# World Journal of Clinical Cases

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ORIGINAL ARTICLE

#### **Retrospective Study**

## Clinical effects of a traditional Chinese medicine nursing programme to intervene in gastric pain of the spleen and stomach with Qi deficiency

Yin-Hong Yu, Yu-Shuang Yu, Xiao-He Cheng

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#### **Abstract**

#### **BACKGROUND**

Gastroparesis is a common digestive disorder characterized by delayed gastric emptying, which can lead to symptoms such as nausea, vomiting, abdominal pain, and poor appetite. Traditional Chinese medicine (TCM) has been used for centuries to treat gastrointestinal disorders, including gastroparesis. TCM theory suggests that spleen and stomach qi deficiency syndrome is one of the main pathogenic factors in gastroparesis. Nursing care plays an important role in the treatment of gastroparesis, and TCM nursing interventions have shown promising results in improving patient outcomes. However, there is limited research on the clinical effectiveness of TCM nursing interventions for gastroparesis with spleen stomach deficiency syndrome. This study aimed to evaluate the clinical effect of TCM nursing intervention in the treatment of gastroparesis with spleen stomach deficiency syndrome and to compare it with routine nursing interventions.

To analyze the clinical effect of traditional Chinese medicine nursing intervention in the treatment of gastric paraplegia with spleen stomach deficiency syndrome.

From January 2020 to July 2021, 80 patients with gastroparesis of spleen stomach qi deficiency type diagnosed in our hospital were selected for the study. The 80 patients were randomly divided into a control group and an experimental group, with 40 cases in each group. During the treatment period, the control group received routine nursing interventions, while the experimental group received traditional Chinese medicine nursing procedures. Compare the nursing effects of the two groups and observe the changes in traditional Chinese medicine symptom scores, pain levels, and sleep quality before and after treatment.

After treatment, comparing the treatment effects of the two groups, the total effective rate of the experimental group was significantly higher than that of the control group, with statistical significance (P < 0.05). There was no statistically significant difference in the TCM symptom score, visual analogue scale (VAS) score, and Pittsburgh sleep quality index (PSQI) score between the two groups before treatment (P > 0.05). However, after treatment, the TCM syndrome scores, VAS scores, and PSQI scores of the experimental group were significantly lower than those of the control group, with a statistically significant difference (P < 0.05).

#### **CONCLUSION**

In the clinical nursing intervention of patients with mild gastroparesis due to spleen and stomach qi deficiency, the traditional Chinese medicine nursing plan has good clinical application value and nursing effect, and has a good effect on improving patients' pain and sleep quality.

**Key Words:** Chinese medicine nursing programme; Spleen and stomach qi deficiency type; Gastric and epigastric pain; Nursing effect; Pain; Sleep quality

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**Core Tip:** Traditional Chinese medicine is a traditional Chinese medicine that refers to stomach pain as gastroparesis, which is mainly caused by cold, heat, qi stagnation, blood stasis, and food accumulation. This study shows that traditional Chinese nursing helps relieve gastroparesis symptoms and improve patients' quality of life.

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#### INTRODUCTION

Traditional Chinese medicine is a traditional Chinese medicine that refers to stomach pain as gastroparesis, which is mainly caused by cold, heat, qi stagnation, blood stasis, and food accumulation. In addition, there are emotional disorders that can cause stomach pain[1]. Gastric paresis is divided into eight symptoms in traditional Chinese medicine, and deficiency of spleen and stomach qi is one of the most common symptoms. Repeated attacks can have a significant impact on the daily life of patients. The main principle of clinical treatment of gastroparesis in traditional Chinese medicine is to coordinate with the stomach to relieve pain, warm the stomach and strengthen the spleen, which can improve the clinical symptoms of patients. However, some studies[2] point out that only traditional Chinese medicine treatment has limited efficacy, and traditional Chinese medicine nursing intervention can further improve the efficacy and promote rehabilitation. This article selects 80 patients with gastric paresis of spleen and stomach qi deficiency type diagnosed in our hospital from January 2020 to July 2021 for research. The research report is as follows.

#### MATERIALS AND METHODS

#### General information

With the approval of the ethics committee of our hospital, 80 patients with gastric paresis due to deficiency of spleen and stomach qi diagnosed in our hospital from January 2020 to July 2021 were selected for study. Eighty patients were randomly divided into control group and experimental group. There were 40 patients with gastroparesis in the control group, with a male to female ratio of 23:17; The age range is 20-66 years, with a median of  $(41.55 \pm 5.87)$  years; The course of disease ranged from 0.5 to 1.0 year, with an average of  $(0.89 \pm 0.24)$  years. There were 40 patients with gastroparesis in the experimental group, with a male to female ratio of 25:15; The age range is 22-65 years, with a median of  $(41.51 \pm 5.89)$ years; The course of disease ranged from 0.5 to 1.5 years, with an average of (0.93 ± 0.22) years. When comparing the above general information of the two groups of patients with gastroparesis due to deficiency of spleen and stomach qi, there was no statistically significant difference (P > 0.05). Inclusion criteria: (1) Patients who meet the relevant diagnostic criteria for gastroparesis due to deficiency of spleen and stomach qi[3]; (2) a person with normal communication and thinking skills; and (3) sign an informed consent form. Exclusion criteria: (1) Patients with cardiopulmonary insufficiency; (2) patients with other digestive system diseases; (3) pregnancy or lactation; and (4) patients with neurological disorders.

#### Methodology

After admission, both groups were treated with Chinese herbal medicines to warm the spleen, harmonize the stomach and relieve pain. During the treatment period, the control group was cared for with conventional nursing interventions, including observation of the condition, dietary guidance, and medication guidance. For patients with symptoms such as cold extremities and paroxysmal pain, moxibustion can be applied to acupuncture points such as the foot Sanli point, Shen Que point and Stomach Yu point, while keeping the patient warm and instructing him to use Chinese herbs to the patient's feet can be soaked to stimulate the acupuncture points on the feet to improve clinical symptoms. Application of appropriate Chinese medicine techniques: Nursing staff need to reasonably apply various appropriate Chinese medicine techniques according to the patient's specific condition, such as auricular point embedding, acupressure, acupressure and moxibustion, etc. At the same time, during the application of appropriate Chinese medicine techniques, the patient needs to be closely observed, and once the patient is found to have uncomfortable symptoms, he needs to stop immediately and promptly cooperate with the doctor for symptomatic treatment. Dietary adjustment: The nursing staff can make a reasonable dietary plan for the patient according to the results of the patient's specific identification and dietary preferences, such as increasing the intake of foods such as yam, japonica rice and red dates in the daily diet, while avoiding foods such as mung beans, bitter gourd and bananas, which can easily damage the temper. In addition, the patient is advised to eat slowly and chew carefully, and to eat regularly in order to minimise stomach irritation. Emotional care: The occurrence of gastroparesis is closely related to emotional disorders, so to further improve the patient's treatment outcome, nursing staff need to strengthen emotional care interventions during the treatment process, actively and patiently communicating with the patient, not only to inform him of the importance of a smooth emotional state to facilitate recovery, but also to instruct him on how to regulate and control his bad emotional state in the right way. In addition, nursing staff need to actively introduce patients to successful clinical treatment cases on the one hand, and actively guide patients' families to encourage them during treatment in order to help boost their confidence and soothe their emotions on the other.

#### Observation indicators

Observe the effect of care for patients in both groups. If the patients' TCM symptom scores decreased by more than 80% after care compared with those before care, it was said to be effective; if the patients' TCM symptom scores decreased between 60% and 80% after care compared with those before care, it was said to be ineffective; if the above criteria were not met, it was said to be ineffective [4]. Total effective rate = (effective + effective)/total number of cases × 100%. To observe the changes in TCM symptom scores, pain level and sleep quality of the two groups before and after care. The TCM symptom scores were mainly assessed in terms of gastroparesis, gastric distension and fatigue, and were recorded as 0 (no symptoms), 3 (mild symptoms), 6 (moderate symptoms), and 9 (severe symptoms) respectively according to the severity of symptoms. The pain scale is the visual analogue scale (VAS) with a total score of 0-10, and the sleep quality scale is the Pittsburgh sleep quality index (PSQI) with a total score of 0-21, with the lower score being preferred [5].

#### Statistical analysis

The study data were analysed by the statistical software SPSS22.0. The measurement data were expressed as (mean ± SD) by t-test and the count data were expressed as n (%) by  $\chi^2$  test. P < 0.05 was considered a statistically significant difference.

#### RESULTS

#### Comparison of care outcomes after care between groups

As shown in Table 1, after the care, the comparison of the nursing effect between groups, the total effective rate of the experimental group was significantly higher than that of the control group, and the difference was statistically significant (P < 0.05).

#### Comparison of changes in TCM symptom scores, VAS scores and PSQI scores before and after care between groups

As shown in Table 2, the differences in TCM symptom scores, VAS scores and PSQI scores between groups before care were not statistically significant (P > 0.05), and after care, the experimental group had significantly lower TCM symptom scores, VAS scores and PSQI scores than the control group, and the differences were all statistically significant (P < 0.05).

#### **DISCUSSION**

In recent years, as people's dietary habits change, the incidence of digestive disorders is on the rise. Gastroparesis, as one of the common clinical disorders, refers to stomach pain and gas pain in Chinese medicine and peptic ulcer and chronic gastritis in Western medicine. It is a common form of gastroparesis with symptoms such as vague pain in the stomach and stomach, pale tongue and slow pulse, and poor appetite, and is prone to recurrent attacks, with long treatment cycles and serious impact on patients' daily lives. For patients with gastroparesis, pharmacological treatment is the most common treatment method, which has proven to be effective. However, some studies have pointed out that the long treatment time of patients may affect their compliance and psychological status, so it is necessary to strengthen the nursing intervention during treatment.

	Table 1 Comparison o	f care outcomes after care	between groups, n (%)
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Grouping	Number of examples	Visible effect	Effective	Invalid	Total efficiency
Control group	40	15 (37.50)	15 (37.50)	10 (25.00)	30 (75.00)
Experimental group	40	27 (67.50)	10 (25.00)	3 (7.50)	37 (92.50)
$\chi^2$	-	-	-	-	4.501
P	-	-	-	-	0.034

Table 2 Comparison of changes in traditional Chinese medicine symptom scores, visual analogue scale scores and Pittsburgh sleep quality index scores before and after care between groups (mean ± SD, points)

Grouping	Number of examples	Chinese Medicine symptom score		VAS score		PSQI score	
		Before care	After care	Before care	After care	Before care	After care
Control group	40	19.82 ± 4.04	14.27 ± 2.67	6.81 ± 1.34	$4.02 \pm 1.20$	17.15 ± 1.09	13.04 ± 1.10
Experimental group	40	$19.88 \pm 4.01$	12.05 ± 2.25	$6.77 \pm 1.35$	$3.11 \pm 1.18$	17.09 ± 1.10	$10.82 \pm 1.07$
t	-	0.067	4.021	0.133	3.420	0.245	9.149
P	-	0.947	0.000	0.894	0.001	0.807	0.000

VAS: Visual analogue scale; PSQI: Pittsburgh sleep quality index.

In a randomized controlled nursing study of 120 patients with stomachache due to deficiency of spleen and stomach qi, some studies [6-17] pointed out that traditional Chinese medicine nursing intervention can alleviate the pain symptoms of patients to a greater extent in terms of symptom care, dietary care, and emotional and spiritual guidance, and its nursing effect is significantly superior to conventional nursing. After nursing, the total effective rate of the experimental group was significantly higher than that of the control group, with a statistically significant difference (P < 0.05). The difference was statistically significant (P < 0.05), and the scores of the experimental group were significantly lower than those of the control group. It is recommended that in clinical nursing interventions for patients with gastroparesis due to deficiency of spleen and stomach qi, traditional Chinese medicine nursing programs can not only help patients improve clinical nursing effectiveness to a greater extent, but also further help patients alleviate pain levels and improve sleep quality [18-29]. The main reason is that traditional Chinese medicine nursing plans can help patients develop good eating habits, ensure a scientific and reasonable diet, and on the other hand can effectively alleviate the negative emotions of patients [30-38]. On the other hand, it can effectively alleviate the emotional state of patients, enable them to face the disease with positive emotions and cooperate with treatment, thereby improving clinical nursing effectiveness, pain symptoms, and sleep quality[39,40].

This study takes patients with gastric diseases as the research object, and reveals that traditional Chinese medicine nursing has a promoting effect on the rehabilitation of patients with epigastric pain, but the number of cases and treatment methods are still limited. The main reason is that there is no distinction between gastritis patients with all syndromes. In addition, the number of cases is small, which cannot represent all groups, and the detection indicators are limited, which cannot measure changes in all aspects. Therefore, this study will focus on the number of cases, sample size, age group and disease breadth, and use it as a starting point to carry out limited repair experiments.

Comprehensive nursing intervention can maximize the health cognition level of patients, meet the nursing needs of patients, correct wrong cognition, improve patient compliance and improve prognosis by implementing different health education methods and contents at different stages. Comprehensive nursing intervention attaches importance to the implementation of nursing intervention from physiological, psychological and other aspects, attaches importance to the role of psychological factors in the occurrence and development of diseases, strengthens psychological nursing, reduces the negative impact of patients' stress response on disease recovery, improves treatment compliance to a certain extent, achieves the best treatment and prognosis, and improves the quality of life. However, due to the limitations of research methods, research instruments and sample size, this study cannot represent all groups. It is still necessary to continue to expand the sample size and expand the type of gastritis in order to further promote and make up for these deficiencies.

#### CONCLUSION

The TCM care protocol has good clinical application in the clinical care intervention of patients with spleen and stomach gas deficiency type of gastroparesis, with good nursing effect and good improvement in patients' pain and sleep quality.

#### **ARTICLE HIGHLIGHTS**

#### Research background

Gastroparesis is a common condition in traditional Chinese medicine (TCM), and deficiency of spleen and stomach qi is a frequent symptom. While TCM treatment can improve symptoms, studies suggest that TCM nursing intervention can further enhance efficacy and promote recovery.

#### Research motivation

To explore the potential benefits of TCM nursing intervention in improving the clinical symptoms of gastroparesis and enhancing patients' quality of life.

#### Research objectives

To compare the nursing effects of routine interventions vs TCM procedures on patients with gastroparesis of spleen stomach qi deficiency type, and evaluate the clinical value of TCM nursing intervention in improving pain and sleep quality.

#### Research methods

This study selected 80 patients with gastroparesis of spleen stomach qi deficiency type and conducted a randomized controlled trial. The experimental group received TCM nursing procedures, while the control group received routine nursing interventions. The nursing effects of both groups were compared, and changes in symptom scores, pain levels, and sleep quality were observed before and after treatment.

#### Research results

After treatment, the experimental group receiving TCM nursing procedures showed a significantly higher total effective rate compared to the control group (P < 0.05). Additionally, the TCM syndrome scores, visual analogue scale scores, and Pittsburgh sleep quality index scores of the experimental group were significantly lower compared to the control group, with statistical significance (P < 0.05). These findings suggest that TCM nursing has good clinical application value in improving pain and sleep quality in patients with gastroparesis of spleen stomach qi deficiency type.

#### Research conclusions

TCM nursing intervention is an effective clinical nursing option for patients with mild gastroparesis due to spleen and stomach qi deficiency. It has a positive effect on improving pain and sleep quality, and its clinical application value is worth promoting.

#### Research perspectives

Possible future research directions include investigating the long-term effects and mechanisms of TCM nursing intervention for gastroparesis, as well as incorporating objective measures.

#### **FOOTNOTES**

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