WHIOCE PUBLISHING PTE. LTD.
PROVIDING
FIRST-CLASS SCIENTIFIC INFORMATION
FOR TOP SCHOLARS

2025 Volume 10, Issue 3
Advances in Precision Medicine
ISSN: 2424-9106 (Online)
ISSN: 2424-8592 (Print)

Clinical Observation of Dachaihu Decoction in the Treatment of Bile Reflux Gastritis

Hao Zhou*
Xuzhou Tongshan Maternal and Child Health Hospital, Xuzhou 221100, Jiangsu, China

**Author to whom correspondence should be addressed.*

Abstract: *Objective:* To analyze the effect of Dachaihu decoction in the treatment of bile reflux gastritis. *Methods:* A total of 70 patients with bile reflux gastritis were selected for data analysis in this experiment. The selected time was from June 2024 to May 2025. 35 patients in each group were divided into two groups by lot. The study group was treated with conventional Western medicine + Dachaihu decoction, and the control group was treated with conventional Western medicine. The data of the two groups were compared. *Results:* Compared with the control group, the total effective rate of the study group was significantly higher, the TCM syndrome score after treatment was significantly lower, the number of bile reflux after treatment was significantly less, and the time of bile reflux after treatment was significantly shorter, $P < 0.05$; The TCM syndrome score, bile reflux times and bile reflux time before treatment were compared between the two groups, $P > 0.05$. *Conclusion:* The effect of Dachaihu decoction in the treatment of bile reflux gastritis is ideal.
Keywords: Dachaihu decoction; Bile reflux gastritis; Therapeutic effect

Online publication: September 26, 2025

1. Introduction

The incidence of bile reflux gastritis is relatively high. Clinical research on its etiology and treatment options has been given great attention, and a large number of studies have been carried out. In recent years, with the interference of factors such as the change of people‘s dietary structure and the increase in life pressure, the incidence of this disease has increased year by year. The main clinical symptoms are epigastric pain, abdominal distension, acid regurgitation, bitter mouth, etc. [1] The repeated attacks of the disease will lead to adverse outcomes and seriously affect the quality of life of patients. During the treatment of patients with Western medicine, acid suppressants, gastric mucosal protectors, and gastrointestinal motility-promoting drugs are mainly used [2]. The curative effect of long-term treatment of patients is not good, drug dependence is easy to occur, and patients have adverse reactions, such as gastrointestinal flora imbalance. Bile reflux gastritis in the theoretical system of traditional Chinese medicine belongs to the categories of “epigastric pain,“ “fullness of the stomach,“ “acid swallowing,“ etc., including liver and gallbladder stagnation, stomach qi inversion, and patients with damp heat or food accumulation, patients should be given the implementation of soothing the liver and gallbladder, and stomach depression [3]. In the Treatise on febrile diseases, Dachaihu Decoction contains bupleurum, *Scutellaria baicalensis*, *Pinellia ternata*, *Fructus aurantii Immaturus*, rhubarb, *Radix Paeoniae Alba* and other drugs. Its

efficacy is to reconcile Shaoyang and internal diarrhea heat knot. It is applied to the treatment of patients with bile reflux gastritis, which conforms to the characteristics of pathogenesis. In recent years, there have been clinical reports suggesting that Dachaihu decoction can help patients improve bile reflux symptoms and effectively repair gastric mucosal damage in patients [4]. In this paper, 70 patients with bile reflux gastritis were selected to explore the effect of Dachaihu decoction.

2.1. Data

In this experiment, a total of 70 patients with bile reflux gastritis were selected for data analysis. The selected time was from June 2024 to May 2025, with 35 patients in each group. The study group had 20 men and 15 women, aged 27–69 (44.54 ± 5.36) years old, and the control group had 21 men and 14 women, aged 25–67 (44.55 ± 5.34) years old. The comparison of the two groups of data showed that $P > 0.05$.

Inclusion criteria: (1) In line with the disease diagnostic criteria, gastroscopy suggested gastric mucosal lesions and bile reflux; (2) Chief complaint: burning sensation, epigastric pain, bitter mouth, dry mouth, etc; (3) The onset was relatively slow and recurrent within 2 months.

Exclusion criteria: (1) Severe gastrointestinal bleeding and esophageal stenosis; (2) In lactation or pregnancy; (3) Mental disorders, language dysfunction, etc.

2.2. Method

The control group was treated with conventional Western medicine, oral Domperidone Tablets, 10 mg/time, 3–4 times/D, chewing hydrotalcite tablets, 10 mg/time, 4 times/D, for 4 weeks.

The study group was treated with conventional Western medicine plus Dachaihu decoction. Based on the treatment in the control group, the following were added: *Radix bupleuri* 10 g, *Radix scutellariae* 10 g, fried *Radix paeoniae alba* 10 g, *Radix et rhizoma rhei* 6 g, *Radix curcumae* 10 g, *Rhizoma pinelliae* 10 g, fried *Fructus aurantii* 6 g, ocher 30 g and licorice 3 g. The gallbladder wall of patients with cholecystitis was rough, so it was necessary to add *Lysimachia christinae* 30 g and *Artemisiae scopariae* 15 g. If the patients had severe pain, it was necessary to increase *Rhizoma corydalis* 10 g and *Rhizoma curcumae* 10 g. If the patients had obvious acid regurgitation, it was necessary to increase *Rhizoma coptidis* 9 g and *Fructus evodiae* 1.5 g. If the 30 g, 10 g of bitter almond, 1 dose per day for the patient, 300 mL of drug solution obtained by boiling, morning and evening medication, continuous treatment for 8 weeks.

2.3. Observation indexes

(1) The total effective rate of the two groups was compared. After treatment, the symptoms disappeared completely, gastroscopy showed that the lesion of gastric mucosa was basically disappeared, and the gastric mucosa was well repaired, which was judged to be effective; After treatment, the symptoms were improved, and gastroscopy showed that the lesion of gastric mucosa was reduced by 50% or more, which was judged to be effective; In other cases, the judgment is invalid. Total effective rate = 100% - ineffective rate.

(2) The TCM syndrome scores of the two groups were compared.

(3) The times and frequency of bile reflux were compared between the two groups.

2.4. Data statistics

Statistical SPSS 28.0 software was used to complete the data calculation. The measurement data were described by mean ± standard deviation (SD), *t*-test, and count data were described by % and χ^2 test, $P < 0.05$, there was statistical significance.

3. Results

Compared with the control group, the total effective rate of the study group was significantly higher, the TCM syndrome score after treatment was significantly lower (**Table 1**), the number of bile reflux after treatment was significantly less, and the bile

reflux time after treatment was significantly shorter, $P < 0.05$ (**Table 2**). The TCM syndrome score, bile reflux times and bile reflux time before treatment were compared between the two groups, $P > 0.05$ (**Table 3**).

Table 1. Comparison of total effective rate between the two groups (%)

Group	Markedly effective	Effective	Invalid	Total effective rate
Research group ($n = 35$)	30 (85.71)	4 (11.43)	1 (2.86)	97.14
Control group ($n = 35$)	14 (40.00)	13 (37.14)	8 (22.86)	77.14
χ^2				6.2477
P				< 0.05

Table 2. Comparison of TCM syndrome scores between the two groups

Group	Epigastric pain		Abdominal distension and fullness		Dry mouth and bitter mouth		Heartburn and noise	
	Before treatment	After treatment	Before treatment	After treatment	Before treatment	After treatment	Before treatment	After treatment
Research group ($n = 35$)	4.22 ± 1.35	1.21 ± 0.21	4.08 ± 1.22	1.16 ± 0.15	3.80 ± 1.66	1.06 ± 0.47	3.61 ± 1.71	1.18 ± 0.36
Control group ($n = 35$)	4.25 ± 1.41	2.36 ± 1.87	4.10 ± 1.28	2.22 ± 1.21	3.92 ± 1.65	2.38 ± 1.22	3.58 ± 1.85	2.46 ± 1.84
t	0.0909	3.6155	0.0669	5.1433	0.3033	5.9731	0.0705	4.0390
P	> 0.05	< 0.05	> 0.05	< 0.05	> 0.05	< 0.05	> 0.05	< 0.05

Table 3. Comparison of bile reflux times and bile reflux time between the two groups

Group	Bile reflux times (times/d)		Bile reflux time (min/time)	
	Before treatment	After treatment	Before treatment	After treatment
Research group ($n = 35$)	7.12 ± 0.48	2.05 ± 0.26	7.62 ± 0.51	2.02 ± 0.47
Control group ($n = 35$)	7.09 ± 0.52	3.07 ± 0.36	7.51 ± 0.47	3.23 ± 0.52
t	0.2508	13.5888	0.9383	10.2128
P	> 0.05	< 0.05	> 0.05	< 0.05

4. Discussion

Bile reflux gastritis is a common disease in the clinic. The incidence of patients is high, and there is a clinical treatment dilemma. How to solve it is explored and analyzed in the clinic. Epidemiological data show that in patients with chronic gastritis accounts for 10% to 20% [5]. Affected by factors such as refined diet, irregular work and rest, and a sharp increase in mental pressure in modern society, the incidence of chronic gastritis increases by 3–5% every year. The number of young and middle-aged patients has also increased in recent years. From the perspective of pathological mechanism, the core contradiction of bile reflux gastritis is gastroduodenal motility disorder or pyloric sphincter dysfunction. The duodenal contents of patients reflux to the stomach, which contains bile salt and trypsin. The former can directly damage the phospholipid bilayer structure of the patient‘s gastric mucosa. Patients are prone to gastric mucosal barrier function,

resulting in mucosal congestion, edema, erosion, and long-term repeated attacks [6], which will lead to gastric mucosal atrophy, intestinal metaplasia, and significantly increase the risk of precancerous lesions such as dysplasia. The health and quality of life of patients' digestive systems are seriously threatened.

The experimental results of this group are: compared with the control group, the total effective rate of the study group is significantly higher, the TCM syndrome score is significantly lower after treatment, the number of bile reflux after treatment is significantly less, and the bile reflux time after treatment is significantly shorter, $P < 0.05$; The TCM syndrome score, bile reflux times and bile reflux time before treatment were compared between the two groups, $P > 0.05$.

Detailed analysis of the causes of the results:

(1) The efficacy of *Radix bupleuri* is to soothe the liver and relieve depression, regulate Qi, effectively restore the liver drainage function of patients, and significantly improve the poor bile excretion of patients. *Radix scutellariae* is bitter, cold and clear heat, which can directly remove the heat of the liver and gallbladder of patients with Shaoyang. After compatibility, it can help patients "reconcile Shaoyang" and effectively alleviate the pathological basis of patients with "liver and gallbladder stagnation heat" from the root.

(2) Fried *Radix paeoniae alba* with herbal medicine can soften the liver, relieve pain, assist *Radix bupleuri* to soothe the liver, and effectively relieve the pain caused by epigastric spasm caused by liver Qi inversion. The effect of rhubarb is to relieve cold and cold, help patients to clear the bowels and relieve heat, and effectively remove the gastrointestinal heat of patients. Through "clearing the bowels," it can improve the gastrointestinal motility of patients, reduce bile reflux, and use *Rhizoma pinelliae* ginger for patients, which can promote the patients' pungent temperature and reduce adverse reactions, dry dampness and remove phlegm, significantly enhance the ability of stomach Qi to reduce turbidity, and effectively relieve the symptoms of acid reflux and heartburn caused by stomach Qi inversion. The function of Yujin is to relieve Qi depression, promote the gallbladder and eliminate jaundice, and soothe the liver and benefit patients. The bile effect was further strengthened and bile excretion was significantly improved.

(3) The effect of fried *Fructus aurantii immaturus* with adjuvant is to regulate Qi and relieve stagnation and distension. It can effectively relieve the symptoms of abdominal distension and fullness. It can replace the heavy deposition of ochre. It can help patients reduce adverse reactions and stop vomiting. The downward force of stomach Qi is effectively enhanced, and bile reflux is directly reduced. The role of licorice is to reconcile various drugs. The bitter cold nature of rhubarb and *Scutellaria baicalensis* can be alleviated, which can effectively prevent patients from damaging the Yang Qi of spleen and stomach [7].

(4) This study combined with the syndrome differentiation and subtraction of patients. Rough gallbladder wall, cholecystitis plus *Lysimachiae* and *Artemisiae capillaris* can help patients clear away heat and dampness, promote gallbladder and reduce jaundice. Severe pain plus *Rhizoma corydalis* and *Rhizoma curcumae* can significantly strengthen the effect of promoting Qi and activating blood circulation, removing blood stasis and relieving pain in patients. *Coptis rutaecarpa* and *Evodia rutaecarpa* can help patients clear liver and fire, soothe the stomach and stop acid, and add *Atractylodis macrocephalae* and bitter almond for constipation. Patients can effectively strengthen the spleen and intestines, and the pertinence and efficacy of prescriptions are significantly improved [8].

From the perspective of modern pharmacological mechanism, Dachaihu Decoction plays a therapeutic role through multiple targets and channels. For example, saikosaponin in Bupleurum can effectively regulate the level of gastrointestinal hormones in patients, improve gastrointestinal motility, enhance the tension of the pyloric sphincter, and reduce bile reflux; Baicalin in *Scutellaria baicalensis georgi* can help patients with anti-inflammatory and anti-oxidation, inhibit the release of inflammatory factors in gastric mucosa, and reduce mucosal damage. Paeoniflorin in *Radix paeoniae alba* can effectively inhibit the spasm of gastrointestinal smooth muscle, relieve epigastric pain, and enhance the function of the gastric mucosal barrier in patients with good mucosal repair. Emodin in Rhubarb can effectively regulate the balance of intestinal flora in patients, improve intestinal peristalsis function, reduce retention of duodenal contents by "dredging the bowels," and effectively reduce the risk of reflux in patients. Alkaloids in *Pinellia ternata* can inhibit the vomiting center of patients,

and reduce gastric Qi upwardness. Iron oxide, silicon dioxide and other components in ochre can neutralize gastric acid and protect the gastric mucosa. The pharmacological effect of "heavy falling and downwardness" can effectively delay gastric emptying speed and reduce bile reflux.

5. Conclusion

The effect of Dachaihu Decoction in the treatment of bile reflux gastritis is ideal; the TCM syndrome score of patients after treatment is significantly lower, the number of bile reflux episodes after treatment is significantly less, and the time of bile reflux after treatment is significantly shorter, which is worthy of clinical use and promotion.

Disclosure statement

The author declares no conflict of interest.

References

[1] Chen Q, Wu P, 2024, Clinical Observation of Banxia Xiexin Decoction Combined with Zuojin Pill in the Treatment of Bile Reflux Gastritis. Journal of Practical Traditional Chinese Medicine, 40(4): 626–627.

[2] Chen Y, Cao C, 2024, Effect and Pharmacological Mechanism of Xiaochaihu Decoction Combined with Western Medicine in the Treatment of Bile Reflux Gastritis. Clinical Rational Drug Use, 17(27): 70–73.

[3] Liu J, Zhang Z, Sun Y, et al., 2024, Observation on the Effect of Chaihu Guizhi Ganjiang Decoction Plus Acupuncture in the Treatment of Bile Reflux Gastritis. Chinese Prescription Drug, 22(8): 157–160.

[4] Yang H, Liu Y, 2024, Clinical Efficacy of Shugan Jiangni Decoction in the Treatment of Bile Reflux Gastritis of Liver Stomach Stagnation Heat Type. Shenzhen Journal of Integrated Traditional Chinese and Western Medicine, 34(13): 46–49.

[5] Hong Y, 2024, Shugan Jiangni Decoction in the Treatment of 30 Cases of Bile Reflux Gastritis of Liver Stomach Stagnation Heat Type. Guangming Traditional Chinese Medicine, 39(10): 1993–1996.

[6] Zhan Q, 2023, Clinical Effect of Chaihu Xianxiong Decoction Combined with Haoqin Qingdan Decoction in the Treatment of Bile Reflux Gastritis After Cancer Radiotherapy. Chinese and Foreign Medical Research, 21(21): 157–160.

[7] Zheng Z, 2023, Clinical Observation of Dachaihu Decoction in the Treatment of Bile Reflux Gastritis. Journal of Practical Traditional Chinese Medicine, 39(10): 1946–1947.

[8] Bai T, 2022, Clinical Efficacy of Modified Dachaihu Decoction in the Treatment of Bile Reflux Gastritis. Inner Mongolia Traditional Chinese Medicine, 41(5): 13–14.