience in Treating Chronic Liver Failure with Commonly Used Drug Pairs*

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**Abstract:** In the treatment process, we focus on regulating the spleen and stomach, using Yin Chen - Fu Ling to clear the middle jiao and strengthen the spleen and earth, Pig Yin - Bai Mao Root to clear the lower jiao and facilitate urination, and Huang Qi - Bai Zhu to benefit the spleen and nourish the middle jiao. The treatment of chronic liver failure is based on the holistic concept of Chinese medicine.

## 1. Introduction

Chronic liver failure is a progressive decompensation and loss of liver function based on cirrhosis: (1) elevated serum TBil, often less than  $10 \times \text{ULN}$ ; (2) significantly lower albumin (Alb); (3) significantly lower platelets,  $\text{PTA} \leq 40\%$  (or  $\text{INR} \geq 1.5$ ), and exclude other causes; (4) manifestations such as intractable ascites or portal hypertension; (5) hepatic encephalopathy, etc. as the main manifestation of a group of clinical syndromes<sup>[1]</sup> Chronic liver failure The clinical symptoms of chronic liver failure are complicated, with many variable and concurrent symptoms, and the therapeutic effect is unsatisfactory, while Chinese medicine can improve the clinical symptoms to some extent. The treatment of chronic liver failure and related complications by the famous Chinese medicine practitioner, Professor Chang Zhanjie, has been tried and tested repeatedly, and I found that Professor Chang pays special attention to regulating the middle jiao and taking into account dampness, stasis and toxicity and deficiency in his treatment, with remarkable efficacy. In this article, I will elaborate on Professor Chang's experienced medicine pairs from the perspective of regulating the middle jiao to prevent and treat chronic liver failure.

## 2. Chronic Liver Failure and the Middle Jiao Spleen and Stomach

In Chinese medicine, it is believed that chronic liver disease progresses to cirrhosis over time and liver function gradually decreases, and when triggers are encountered, chronic liver failure eventually develops. In the initial stage, it is mostly caused by damp-heat accumulation and liver stagnation, but later it turns from actual to deficiency, including spleen qi deficiency, spleen yang deficiency, liver yin deficiency, liver blood deficiency and even spleen kidney yang deficiency. In

addition, when liver qi is not relieved, the middle jiao loses its transportation, which in turn affects the transportation of qi, blood and fluids, resulting in phlegm and stasis of blood due to phlegm-dampness obstruction. Chronic liver failure belongs to the category of “jaundice”, “bulging” and “accumulation” in Chinese medicine.<sup>[2]</sup> The “Internal Classic - Treatise on Water Distension Nei Jing - water distension theory: “bulging ..... abdominal distension body are large, pale yellow, abdominal tendons up .....” Clinical jaundice is often seen throughout the pathogenesis of chronic liver failure, and Professor Chang believes that this disease is mostly due to the evidence of deficiency. The standard reality is generally due to dampness, heat and toxicity attacking the body, the fight between the positive and the evil, the positive does not prevail over the evil, easy to poison and stasis, obstructing the qi, presenting a chronic process of mutual poison and stasis; over time, the evil is in the decline, dampness, heat and epidemic toxicity stay in the Sanjiao, the lungs lose suction, the spleen loses health, the kidneys lose gas, resulting in deficiency and stasis, forming the internal organs deficiency symptoms.

In the Suwen-Linglan Secret Code, “The spleen and stomach are the officials of the granary, from which the five tastes come.”<sup>[3]</sup> Professor Chang believes that in the pathogenesis of chronic liver failure, early on, due to the invasion of dampness, heat, epidemic and toxicity, the body loses its qi flow, the liver loses its sparing, the spleen is offended, the spleen loses its health, which affects the stomach, the stomach loses its harmony, the qi and blood have no source of biochemistry to moisten the liver, the liver loses its sparing, which leads to qi stagnation and blood stasis, which then offends the spleen, the spleen loses its health, water and dampness accumulate, followed by earth deficiency and wood depression, which leads to the same disease in the liver and spleen, which extends over time and affects the kidneys. The kidney is incompetent in qi-transformation, opening and closing, and water-dampness is not transported, so the fullness and distension become more and more severe; its key disease location is in the liver, cross-checking the spleen and stomach, involving the kidney, and related to the lung.

### **3. Treatment of Chronic Liver Failure from “Deficiency, Dampness, Stasis and Toxicity**

Ling Shu - meridians: “It is the spleen that is sick ..... jaundice, unable to lie down”<sup>[4]</sup> , “Jin Kui Yao - Jaundice Pulse and Treatment”: “The yellow family gets it from dampness”<sup>[5]</sup> Professor Chang, following the emphasis placed on the spleen and stomach in the Yellow Emperor's Classic of Internal Medicine, believes that damp-heat and cold-dampness are the causes of jaundice, and that deficiency of the spleen and earth is the cause of the disease, which is located in the liver and spleen and is related to the lungs and kidneys. The treatment of jaundice is based on the theory of deficiency and actuality. Actual jaundice is caused by infection with damp-heat and epidemic toxins on the basis of spleen deficiency, which obstructs the qi flow in the middle jiao and causes the liver to lose drainage and damp-heat to steam; deficiency jaundice is caused by prolonged liver disease, which does not allow drainage and bile to follow the normal path and affects the function of the spleen and stomach, which does not allow the spleen to transport and transform and damages the stomach qi. The liver and spleen transmit each other, affecting the operation of the qi of the middle jiao, producing pathological products such as qi stagnation, blood stasis and water-dampness, and the condition often remains untreated for a long time. When the spleen and stomach fail to transport and transform, there is a lack of source of qi and blood production, a deficiency of essence and blood in prolonged illness, a deficiency of yang qi, and an internal cold, resulting in stagnation of qi and blood stasis; when the spleen qi is deficient, the blood loses its solidity and overflows outside the veins, “the blood that leaves the meridian becomes stasis”. In addition, Prof. Chang believes that dampness and heat can easily become stasis and toxicity because of prolonged illness with dampness and stagnation of blood, the fight between right and wrong, the deficiency of the middle

element and the failure of the clear yang to rise, thus presenting a yellowish stain on the body and eyes. If the disease persists for a long time, damp-heat and epidemic toxins are intertwined and then coiled in the three jiao, and the operation of qi is obstructed. In severe cases, the stasis and toxins are strong, and the turbid qi attacks upward, damaging the heart and lungs and clouding the clear orifices, resulting in liver coma; downward extending to the kidneys and bladder, with abnormal qi-transformation, obstruction of turbid evil and unfavorable watercourses, resulting in critical symptoms such as retention of urine and guangs for a long time.

Based on the theory of jaundice and the characteristics of the liver and spleen, Prof. Chang proposes the treatment principle of strengthening the middle jiao, strengthening the spleen and draining the liver first, transporting dampness and turbidity is the key, while helping to improve the circulation function of the liver by removing stasis. According to the various pathological manifestations of chronic liver failure, he focuses on the middle jiao in the clinical treatment process, taking into account the upper and lower jiao, dredging the liver and strengthening the spleen, regulating qi and activating blood, benefiting the spleen and nourishing the liver, and treating the liver flexibly, with good choice of medicine for empirical treatment, which has the wonderful effect of nourishing the middle jiao and strengthening the four directions.

#### **4. Select Empirical Drug Pairs for Evidence-Based Treatment**

##### **4.1 Clearing the Middle Jiao and Strengthening the Spleen and Earth - Yin Chen and Fu Ling**

The Shen Nong Ben Cao Jing says that Yin Chen is a superior product, bitter and flat in taste, and is used to treat wind-dampness, cold and heat, evil spirits, and jaundice of heat knots.

The “Compendium of Materia Medica” said Poria odor light and permeable, its nature upward, fluid, open coup, nourishing water sources and down, urine.<sup>[6]</sup> “sweet taste tonic, light can permeate damp, support both the right and remove evil, both water and permeate damp, but also can strengthen the spleen Yang.

Yin Chen is light in quality and Fu Ling is light in taste, and the combination of the two has the function of promoting and percolating, so Professor Chang emphasizes the use of Yin Chen in the treatment of dampness in the middle jiao.<sup>[7]</sup> In the treatment of dampness in the middle Jiao, Professor Chang emphasized the use of Yin Chen, commonly used to 20-60g, and at the same time, the dampness to reduce the yellow, with light percolation of dampness, such as pig ling, Ze di, etc. If heat is heavier than damp, the dose of gardenia and rhubarb should be increased in order to remove the fire and detoxify the toxin and penetrate the heat; if dampness is heavier than heat, patchouli and pelargonium should be added to aromatize dampness; if cold dampness is yellow, sand, wood, ginger should be used to awaken the spleen and warm the yang; if dampness and heat are invasive, scutellaria and atractylodes should be used to dry dampness and promote detoxification.

##### **4.2 Clearing the Lower Jiao and Facilitating Urination - Poria and Bupleurum**

Compendium of Materia Medica: “pig ling light seepage, gas ascending and can descend. Therefore, it can open the coup and facilitate urination.” It is also known as “Pharmaceuticals and Chemistry”, which states that it has a thin qi, sweet and light taste, and is flat in nature, and is used to remove dampness and cure jaundice.

The materia medica for truth: “white foxglove and up and down the Yang, eliminate the spleen and stomach fever, lung fluid to cool the blood, for blood heat delusion up and down the blood loss of the important medicine.”<sup>[8]</sup> The book “The Essential Guide to the Golden Horoscope” says: “Bai Mao Root harmonizes the Yang of the upper and lower spleen and stomach, and generates lung fluid

to cool the blood. The “Golden Knot”: “all diseases of the yellow family, but to facilitate its urine”.<sup>[9]</sup> Professor Chang believes that the combination of pig ling and white foxglove has the intention of relieving dampness and reducing yellow, so that the evil qi can go from the urine. Bai Mao Root can clear heat and cool the blood, diuretic and stop bleeding, while diuretic, can make the evil of dampness and stagnation discharged with the urine, often with yam, Bai Mao Root is good at diuretic and drainage of turbidity, in the elimination of dampness and turbidity at the same time, can also help yam to play a role, the two together drainage in the tonic.

#### **4.3 To Resolve Blood Stasis and Detoxify Poisonous Evil - Liu Fan Nu and Red Peony.**

Liu Lian Nu is warm and bitter, belongs to the heart, liver and spleen meridian, specifically into the blood has the effect of activating blood circulation, breaking blood circulation, eliminating food and resolving stagnation.<sup>[10]</sup> The medicine of the nature of the explanation: “the bitterness of the snail, should be returned to the heart, and the warmth of the nature, and the spleen, so the two into the. Gai heart real main blood, spleen real wrapped blood, to specialize in the treatment of blood evidence.”

Red peony is slightly cold and bitter, entering the liver meridian, with the effect of clearing heat and cooling the blood, dispersing blood stasis and relieving pain. The Compendium of Materia Medica says: “Red peony disperses evil and can move the stagnation in the blood.”

Professor Chang believes that the body is not full of vital energy, or long-standing illness, dampness, heat and poisonous evil stay without going to the spleen, resulting in the first deficiency of the spleen, poisonous evil stagnation, deficiency on top of the stasis, treatment to strengthen the spleen and benefit the qi, remove stasis and detoxification. Liu Fan Nu enters the blood to resolve blood stasis and open the ligaments, and Red Peony is cool in nature to restrain its warm and dry nature, the two must be paired together to perform the function of resolving blood stasis, opening the ligaments and detoxifying the toxins. The combination with *Atractylodes Macrocephala*, which enters the qi branch, strengthens the spleen and helps transport, so as to strengthen the spleen and resolve blood stasis, invigorate the blood and open the veins, eliminating evil without harming the righteousness and invigorating the blood without leaving stasis. In addition, Prof. Chang believes that while strengthening the spleen and resolving blood stasis, we should supplement with pungent and aromatic products to harmonize the Blood and Ying and regulate the Qi to resolve dampness; in case of deficiency of Yin and Blood, we should combine with products to soften the Liver and nourish Yin, and we should use Bai Shao 20~40g to calm the Liver Qi and nourish the Liver Blood; in case of significant bile stasis in the liver, we should use Liu Fan Nu, the dosage of which can reach 30~60 g; in case of serious blood stasis such as dull face and stasis spots on the tongue, we should use Ze Lan 20~40g.

#### **4.4 Benefit the Spleen Qi and Nourish the Middle Jiao - Huang Qi and Bai Zhu.**

Zhang Xichen said: “Astragalus, the optimal function of tonic qi, the main medicine for the qi”. Li Dongyuan believes that “Astragalus ..... benefits the vital energy and nourishes the three jiao” and has strong tonic functions.<sup>[11]</sup> The main purpose of this medicine is to help the body to improve its health.

The herb “Tongxuan” cloud: “white atractylodes, sweet and warm can strengthen the spleen and nourish the middle, bitter and warm can dry dampness and stop diarrhea, the spleen and stomach of the medicine, there is no one more than its right.”<sup>[12]</sup>

Professor Chang used Astragalus in the treatment of recovery from jaundice, firstly, to benefit the spleen and stomach and to warm the middle jiao, and secondly, to have a source of biochemistry and to greatly supplement the deficiency. In addition, if jaundice is caused by spleen deficiency and

dampness, a large dose of *Astragalus membranaceus* is used with *Atractylodes macrocephala* to, first, benefit the spleen and nourish the middle jiao, so that the spleen and stomach can support the biochemical source of qi and blood; second, irrigate the spleen and earth in the middle jiao to nourish the surrounding organs; third, benefit the qi of the spleen and lung to consolidate the surface and facilitate water, as the lung is responsible for the movement of water and the spleen is responsible for the transportation of water and fluids. On the other hand, it adds to the power of tonifying the lung to benefit the body and consolidate the surface.<sup>[13]</sup> On the one hand, it strengthens its function of strengthening the spleen, drying dampness and promoting water circulation, and on the other hand, it increases the power of tonifying the lung and strengthening the body.

## 5. Conclusion

Professor Chang believes that the basic pathogenesis of chronic liver failure is the deficiency of the middle jiao, loss of spleen health, dampness, heat, and toxicity that remain in the three jiao, blocking the qi flow and spreading to the upper and lower jiao, failure of the spleen's clear yang to rise, loss of lung qi to nourish, abnormal suction and descent, and inability to disperse fluid, which can become dampness and drink, and become heat in the liver and gallbladder, leading to jaundice; or dampness in the middle jiao can seep down into the kidneys and bladder, affecting the qi-transformation function, which is not conducive to qi-transformation, resulting in jaundice. Therefore, Professor Chang attaches importance to the spleen and stomach of the middle Jiao in the clinical treatment process, with the core of strengthening the spleen to help transport, and the liver to strengthen the spleen as the base, followed by transporting dampness, helping to correct stasis. In this paper, we have initially compiled Professor Chang's experienced medicine pairs commonly used in the treatment of chronic liver failure from four aspects: dampness, stasis, toxicity, and deficiency, taking into account the expulsion of dampness, elimination of stasis, detoxification, and supplementation of deficiency, etc. We hereby summarize them in order to provide better therapeutic ideas for the Chinese medicine treatment of chronic liver failure.

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