

# Treatment of primary bile reflux gastritis and its clinical pathological analysis

Shi Min

Xi'an PeiHua College, Shaanxi Xi'an 710125, China

**Keywords:** bile reflux gastritis; Hydrotalcite, Weifuchun group; Mosapride group; Pathological analysis.

**Abstract.** Objective: to analyze the effect of multiple therapies in the treatment of primary bile reflux, and to observe and analyze the pathological symptoms of bile reflux gastritis. Methods 120 cases from January 2016 to January 2017 in our hospital to receive treatment and meet the requirements of the patients, randomly divided into two groups, will give hydrotalcite and Weifuchun for treatment of patients in the treatment group were treated with Mosapride for treatment of patients as the control group, the treatment effect of the two groups of comparison. Results the two groups of patients after treatment of gastric reflux and the total number of reflux total time percentage decreases, but the change in the treatment group than the control group significantly ( $p < 0.05$ ); there was no significant difference in patients with pathological changes occurred before and after treatment with ( $P > 0.05$ ); the patients in the treatment group the total effective rate was 98.3%, the recurrence rate was 3.3%, control group total effective rate was 90%, the recurrence rate was 23.3%, the difference was statistically significant ( $p < 0.05$ ). In the conclusion of primary bile reflux gastritis patients were treated in the process, methods of hydrotalcite, Weifuchun multiple treatment can achieve better clinical effect, and the recurrence is low, the prognosis is good. In addition, according to the clinical pathological analysis results, primary bile reflux gastritis and gastric mucosa, intestinal metaplasia or dysplasia appeared atrophy associated changes.

## Introduction

Generally speaking, in the patients of primary bile reflux gastritis (bile reflux, gastritis, BRG) the phenomenon is one of the common phenomenon, the main reason is due to the overproduction of duodenal solution in patients with the bile contents through the door and reverse into the stomach, causing irritation and damage the gastric mucosa, causing inflammation or other erosions, ulcers and other symptoms. This clinical disease is also called alkali reflux gastritis, bile gastritis, or gastric reflux disease (Duodeno). In recent years, with the continuous improvement of the level of medical diagnosis and development of endoscopic technology improvement, clinically diagnosed with primary bile gastritis patients with the number increasing, the disease has gradually become more and more attention to the concern of [1]. In the current stage, many scholars have reported the treatment of primary bile reflux gastritis methods, but there is no reported analysis of multiple treatment methods. In this paper the author selected 120 cases in January 2016 to January 2017 in the hospital to receive treatment and meet the requirements of the patients as the research object, probes can be achieved in the treatment of primary bile reflux in the process of using multiple treatment effect, such as under the first report.

## Clinical data

Select 120 cases from January 2016 to January 2017 in our hospital to receive treatment for the first time and received gastroscopy was diagnosed with primary bile reflux gastritis patients, of which 55 cases are male, 65 cases were female, aged between 20 to 66 years old, the average age of for 44.5 years. Randomly divided into two groups, will give hydrotalcite and Weifuchun for treatment of patients in the treatment group, 26 cases were male, 34 cases were female; given mosapride treatment of patients as control group, including 28 cases of male, female 32 cases. Through endoscopy image visible: Patients with Gastric Bile solution contains more into reverse, at the junction of the pylorus of stomach and duodenum muscle is flabby, not completely closed, peristalsis is slow, gastric mucosa showed hyperemia and edema, especially antrum position is most obvious. The differences of age, sex and basic condition between the two groups were not statistically significant ( $P > 0.05$ ), which had comparable significance.

According to Lin Jinkun published content: "where the endoscopic bile dyed mucous lake and gastric mucosa erosion or moderate gastric mucosal hyperemia coexisting" can be diagnosed with bile reflux gastritis, which is not because of surgery because of its symptoms known as primary bile reflux gastritis. According to the research of Ke LLO Salo et al can be classified bile dyed mucous Lake: Grade I, a lake clear mucus, showed pale yellow, only a few have gastric retention, mucosa did not occur yellowing phenomenon; II, mucous yellow and clear lake, a medium sized amount of gastric juice to produce retention. Changes in local mucosa occurred yellow dye; III, mucus lake was green, more amount of gastric juice to produce yellow dye retention, there is a wide range of changes of mucosa.

Analysis of the specific data by using SPSS 13 statistical software, using ( $\bar{x} + s$ ) of measurement data, compare the results with t test, using 2 test count data, P is less than 0.05 to determine whether income difference was statistically significant. It indicates no symptoms; 1 said the symptom is lighter, not much impact on life and work; 2 said the symptoms are relatively obvious, affecting mood, need drug; 3 said the symptoms affect the life and work; 4 present the more serious symptoms of treatment need long-term medication. When the patient's symptoms are completely improved, it represents recovery; when the main symptoms are obviously improved, the symptoms are marked; the signs of improvement of symptoms are effective; symptoms are not changed and even worse, they are invalid.

The secretion of bilirubin in the stomach during. In three days of taking patients to stop drugs work on digestive tract secretion and exercise and fasting for eight hours, the specific location to choose the appropriate method to find the esophageal sphincter, the sphincter probe was placed on the lower edge of the esophageal catheter fiber distance 5-8 cm. Patients with nasal cavity, the other end is connected with the instrument monitoring catheter the real-time recording of secretion of bilirubin within 24 hours in patients with stomach. In the process of recording, to ensure that the patient's diet is semi fluid state, while avoiding eating light absorption properties close to bilirubin foods, such as tomatoes, bananas, carrot juice and other [2]. The value of light absorption value was not less than 0.14 as the threshold value of bile reflux. The percentage of bile reflux and total time within two weeks before and after treatment were calculated.

The patient received four weeks of treatment after the examination of the gastroscopy image, the status of gastric mucosa, bleeding point, mucus lake and so on. At the same time, a biopsy specimen was removed from the stomach and sinus of the patient by urease, and two sinus tissues were stained with HE and Giemsa staining. According to the relevant standards of *Helicobacter pylori*, activity, intestinal metaplasia and other characteristics were observed, according to its severity divided into four grades: 0 for no, 1 for light, 2 for moderate, 3 for heavy.

A day after meal in patients with hydrotalcite, four times a day, a 1 g. At the same time, take stomach re Chun, three times a day, once 4, four tablets, four weeks for 1 a course of treatment cycle. After a course of treatment, gastroscopy was performed.

Half an hour before meals every day in patients treated with Mosapride, three times a day, a 5mg. Taking ranitidine two times a day, 0.15g once a day, and 1 weeks as a course of treatment. After a course of treatment, gastroscopy was performed.

## Results

The total number of reflux and total reflux time in the two groups were decreased after treatment, but the change in the treatment group was significantly different from that in the control group ( $p < 0.05$ ). Details are shown in table 1.

Table 1 Comparison of gastric bilirubin between the two groups before and after treatment

group	n	light absorption value is more than 0.14 of the total number of reflux		Total reflux time percentage (%)	
		Before treatment	after treatment	Before treatment	after treatment
treatment group	60	67.8±3	26.5±22.1	12.9	0 ~
control group	60	67.6±3	44.7±22.3	12.7	1.2 ~
p		<0.05		~ 77.4	8.6 ~ 77.2

The symptoms of the two groups were improved after treatment, but the difference between the two groups was statistically significant ( $P < 0.05$ ). Details are shown in table 2.

Table 2 Comparison of gastroscopy between two groups before and after treatment

group	n	Before treatment			after treatment		
		congestion	erosion	Mucosal bile staining	congestion	erosion	Mucosal bile staining
treatment group	60	13	47	60	1	3	5
control group	60	15	45	60	5	17	26
p		<0.05					

There was no significant difference in the pathological changes before and after treatment ( $P > 0.05$ ). Details are shown in table 3.

Table 3 pathological comparison between the two groups before and after treatment

group	n	Before treatment			after treatment		
		Intestinal metaplasia	atrophy	dysplasia	Intestinal metaplasia	atrophy	dysplasia
treatment group	60	15	21	4	13	19	4
control group	60	16	23	6	14	13	5
p		>0.05					

The total effective rate of the treatment group was 98.3%, the recurrence rate was 3.3%, the total effective rate of the control group was 90%, the recurrence rate was 23.3%, the difference was statistically significant ( $p < 0.05$ ), in detail, table 4.

Table 4 Comparison of curative effect between two groups of cases

group	n	Cure	improvement	obvious effect	invalid	effective number	recurrence rate	total effective rate
treatment group	60	53	40	2	1	59	3.3%	98.3%
control group	60	32	10	12	6	54	23.3%	90.0%
p		<0.05						

## Discussion

There are many methods for the treatment of primary bile reflux gastritis, but there are no reports of multiple therapies. According to the findings showed that the total number of two groups of patients with reflux and reflux total time percentage decreases after treatment in the stomach, and the change of the treatment group was obviously significant in the control group, the difference was statistically significant ( $p < 0.05$ ). The patients in the treatment group the total effective rate was 98.3%, the recurrence rate was 3.3%, control group total effective rate was 90%, the recurrence rate was 23.3%, the difference was statistically significant ( $p < 0.05$ ), so that in the treatment of primary bile reflux gastritis can be considered as the first test of hydrotalcite using drugs. According to the previous clinical practice experience, in the process of treatment of patients with primary bile reflux gastritis, dietary factors have a greater impact on the change of the disease. Patients should ensure that their diet is reasonable, light and appropriate, refused to eat spicy greasy food, to avoid gallbladder stimulation, excessive secretion of bile, affecting the recovery of the disease [3]. At the same time, patients should develop good habits, to ensure adequate sleep and pleasure of the mood, not easy to take drugs that can cause irritation to the stomach mucosa, such as Compound Aminopyrine Phenacetin Tablets, aspirin and other [4]. In addition, according to the results of this study, the pathological changes of patients before and after treatment were not statistically significant ( $P > 0.05$ ). To sum up, the primary bile reflux gastritis patients were treated in the process, methods of hydrotalcite, Weifuchun multiple treatment can achieve better clinical effect, and the recurrence is low, the prognosis is good. In addition, according to the clinical pathological analysis results, primary bile reflux gastritis and gastric mucosa, intestinal metaplasia or dysplasia appeared

atrophy associated changes.

### **Acknowledgements**

Fund project: the Education Department of Shaanxi province natural science research project; level: level; Fund Name: Jing Wei Fuzhuan Tea in the extraction of TPS and ALX on mouse model of hypoglycemic mechanism research; project number: 17JK1057.)

### **References**

- [1] Huang quiet. Treatment and clinical pathological analysis of primary bile reflux gastritis [J]. Chinese medical engineering, 2015,23 (08): 92.
- [2] ho Yun. Analysis of the causes of children with primary bile reflux gastritis [J]. modern diagnosis and treatment, 2015,26 (06): 1410-1412.
- [3] Li Li. Clinical and pathological intervention study on the treatment of primary bile reflux gastritis with Qing Wei Hewei decoction ([D].), Beijing University of Chinese Medicine, 2016.
- [4] Wu Chunyu. Clinical observation on the treatment of primary bile reflux gastritis (liver Qi invading stomach syndrome) by soothing the liver and descending the stomach ([D].), Heilongjiang University Of Chinese Medicine, 2017.
- [5] Zhao Fulan. Progress in the diagnosis and treatment of primary biliary reflux gastritis [J]. Xinjiang Medical Sciences, 2012,42 (05): 61-65.