

Analysis of the Medication Rules of Chief Physician Tang Yuanshan in the Treatment of Chronic Cholecystitis and Hepatobiliary Qi Stagnation based on Data Mining Technology

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Abstract: Objective: Through data mining methods, summarize and refine the medication patterns of Chief Physician Tang Yuanshan in treating chronic cholecystitis of liver and gallbladder qi stagnation type. Methods: The diagnosis and treatment information of traditional Chinese medicine (TCM) was analyzed by data mining method, and the medication rules of Chief Physician Tang Yuanshan in the treatment of chronic cholecystitis and hepatobiliary qi stagnation were explored. Results: 245 prescriptions were collected, including 149 traditional Chinese medicines, with a total frequency of medication use of 2, 917 times. The top 15 in descending order of frequency are Bupleurum, Pinellia ternata, Yam, Paeonia lactiflora, Magnolia officinalis, Aurantii fructus, Honey-fried licorice, Codonopsis pilosula, Money Plant, Yujin, Coix Seed, Licorice, Poria cocos, peony Bark, and dried tangerine peel. The statistics of the four natures of drugs show that cold-natured, neutral and warm-natured drugs are predominant. The statistics of the five flavors of drugs mainly focus on bitter drugs, sweet drugs and pungent drugs. The meridians of the drugs are mostly the lung, spleen, liver and stomach. The total frequency of drug classification is in the following order: tonifying deficiency, promoting diuresis and removing dampness, regulating qi, etc. It can be seen from the network diagram and association rules that there are 50 pairs of drug pairs with strong connection numbers. Five core combinations of drugs were extracted through cluster analysis. Conclusion: Chief Physician Tang Yuanshan treats CC hepatobiliary qi stagnation type with the basic treatment principles of soothing the liver and relieving gallbladder and regulating qi and relieving depression. The commonly used prescriptions are the addition and subtraction of the four inverse powders, the addition and subtraction of Bupleurum Shugansan, and the addition and subtraction of Xiao Chai Hu Tang. Commonly used drugs are Bupleurum chinensis, white peony, citrus aurantium, tulip, desmodium, yam, licorice, etc. If the abdomen is full, add magnolia bark and citrus aurantium; belching, vomiting plus ochre, banxia, bamboo; Those who are bitter and upset add peony skin; For those with gallstones, add desmodium, sea sand, chicken gold, etc.

Keywords: Chronic cholecystitis, Tang Yuanshan, Hepatobiliary qi stagnation, Data mining.

1. Introduction

Cholecystitis is an inflammatory lesion of the gallbladder wall. It is divided into acute and chronic types according to the course of the disease. The acute onset is called acute cholecystitis, and the long-term repeated attacks progress to chronic cholecystitis (CC) [1]. The prevalence of chronic cholecystitis in adults in my country is 0.78% to 3.91%. The incidence rate increases with age, and the peak age of incidence is around 50 years old [2]. Chronic cholecystitis is characterized by recurring right upper quadrant pain, indigestion, and hypofunction of the gallbladder. Its protracted course and easy recurrence seriously affect the quality of life of patients [3]. Although CC does not have a specific counterpart in traditional Chinese medicine, its core symptoms such as right-sided chest pain, discomfort in the chest and abdomen, and frequent belching are highly compatible with conditions like "chest pain," "gallbladder swelling," and "collapsed chest" [4]. Dr. Tang Yuanshan, Chief Physician. Master Shi Shi studied under Mr. Gao Shanglin, the first national renowned traditional Chinese medicine practitioner of the Qin-Jin Gao School of Internal Medicine. He has been practicing medicine for over thirty years, covering a wide range of areas. Having inherited Mr. Gao's academic expertise, he has extensive experience in treating CC and has achieved remarkable results. His current research and analysis focus on CC. This provides insights into the clinical treatment of liver and gallbladder qi stagnation.

2. Materials and Methods

2.1 Data Source

The data of chronic cholecystitis with stagnation of liver and gallbladder qi admitted by the chief physician of Tang Yuanshan from January 2010 to August 2024 in yiguang, Xi'an Hospital of Traditional Chinese Medicine were collected, and 245 patients who met the admission criteria were screened and analyzed.

2.2 Research Methods

2.2.1 Inclusion criteria

- (1) Meet the Western medical diagnostic criteria for chronic cholecystitis [2];
- (2) Meet the TCM diagnostic criteria for chronic cholecystitis and hepatobiliary qi stagnation [5];
- (3) Drugs that have a serious impact on liver and kidney function have not been used in the past 3 months;
- (4) The prescribing physician is Chief Physician Tang Yuanshan;
- (5) The patient's medical records are complete.

The included patients with chronic cholecystitis should meet the above conditions at the same time.

2.2.2 Exclusion criteria

- (1) Patients with abnormal space-occupying lesions found on imaging;
- (2) Patients with severe hepatitis;
- (3) Patients with severe cardiovascular, cerebrovascular, pulmonary, renal and other primary diseases;
- (4) Patients with mental illness;
- (5) Pregnant or lactating women.

Those who meet one of the above criteria will be excluded.

2.2.3 Standardization of names of traditional Chinese medicines

Refer to the Pharmacopoeia of the People's Republic of China (2020 Edition) [6].

Based on the traditional Chinese medicines included, using traditional Chinese medicine. The Traditional Chinese Medicine Library within the Legacy Computing Platform (V3.5) performs unified processing of relevant drug names and symptoms.

2.2.4 Data and result processing

All data was entered by two individuals, and the pathological information was reviewed after the data entry process was completed. Passed. The "Data Analysis Statistical Analysis" module of the Traditional Chinese Medicine Inheritance Calculation Platform (V3.5) calculates the frequency of medication use for patients. Statistical results on the categories of secondary, four qi and five flavors, meridians, and the efficacy of medicinal substances. The "Association Rules" module derives commonly used drug combinations and drug pairs. From analyzing and summarizing the correlation and compatibility between drugs, A summary was made of the prescription patterns used by Chief Physician Tang Yuan-Shan in treating the Liver-Gallbladder Qi Stagnation type of CC.

3. Results

3.1 Analysis of Medication Frequency

245 prescriptions were included, including 149 flavors of traditional Chinese medicine, with a total medication frequency of 2917 times. Among them, the top 15 from high to low frequency are Bupleurum, Pinellia, Chinese yam, white peony root, Magnolia officinalis, Citrus aurantium, licorice, Codonopsis root, Desmodium chinensis, turmeric, coix seed, licorice, Poria, peony bark, and tangerine peel. (See Table 1)

Table 1: Frequency of traditional Chinese medicine

| serial number | drug | Frequency | Frequency (%) |
|---------------|----------------------|-----------|---------------|
| 1 | Bupleurum | 241 | 99.18 |
| 2 | Ginger Pinellia | 231 | 95.06 |
| 3 | yam | 182 | 74.9 |
| 4 | white peony root | 177 | 72.84 |
| 5 | Magnolia officinalis | 174 | 71.6 |
| 6 | Citrus aurantium | 165 | 67.9 |
| 7 | Zhigancao | 152 | 62.55 |
| 8 | Codonopsis pilosula | 131 | 53.91 |
| 9 | money plant | 130 | 53.5 |
| 10 | tulip | 117 | 48.15 |
| 11 | Coix seed | 100 | 41.15 |
| 12 | Licorice | 86 | 35.39 |
| 13 | Poria | 67 | 27.57 |
| 14 | Peony bark | 66 | 27.16 |
| 15 | tangerine peel | 56 | 23.05 |
| 16 | Angelica sinensis | 45 | 18.52 |
| 17 | Atractylodes | 45 | 18.52 |
| 18 | Ophiopogon japonicus | 44 | 18.11 |
| 19 | Amomum villosum | 44 | 18.11 |
| 20 | Digupi | 41 | 16.87 |
| 21 | Oyster | 30 | 12.35 |
| 22 | Gastrodia elata | 26 | 10.7 |

3.2 Analysis of Meridians of Drug Properties and Flavors

3.2.1 Distribution of medicinal properties

The medicinal properties of 149 kinds of traditional Chinese medicines were analyzed, and the results showed that cold-natured medicines were mainly used (1233 times, accounting for 46.48%), followed by flat-natured medicines (750 times, accounting for 28.27%), and warm-natured medicines (551 times, accounting for 20.77%). (See Table 2)

Table 2: Four gas frequencies

| four qi | Frequency | Frequency (%) |
|-------------|-----------|---------------|
| cold | 1233 | 46.48 |
| flat | 750 | 28.27 |
| temperature | 551 | 20.77 |
| cold | 117 | 4.41 |
| hot | 2 | 0.07 |

3.2.2 Distribution of medicinal flavor

The five tastes primarily consisted of bitter-tasting herbs, sweet-tasting herbs, and pungent-tasting herbs, accounting for 32.34%, 29.52%, and 23.81% of the total data, respectively. Acidic-tasting herbs made up 8.98% of the total, and salty-tasting herbs accounted for 5.35%. (See Table 3.)

Table 3: Distribution of medicinal flavor

| Gomi | Frequency | Frequency (%) |
|--------|-----------|---------------|
| bitter | 1422 | 32.34 |
| Sweet | 1298 | 29.52 |
| Spicy | 1047 | 23.81 |
| acid | 395 | 8.98 |
| salty | 235 | 5.35 |

3.2.3 Meridian distribution of drugs

The meridional frequency of drugs is arranged from high to low, and the order is lung > spleen > liver > stomach > heart > kidney > gallbladder > large intestine > bladder > small intestine > triple burner > pericardium. (See Table 4)

Table 4: Medication frequency of menstrual return

| Meridian distribution | Frequency | Frequency (%) |
|-----------------------|-----------|---------------|
| Lung | 1653 | 21.57 |
| Spleen | 1626 | 21.22 |
| Liver | 1051 | 13.72 |
| Stomach | 996 | 13 |
| Heart | 693 | 9.04 |
| Kidney | 682 | 8.9 |
| Bile | 484 | 6.32 |
| Large intestine | 234 | 3.05 |
| Bladder | 167 | 2.18 |
| Small intestine | 49 | 0.64 |
| Triple burner | 26 | 0.34 |
| pericardium | 2 | 0.02 |

3.2.4 Drug efficacy distribution

Statistics on the frequency and percentage of drug efficacy are shown in Table 5. There are a total of 2653 times, and the frequency exceeds 5% of the categories of tonifying deficiency, diuresis and dampness, regulating qi, relieving surface, resolving dampness, clearing away heat, and promoting blood circulation and removing blood stasis. Among them, drugs for replenishing deficiency accounted for the most, accounting for 34.41%; drugs for diuresis and dampness accounted for 11.91%; drugs for regulating qi accounted for 10.7%; drugs for relieving external symptoms accounted for 9.84%; drugs for removing dampness accounted for 8.56%; drugs for clearing away heat accounted for 8.48%; drugs for promoting blood circulation and removing blood stasis accounted for 6.18%.

Table 5: Frequency of classification of traditional Chinese medicines

| Efficacy distribution | Frequency | Frequency (%) |
|---|-----------|---------------|
| Tonic type | 913 | 34.41 |
| Diuretic and dampness type | 316 | 11.91 |
| Qi-regulating type | 284 | 10.7 |
| Exo-relieving type | 261 | 9.84 |
| Dampness-removing type | 227 | 8.56 |
| Heat-clearing type | 225 | 8.48 |
| Blood-activating and blood-stasis-removing type | 164 | 6.18 |

3.3 Drug Combinations and Frequency Statistics Results

Carry out prescription rule analysis on 245 first prescriptions, input the “number of support” as 80 and the input “confidence” as 0.9. After calculating the medication mode, 50 groups of commonly used medicine groups are obtained, see Table 6 (Due to the large volume of data, this table only displays the top 10 entries.). After running association rule analysis, 52 groups of related medicine groups are obtained, see Table 7 (Due to the large volume of data, this table only displays the top 10 entries.).

Table 6: Commonly used drug combinations and frequency

| Serial number | Drug mode Frequency | Frequency |
|---------------|---|-----------|
| 1 | Bupleurum, white peony root | 174 |
| 2 | Bupleurum, ginger pinellia, citrus aurantium, licorice | 99 |
| 3 | Ginger pinellia, Citrus aurantium, Zhigancao | 99 |
| 4 | Ginger pinellia, white peony root, money grass | 99 |
| 5 | Bupleurum, ginger pinellia, white peony root, money grass 9 | 97 |
| 6 | Yam, Codonopsis pilosula | 96 |
| 7 | Ginger Pinellia, Citrus Aurantii, Money Grass | 96 |
| 8 | Bupleurum, white peony root, Magnolia officinalis, Citrus aurantium | 95 |

| | | |
|----|--|----|
| 9 | Yam, white peony root, citrus aurantium | 95 |
| 10 | White peony root, Magnolia officinalis, Citrus aurantium | 95 |

Table 7: Confidence analysis of drug rules

| Serial number | Rule | Confidence level |
|---------------|---|------------------|
| 1 | White peony root, Magnolia officinalis, Citrus aurantium -> Bupleurum | 1 |
| 2 | Ginger pinellia, yam, turmeric -> Bupleurum | 1 |
| 3 | White peony root, Citrus aurantium husk, licorice root -> Bupleurum | 1 |
| 4 | White peony root, Citrus aurantium husk, licorice root -> Bupleurum | 1 |
| 5 | Ginger pinellia, Citrus aurantium, Zhigancao -> Bupleurum | 1 |
| 6 | Yam, Magnolia officinalis, Citrus aurantium -> Bupleurum | 1 |
| 7 | Coix->Bupleurum | 1 |
| 8 | White peony root, coix seed->bupleurum | 1 |
| 9 | Magnolia officinalis, Yujin -> Bupleurum | 1 |
| 10 | Ginger Pinellia, Magnolia officinalis, Turmeric -> Bupleurum | 1 |

3.4 Analysis of New Prescriptions

In the “Data Analysis - Prescription Analysis - Cluster Analysis” module, using the K-means clustering algorithm., extracted the core combination of drugs through multiple clustering analysis, and analyzed 245 outpatient prescriptions that met the standards. Based on the clinical experience of Dr. Tang Yuanshan in treating the CC Liver-Gallbladder Qi Stasis type, five core prescriptions were identified. (See Table 8.)

Table 8: Core prescriptions

| Serial number | New combination | Frequency |
|---------------|---|-----------|
| 1 | Bupleurum, ginger pinellia, Magnolia officinalis, yam, white peony root, Citrus aurantium | 97 |
| 2 | Bupleurum, ginger pinellia, white peony root, Magnolia officinalis, money grass, turmeric | 66 |
| 3 | Bupleurum, ginger pinellia, yam, citrus aurantium, white peony root, Magnolia officinalis | 52 |
| 4 | Bupleurum, ginger pinellia, white peony root, yam, citrus aurantium, licorice | 22 |
| 5 | Bupleurum, yam, ginger pinellia, licorice, madder charcoal, white peony root | 6 |

4. Discussion

4.1 Understanding of the Etiology, Pathogenesis, Syndrome Differentiation and Treatment of Chronic Cholecystitis with Hepatobiliary Qi Stagnation

Traditional Chinese medicine views CC as falling under the categories of “abdominal pain” and “gallbladder swelling.” The main causes of CC include emotional distress, irregular diet, exposure to external pathogens, obstruction by worms and stones, and excessive physical strain [7]. CC is located in the gallbladder and is associated with the dysfunction of the liver, spleen, and stomach. The basic pathogenesis is that the liver fails to relieve diarrhea, the gallbladder fails to function, causing pain due to blockage, the gallbladder fails to nourish, and the gallbladder fails to function, resulting in pain. The CC Liver and Gallbladder Stasis type is characterized primarily by right-sided chest pain and discomfort. The pain is migratory and can radiate to the chest and back. It worsens upon anger and may be accompanied by aversion to greasy foods, occasional nausea, vomiting after eating, fullness and

discomfort in the abdomen and chest, and belching. The tongue typically shows a pale red tongue coating, a thin white or greasy tongue coating, and a characteristic wiry pulse [5]. The gallbladder is the house of the essence, which contains the essence. The gallbladder is one of the six internal organs. The liver is located under the side of the body, and the gallbladder is attached to the liver. They are the exterior and interior of each other. The meridians run along the side of the body. The bile is transformed by the remaining qi of the liver. Only when the liver qi is strong can bile be secreted and excreted normally. Poor mood, improper diet, overeating greasy food or insect accumulation can lead to liver qi stagnation, affecting the liver's drainage and gallbladder's circulation, causing difficulty in bile excretion, causing qi blockage and medullary paralysis, resulting in hypochondriac pain [8]. Therefore, Zhang Jingyue said: "Chronic pain originally belongs to the two meridians of the liver and gallbladder, because both meridians run along the hypochondrium and ribs." Only by resolving liver stagnation can bile be released and the hypochondriac pain disappear. Therefore, Tang Yuanshan, a chief physician, treats CC with hepatic and gallbladder stagnation by focusing on soothing the liver and promoting bile flow, as well as regulating qi and resolving stagnation as the primary treatment principle. Commonly used prescriptions are Sini Powder with a modified flavor and Xiaobupleurum Decoction with a modified version. Commonly used drugs include Bupleurum, white peony root, Citrus aurantium, turmeric, Desmodium, yam, licorice, etc. If the abdomen is distended, add Magnolia officinalis and Citrus aurantium; for belching and vomiting, add ocher, pinellia, and bamboo root; for bitter mouth and upset, add Peony Bark; for those with gallstones, add Desmodium, Sea Jinsha, Gallus gallus gallus L., etc.

4.2 Understanding of the Properties of Drugs for the Treatment of Chronic Cholecystitis and Hepatobiliary Qi Stagnation

Xu Lingtai summarized in "Shen Nong Baicao Jing Bai Zhong Lu" that "the purpose of all medicines is to take their qi, taste, color, shape, quality, temperament, when they were born, or where they were grown. Each of them can be used to cure diseases according to its preference. Therefore, it can remedy the shortcomings and harmonize the internal organs. If you look deeply for its principles, you can find it yourself."

The results of this study showed that among the 149 medicines used, there were 1233 times of cold-natured medicines, 750 times of flat-natured medicines, and 551 times of warm-natured medicines. The CC disease localizes in the gallbladder. Its manifestation of gallbladder qi stagnation is characterized primarily by right-sided chest pain and swelling. Qi stagnation is often caused by dietary impurities, emotional blockages, or weakness and deficiency of qi. There is no clear distinction between cold and heat; however, according to the "Six Microcosmic Principles and Major Theories" of the Inner Canon, "in the region above the yang organ, fire governs; within it lies the yin organ." The yang organ, known as Shaoyang, serves as the "hub" of the three yang energies. Its nature is that of fire, responsible for activating qi and warming both the exterior and interior. This corresponds to the function of the gallbladder in facilitating discharge. Therefore, cold medications are used to directly counteract the excess fire in

the gallbladder and clear the yang organ. Herbal remedies with a neutral nature have the effect of harmonizing the internal organs and facilitating the flow of qi and blood. They are suitable for conditions characterized by prolonged disease courses, a mix of symptoms of deficiency and excess, and stagnation of liver and gallbladder qi. The combination of cold-natured and warm-natured herbs also embodies the "harmonization method" philosophy of Chief Physician Tang Yuanshan [9]. Of the five types of medicinal substances used, bitter-tasting drugs were administered 1, 422 times, sweet-tasting drugs 1, 298 times, and pungent-tasting drugs 1, 047 times. Bitter-tasting drugs facilitate reduction, discharge, and purification, while pungent-tasting drugs promote movement, dispersion, and elevation. This aligns with the nature of the liver's upward movement and the gallbladder's downward movement, ensuring the smooth circulation of qi. According to statistics, the primary meridians affected by the medications used are the lung, spleen, liver, and stomach. Qi stagnation refers to the pathological changes of stagnation of qi in certain viscera and meridians or localized areas. Since the movement of qi in the human body is closely related to the functions of the liver in facilitating release, the lungs in promoting downward movement, the spleen in promoting clarity, and the stomach in facilitating downward elimination, as well as the intestines' function of secretion and transmission, qi stagnation is often associated with imbalances in the functions of these viscera. Treatment of the CC Liver-Gallbladder Qi Stagnation type must involve addressing the liver, spleen, stomach, and lungs. When qi circulates, blood also circulates; when qi becomes stagnant, blood becomes stasis; when qi circulates, water flows as well; when qi becomes stagnant, water stagnates. Therefore, qi stagnation can lead to blood stasis, water retention, and the development of pathological changes such as blood stasis, phlegm, and edema. Moreover, according to "The Essentials of the Golden Cabinet: The Pathology, Pulse Diagnosis, and Treatment of Organs and Meridians," "When one observes symptoms of liver disease, one knows that the liver will transmit its condition to the spleen. Therefore, one should first strengthen the spleen." Consequently, treatment primarily focuses on replenishing qi, promoting water flow, and regulating qi.

4.3 Understanding of the Medication Rules for the Treatment of Chronic Cholecystitis and Hepatobiliary Qi Stagnation

The findings of this study indicate that Tang Yuanshan, the chief physician, used 245 prescriptions to treat the Liver-Gallbladder Qi Stagnation type of CC. These prescriptions involved 149 different herbs. Of these, 15 herbs were used at a frequency of ≥ 50 times. Ye Tianshi described in "Bing-Zhu Jing-Jie" that "Chai Hu is light and clear, promoting the upward movement of gallbladder qi. When the gallbladder qi is unobstructed, all the ten internal organs follow suit and function harmoniously." Pinellia pinellia is pungent and can dissipate stagnation, and its pungency can reduce qi, and its function can eliminate phlegm and dampness, harmonize the stomach and reduce qi; yam can remove cold and heat evil qi, tonify the middle and replenish qi; "Changsha Yao Jie" records that white peony root: "enters the liver and clears the wind, travels the gallbladder and bowels and relieves heat"; Magnolia officinalis is bitter and

warm, bitter can be purged, and warm can be dispelled, so it regulates Qi and blood paralysis; Fructus Aurantii can be used to widen the Qi and relieve swelling; Licorice is sweet and relieves liver urgency, used raw to clear fire, and used to invigorate the Zhong; Codonopsis pilosula nourishes Qi and promotes body fluid; Desmodium chinensis can both diuretic and stranguria, remove stones, and is good at clearing away dampness and heat in the liver and gallbladder; Zhu Danxi said: "The stagnation of metal fire contains earth and water. The ancients used it to treat the lingering stagnation, hence the name."; Coix seed is sweet and cold, and it is sweet to travel, and cold to clear it; "Shen Nong's Materia Medica" records that Poria tastes sweet and flat, and is used to treat adverse qi in the chest and hypochondrium, and worry. The liver rises and the lungs descend. If the lung metal is insufficient, the qi will not fall. If the liver wood is excess, the qi will rise and reverse. Poria cocos enters the lung meridian and the qi will fall when it is flat. It is sweet and soothes the liver, so it is the main medicine. Moutan bark is stagnant and clears the wind. It promotes blood stasis and purges heat. Huang Yuanyun said: "Tangerine peel promotes stagnant qi and purges stagnation and fullness, and is good at opening the chest and diaphragm."

The association rule results show that there are 50 commonly used drug association rules, which are combinations of 11 drugs including Bupleurum, Pinellia, White Peony, Magnolia officinalis, Citrus Aurantii, Chinese Yam, Zhigancao, Curcuma, Desmodium, Coix Seed, and Codonopsis. It is not difficult to see that Chief Physician Tang Yuanshan added or subtracted Sini Powder and Xiaobuihu Decoction in the prescription. The CC Liver-Gallbladder Stasis type is characterized by stagnation of liver qi, leading to obstruction in bile secretion, resulting in symptoms such as chest and side pain, bitter mouth, restlessness, and irritability. Jia wood belongs to yang, corresponds to the gallbladder and fu organs, and controls the Qi mechanism to lower and release; Yi wood belongs to Yin, corresponds to the liver, and governs the Qi mechanism to rise and rise. The two are each other's exterior and interior, and jointly maintain the balance of the liver and gallbladder's qi. The descending and releasing function of A wood depends on the rising of Yi wood, and the rising of Yi wood requires the descending and releasing function of A wood to clear the road. If the first wood does not fall, the bile will be stagnant, and if the second wood does not rise, the liver will be stagnate and the qi will be stagnation. An imbalance between the two can lead to the same diseases of the liver and gallbladder. The liver belongs to wood, and the spleen belongs to earth. When liver qi is stagnant, wood may overcome earth, causing spleen and stomach dysfunction, abdominal distension, loss of appetite and other symptoms. Sini Powder is derived from "Treatise on Febrile Diseases", the power can remove evil and relieve depression, soothe the liver and regulate the spleen. According to the results of this study, the medicinal combination of Bupleurum, White Peony, Zhigancao, and Citrus Aurantii embodies the meaning of Sini Powder. Bupleurum soothes the liver, relieves stagnation, and clears yang; peony nourishes blood and astringes yin, and is matched with Bupleurum, one rise and one astringent; Citrus aurantium promotes qi and dissipates stagnation, and works with Bupleurum, one rises and one falls, strengthening the effect of soothing qi; Zhigancao relieves urgency and moderates, and harmonizes all the medicines. For those with gallstones, add Desmodium chinensis, Sea Jinsha, Gallus

gallus gallus L., etc.; for those with abdominal distension, add Magnolia officinalis. The CC Liver-Gallbladder Stasis type affects the gallbladder and involves the liver and spleen. Xiao Chai Hu Tang is designed for the Shaoyang channel and its function is to harmonize the Shaoyang energy. In this study, the combinations of Bupleurum, Codonopsis, Magnolia officinalis, Pinellia ternata, and Licorice represent the meaning of Xiaobuihu decoction. Bupleurum decoction can relieve the depression of Shaoyang; Codonopsis pilosula, Magnolia officinalis, Pinellia ternata, and licorice can strengthen the spleen, strengthen the body and dispel evils; for those with restlessness and fullness, add Desmodium chinensis and Coix seed; for those with bitter mouth and upset mind, add white peony root and peony bark.

The results of this study show that the core prescription 1 is Bupleurum, ginger pinellia, Magnolia officinalis, yam, white peony root, and Citrus aurantium. In this prescription, Bupleurum enters the liver and gallbladder meridian, soothes the liver and gallbladder, and promotes yang qi. Citrus aurantium regulates qi and relieves stagnation, and works together with Bupleurum. One rise and one fall, soothes the qi. White peony root nourishes blood and restrains yin. Matches with Bupleurum. One liter and one convergence, regulates qi without damaging yin. Together they are ministerial drugs. Ginger pinellia harmonizes the stomach and lowers the inverse, Magnolia officinalis promotes qi and relieves fullness, and yam strengthens the spleen and promotes qi. Together they are auxiliary drugs. The combined use of various medicines can smoothen the flow of qi, eliminate hypochondriac pain, and prevent disease. Together, they can soothe the liver and relieve stagnation, regulate qi and strengthen the spleen.

5. Summary

This data indicates that Chief Physician Tang Yuanshan's clinical treatment of CC with hepatic and gallbladder qi stagnation employs the principle of soothing the liver and promoting bile flow, regulating qi, and resolving stagnation as the main treatment approach, make good use of products that regulate qi, replenish deficiency, and remove dampness to relax liver and gallbladder qi and make the spleen and stomach peaceful. Commonly used prescriptions are Sini Powder with added flavor and Xiaobuihu Decoction with added or subtracted ingredients. Commonly used medicines include Bupleurum, Ginger Pinellia, Magnolia officinalis, Chinese yam, white peony root, Citrus aurantium, Curcuma, Desmodium, Licorice, etc.

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