

# Curative Effect of Helicobacter Pylori Radical Treatment on Gastric Cancer Patients with Helicobacter Pylori Infection

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**Abstracts:** Objective: To explore the role and value of radical treatment of Helicobacter pylori in patients with gastric cancer complicated with Helicobacter pylori infection. Methods: From January 2022 to January 2023, 152 patients with gastric cancer complicated with Helicobacter pylori infection who were treated in our hospital were included in this study by random number table method. According to whether each patient received radical treatment based on Helicobacter pylori infection while receiving chemotherapy treatment, they were divided into the control group of single chemotherapy treatment and the observation group of combined radical treatment of Helicobacter pylori. The difference of treatment indexes between the two groups was analyzed. Results: The effective rate of treatment in the observation group was 88.16%, the total adverse reaction rate was 39.47%, and the treatment satisfaction rate was 93.42%; The effective rate of treatment in the control group was 78.95%, the total adverse reaction rate was 68.42%, and the treatment satisfaction rate was 82.89%. The difference was statistically significant ( $P < 0.05$ ). Conclusion: For patients with gastric cancer complicated with Helicobacter pylori infection, while receiving chemotherapy for gastric cancer, radical treatment for Helicobacter pylori can significantly improve the effective rate of clinical symptom relief of disease treatment, reduce the incidence of adverse reactions during various treatments, and improve the overall satisfaction of patients and their families with treatment.

**Keywords:** Helicobacter Pylori; Gastric Cancer; Chemotherapy

## 1. Introduction

As one of the most common digestive system tumors in clinical practice, gastric cancer has shown a trend of increasing incidence rate and increasing patient base year by year in recent years' epidemiological statistics, which has a great impact on the life, health, safety and quality of life of patients [1]. In recent years, with the improvement of medical level and the ability to diagnose and treat gastric cancer, the life cycle and quality of life of gastric cancer patients have been improved. However, clinical studies have found that Helicobacter pylori infection is one of the causes of gastric cancer. Many patients with gastric cancer also have Helicobacter pylori infection during the period of treatment and treatment, and this infection causes patients to have more complications while receiving chemotherapy and other treatment, affecting the course, cycle, intensity and drug compatibility of their own disease treatment, and reducing the quality of life of patients during treatment. Therefore, how to carry out the radical treatment of Helicobacter pylori in the treatment period of gastric cancer patients and enlarge the treatment prognosis of patients become the key to the study. This article will analyze the treatment effect of the radical treatment of Helicobacter pylori on gastric cancer patients with Helicobacter pylori infection.

## 2. Data and methods

### 2.1. General information

In this study, 152 patients with gastric cancer complicated with Helicobacter pylori infection who were treated in our hospital from January 2022 to January 2023 were included in the study by random number table method. According to whether each patient received radical treatment based on Helicobacter pylori infection while receiving chemotherapy treatment, they were divided into a control

group of 76 patients with single chemotherapy treatment, and 76 people in the observation group who were treated with *Helicobacter pylori* radical treatment. The gender ratio was 48:28, the average age of the patients was  $53.34 \pm 4.75$  years old, and the average duration of the patients was  $6.18 \pm 2.34$  years; The ratio of male and female in the observation group was 49:27, the average age of the patients was  $54.03 \pm 5.48$  years old, and the average duration of the patients was  $6.38 \pm 5.39$  years. In the analysis of the general data of the above subjects, there was no significant statistical significance ( $P > 0.05$ ).

## 2.2. Research methods

In this group-control study, the patients in the control group received a single chemotherapy treatment for gastric cancer. The chemotherapy plan was formulated and applied by the same group of clinicians in combination with the chemotherapy drug treatment guidelines for gastric cancer. According to the changes of patients' condition during chemotherapy, targeted adjustment and symptomatic treatment were carried out. On the basis of the above control group, the patients in the observation group were jointly treated with radical treatment for *Helicobacter pylori* infection. The treatment regimen was amoxicillin 1g, bid, tetracycline 0.5g, tid, Esomeprazole 20mg, bid, colloidal bismuth pectin 0.2g, bid, and the course of treatment was 14 days. The index information such as curative effect changes, complications and treatment evaluation of the two groups of patients are collected.

## 2.3. Research indicators

The indicators of this study include: ① treatment efficiency: that is, the doctors in the same treatment group evaluate the clinical symptoms of each patient before and after treatment, and the percentage of patients in each treatment group who are evaluated as complete remission and partial remission is the research indicator. ② Incidence rate of adverse reactions: that is, the percentage of patients with adverse reactions in each group during the whole treatment cycle of the study is the study index. ③ Treatment satisfaction rate: that is, the percentage of patients who are satisfied with the treatment at the end of the whole treatment cycle in each group of patients receiving treatment is the research index.

## 2.4. Statistical methods

SPSS 23.0 statistical software was used for statistical analysis. The measurement data are expressed in the form of mean  $\pm$  standard deviation ( $\bar{x} \pm s$ ), and are statistically analyzed by t-test; The counting data were expressed in percentage and were statistically analyzed by chi-square test. The difference was statistically significant when  $P < 0.05$ .

## 3. Results

### 3.1. Comparison of treatment effectiveness

As shown in Table 1, the effective rate of treatment in the observation group combined with radical treatment of *Helicobacter pylori* was significantly higher than that in the control group treated with single chemotherapy, and the difference was statistically significant ( $P < 0.05$ ).

Table 1 Difference analysis of clinical disease treatment effectiveness rate between two groups of patients

Group	Number of cases	Complete relieve	Part relieve	Maintain the status quo	More serious	Efficiency
Observation group	76	37	30	6	3	88.16%
Control group	76	29	31	12	4	78.95%
$\chi^2$ value	-	-	-	-	-	4.248

P value - - - - - 0.017

### 3.2. Comparison of adverse reactions

As shown in Table 2, the total incidence of adverse reactions after treatment in the observation group combined with radical treatment of *Helicobacter pylori* was significantly lower than that in the control group treated with single chemotherapy, and the difference was statistically significant ( $P < 0.05$ ). The gradual difference in the incidence of single adverse reactions was not statistically significant ( $P > 0.05$ ).

Table 2 Analysis of the difference in the incidence of adverse reactions after clinical treatment between the two groups

Classification of adverse reactions	Observation group (N=30)	Control group (N=52)
Nausea and vomiting	9 (30%)	23 (44.23%)
Anorexia	2 (6.67%)	8 (15.38%)
Abnormal liver function	3 (10%)	1 (1.92%)
Abnormal renal function	5 (16.67%)	8 (15.38%)
Abnormal hemogram	2 (6.67%)	2 (3.85%)
Mouth ulcer	4 (13.33%)	2 (3.85%)
Skin pigmentation	3 (10%)	6 (11.54%)
Lipsotrichia	2 (6.67%)	2 (3.85%)
Total adverse reaction rate	30/76 (39.47%)	52/76 (68.42%)

### 3.3. Comparison of treatment satisfaction

As shown in Table 3, the treatment satisfaction rate of patients in the observation group treated with combined radical treatment of *Helicobacter pylori* was significantly higher than that in the control group treated with single chemotherapy, and the difference was statistically significant ( $P < 0.05$ ).

Table 3 Difference analysis of clinical treatment satisfaction rate between two groups of patients

Group	Number of cases	Very satisfied	Satisfied	dissatisfied	Satisfaction rate
Observation group	76	41	30	5	93.42%
Control group	76	37	26	13	82.89%
$\chi^2$ value	-	-	-	-	4.257
Pvalue	-	-	-	-	0.000

## 4. Discussion

Gastric cancer is one of the common malignant tumors in the digestive system at present. The current epidemiology shows that with the changes in people's diet structure, work rhythm, life pressure and genomics, the incidence of gastric cancer has increased in recent years. The number of patients in China and even the whole country is also growing. In the epidemiological distribution of gastric cancer, the incidence rate of Southeast Asia is significantly higher than other fifth gastric cancer. Especially in China, the population base of gastric cancer patients is extremely large, and the proportion of men is significantly higher than that of women. The main age group of patients with gastric cancer is about

45-55 years old. In terms of overall incidence rate, gastric cancer has jumped to the fifth in all malignant tumors worldwide, and the third in nausea in terms of mortality. In China, the incidence rate of gastric cancer is the second in all malignant tumors, The mortality caused by gastric cancer ranked third, and the overall incidence rate and mortality were significantly higher than the world level [2].

Patients with gastric cancer often have no obvious clinical symptoms in the early stage. Even if there are temporary abdominal pain, nausea and vomiting, dyspepsia, etc. in the early stage, it can not attract the attention of the patients. With the gradual progress of the tumor and the infiltration of other organs and soft tissues around it, they gradually begin to gradually lose weight, anemia, abdominal pain, hematemesis, hematochezia and other symptoms. Most patients go to see the doctor after they have obvious symptoms, and this is often the middle and late stage of the disease. The treatment prognosis is often not ideal. It has been considered that the cure rate of early gastric cancer can reach more than 90% [3]. Although the clinical life cycle of advanced gastric cancer is gradually extended with the progress of medicine, it is still very limited. Therefore, how to take effective treatment measures in the treatment of gastric cancer patients to promote the prognosis of patients and improve the quality of life The prolongation of life cycle is still one of the key problems to be solved in the treatment of gastric cancer patients.

In the current treatment of clinical gastric cancer, the simultaneous treatment of diseases related to Helicobacter pylori infection cannot be ignored, because Helicobacter pylori is one of the important causes of gastric cancer [4]. Therefore, patients with gastric cancer should also undergo screening related to Helicobacter pylori infection at the time of treatment, and patients with gastric cancer may have their own disease treatment plans affected when suffering from Helicobacter pylori infection at the same time. Treatment may also be delayed and interrupted [5]. Therefore, relevant scholars believe that when treating gastric cancer patients with Helicobacter pylori infection, the treatment of Helicobacter pylori should also be carried out at the same time. However, whether it can promote the specific clinical treatment indicators of gastric cancer patients still needs further study. In this study, for gastric cancer patients with Helicobacter pylori infection, the treatment of Helicobacter pylori should be carried out on the basis of conventional chemotherapy. It can effectively improve the clinical treatment efficiency of patients, reduce the incidence of adverse reactions during treatment, and significantly improve nursing satisfaction. This research result is consistent with the relevant research results of scholars such as Nan Yonggang and Han Lili. QiaoShujie believes that the radical treatment of Helicobacter pylori can not only help the treatment prognosis of patients with gastric cancer, but also achieve the prevention of gastric cancer; Wei Ting systematically elaborated the current clinical treatment of Helicobacter pylori infectious diseases; In the study of Ye Suman, it was stated that for some refractory Helicobacter pylori infections, the adjuvant treatment of traditional Chinese medicine can also play an ideal therapeutic effect. This study initially recognized the positive role of Helicobacter pylori radical treatment in the treatment of gastric cancer with Helicobacter pylori infection. The follow-up study should focus on the changes of the relevant indicators of gastric cancer in patients with Helicobacter pylori radical treatment, so as to clarify the mechanism of intervention, and form a more targeted treatment for clinical treatment of gastric cancer with Helicobacter pylori infection.

To sum up, for patients with gastric cancer complicated with Helicobacter pylori infection, while receiving chemotherapy for gastric cancer, radical treatment for Helicobacter pylori can significantly improve the effective rate of clinical symptom relief for disease treatment, and reduce the incidence of adverse reactions during various treatments, thus improving the overall satisfaction of patients and their families with treatment, which is worthy of clinical promotion and application.

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