Nursing Intervention for Functional Dyspepsia

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【**Abstract**】**Objective:** Clinical effects of nursing interventions for patients with functional dyspepsia to explore and analyze.Methods Our hospital in April 2014 to April 2015 were treated 42 patients with functional dyspepsia will study it as. **Method:** Using randomly divided into two groups and the control group, 21 cases of patients in each group. Control group with conventional drug treatment, observation group subjected to clinical nursing intervention in conventional drug treatment, based on the two groups of patients with dyspeptic symptoms and improvement of quality of life improvement for comparison. **Results:** After treatment, the observation group dyspepsia symptom score was significantly lower than the control group, $P < 0.05$,statistically significant; After treatment, the treatment group's quality of life scores were significantly higher, $P < 0.05$,with statistical significance. **Conclusion:** The clinical efficacy of nursing interventions for patients with functional dyspepsia have a positive effect, can significantly improve their symptoms,to achieve improved quality of life.

【**Keywords**】nursing intervention; functional dyspepsia; efficacy; effect

1 Introduction

Dyspeptic is defined as pain or discomfort in the upper abdomen, which is a very common clinical syndrome. Epidemiological studies in western countries show that 15% to 20% of people experience indigestion every year. Although only 1 / 4 of the patients with dyspepsia go to the hospital, the high incidence, chronic or recurrent characteristics still make dyspepsia a big clinical problem affecting people's lives. Based on the etiology and pathogenesis of functional dyspepsia, the paper puts forward specific measures from the perspective of nursing intervention to provide reference for readers.

2 Clinical manifestations of functional dyspepsia

Functional dyspepsia (functional dyspepsia, FD) FD is defined as persistent or recurrent upper abdominal pain or discomfort without an organic etiology, present for at least 12 weeks in the past year, and with symptoms unrelated to defecation. Upper abdominal discomfort refers to

the upper abdomen fullness, early fullness, flatulence, heating gas or nausea [1]. FD symptoms are often chronic and intermittent, among which postprandial fullness, early satiety, upper abdominal pain and nausea are more problems caused by simplifying symptom heterogeneity. According to the main symptoms of upper abdominal pain or discomfort, FD is divided into three subtypes: selection type, dynamic disorder type and non-specific type. Some of these subtypes were associated with H.pylori (H. pylori) infection or gastric emptying disorders, and each subtype responded differently to acid suppression therapy. Due to the large overlap of symptoms among the subtypes, a considerable number of patients are not eligible for ulcer-like or dynamic disorder-like type, and the classification has a low predictive value for organic disease, thus having limited clinical significance. Moreover, the knowledge of the characteristics of dyspepsia symptoms has become increasing, and although weight loss has long been considered as one of the alarm symptoms, several recent studies have shown that weight loss is also a relatively specific symptom associated with FD.

3 The etiology of functional dyspepsia

The pathogenesis factors of FD have not been fully clarified, but some scholars have mentioned that the functional irritable bowel syndrome (IBS) is a post-infection or inflammatory cause, and it is also reported that gastroparesis is caused by viral infection. A questionnaire survey of FD patients found that 17% had a history of acute gastrointestinal infection, suggesting that some FD was the post-infection cause, including H.pylori infection hole and other [2] including acid, fat diet and psychological factors.

3.1 for H. pylori for infection

The association of H.pylori infection with duodenal and gastric ulcers has been agreed upon, and although acute H.pylori infection can cause transient symptoms of dyspepsia, the role of long-term H.pylori infection in the development of FD is unclear. Epidemiological studies failed to confirm a close association between H.pylori infection and FD, but there was insufficient evidence to exclude a possible causal relationship between the two. Studies on the correlation of H.pylori infection with dyspepsia symptoms or its pathophysiological mechanisms showed no significant differences in the incidence, severity, visual emptying rate, postprandial gastric loosening levels, and sensitivity to gastric dilation between H.pylori-positive and sexual patients. Earlier studies found H.pylori infection associated with

stomach pain or heartburn, but later larger studies have failed to confirm this conclusion [3]. Given that some dyspepsia symptoms do improve in FD patients after H.pylori eradication, H.pylori infection may still have a place among the pathogenic factors of FD.

3.2 Fat diet

Symptoms of indigestion often worsen after a high-fat meal. Studies in healthy individuals have shown that the term called infusion of fat into the duodenum without glucose induces proximal gastric relaxation and increases the sensitivity of the body's response to proximal gastric dilation. Duodenal fat infusion requires fat digestion and its release of cholecystokinin (CCK), a process that can be blocked by lipase inhibitors or CCK receptor antagonists. The serotonin (5-HT) 3 receptor may also play a role in the gastric, duodenal response to fat stimulation. Similar effects are present in patients with IBS, and duodenal infusion of fat can enhance the sensitivity of the colon to dilated stimuli. Increased sensitivity to duodenal fat infusion may be one of the relevant mechanisms in the pathophysiology of FD. However, whether this effect affects all patients with dyspepsia remains to be further studied, and the results of direct fat infusion into the duodenum do not necessarily apply to the dietary intake of fatty foods. These food composition-dependent gastrointestinal alterations should be further studied.

3.3 Acid

The role of acid in the pathophysiological mechanism of FD is not clear. Most FD patients have normal gastric acid secretion, and the sensitivity of gastric mucosa to the contents of acid or Broussonetia flora is not abnormal, but acid inhibition treatment can indeed play a role in alleviating indigestion symptoms in a few patients. Studies have also confirmed that the duodenum of FD patients has a reduced dynamic response to acid stimulation, resulting in a reduced clearance of the foreign acid load. Hydrochloric acid infusion in the duodenum induced nausea response in some FD patients, which was not observed in healthy individuals, suggesting increased duodenal acid sensitivity in FD patients. For FD patients with twelve finger cup pH24h after observation, patients after postprandial duodenal acid exposure, time is too long, acid exposure besides directly cause acid related symptoms, may also use the duodenal mechanoreceptor function change or enhance its chemical sensitivity, affect the gastric antrum-duodenal-jejunal dynamic call has been found

in indigestion patients with gastroduodenal reflux and cause related symptoms, but does not include heartburn and often no erosive esophagitis, these patients respond to acid treatment calibration. Because the severity of individual symptoms was less associated with duodenal pH, and the transient duodenal acid exposure did not affect the production of symptoms, suggesting that duodenal acid exposure and the degree of symptom severity are not very closely related.

3.4 Psychological factors

Whether the psychological factors are FD, especially one of the pathogenic factors for patients with highly sensitive gastric dilatation, and whether they are the regulating factors of FD, whether they determine the patient's treatment, feelings of symptoms and disease prognosis are not clear. However, there is evidence that the central nervous system plays an important role in the occurrence of high sensitivity of viscera. Experimental studies have found that acute mental stress is easy to increase the sensitivity of the body to visceral stimulation, and the visceral sensitivity of rats in the anxiety state increases significantly. Similar situations are also seen in human mental concentration, the body's sensitivity to gastrointestinal expansion is reduced, and the sensitivity is increased in concentration or in a state of mental tension such as anxiety. However, the role of central factors and stress in visceral high sensitivity and symptom production in FD still needs further clarification.

4 Efficacy of nursing intervention in functional dyspepsia

A common disease of functional dyspepsia digestive system, the pathological etiology of the disease has not been clear, and there is no unified treatment system. Clinical is often used for treatment, but the final treatment effect is not ideal, patients often appear psychological and physiological discomfort. To this end, effective nursing intervention is needed on the basis of effective treatment methods. In order to explore the impact of nursing intervention on the clinical efficacy of patients with functional dyspepsia, 42 patients with functional dyspepsia admitted to our hospital from April 2014 to April 2015 were selected, and their clinical data were then retrospectively analyzed. The study process and results are reported as follows.

4.1 Clinical data

Forty-two patients with functional dyspepsia admitted to our hospital from April 2014 to

April 2015 were selected as the study subjects. Of all patients, 18 were male and 24 were female, with mean age (40.4 ± 5.7) years and mean course of disease (4.2 ± 1.5) years. Patients were randomly divided into observation group and control group, with 21 patients in each group. General clinical data of gender, age, and disease duration of all patients were analyzed. There was no significant difference (P> 0.05), which was comparable.

4.2 Methods

4.2.1 Control group

All patients were treated with conventional medication with famotidine 20mg and morololine 10mg, 3 times / d.

4.2.2 Observation group

All patients were given a comprehensive nursing intervention on the basis of routine medical therapy. First of all, the patients should be given health guidance, so that they can understand the occurrence mechanism, pathogenesis law and influencing factors of functional dyspepsia, so that they can have sufficient confidence in the treatment process, effectively eliminate concerns, and actively cooperate with the work of medical staff. Strengthen the psychological nursing of patients, relieve their mental pressure, and through the positive psychological catharsis way, so that their own emotions are expressed.

Score of dyspepsia symptoms: the clinical symptoms of patients were scored according to their severity, with none, mild, moderate and heavy symptoms counted as 0,1,2 and 3 points respectively. None is asymptomatic; mild symptoms, but not obvious; middle is obvious symptoms, no impact on normal life and work; severe symptoms, and affect normal life and work. Quality of life score: use questionnaire to evaluate the quality of life index to understand their total quality of life index.

4.3 Statistical analysis

Patient data were statistically processed using the SPSS17.0 statistical software package. Measurement data were expressed as (mean ± standard deviation) (x ± s), and the difference between the two groups were compared by the t-test, and P <0.05 was considered statistically significant.

4.4 Control results

4.4.1 Comparison of dyspeptic symptom scores between the two groups before and after

treatment

After treatment in both groups, the total score of dyspepsia symptoms in the observation group was lower than that of the control group, with P <0.05. As shown in Table 1.

Table 1 Comparison of the nursing intervention (x ± s)

group	Example number	Prior to nursing intervention	After the nursing intervention
observation group	21	14.1±3.9	7.4±2.6
matched group	21	14.2±2.5	13.5.2±2.9

4.4.2 Comparison of quality of life scores between the two groups before and after treatment

After both treatment groups, the QoL score of the observation group was higher than the control group, with P <0.05, which was statistically significant. As shown in Table 2.

Table 2 Comparison of quality of life scores after the intervention (x ± s)

group	Example number	Prior to nursing intervention	After the nursing intervention
observation group	21	1.23±0.21	1.3±0.22
matched group	21	1.23±0.20	1.8±0.27

4.5 Conclusion

In this study, the total score of patients in the observation group was lower than that of the control group, and the quality of life score was higher than that of the control group, indicating that nursing intervention had a significant impact on the clinical efficacy of patients with functional dyspepsia, and the complete treatment of the disease could not be achieved by relying solely on drugs. Nursing intervention can effectively improve the psychological state of patients, adjust to a healthy lifestyle, improve their understanding of disease and treatment, and have a positive impact on the optimization of disease treatment effect and the improvement of patients' quality of life.

5 Conclusion

As a heterogeneous disease, the etiology is not clear, but the adverse psychological effects

and the stimulation of a variety of social factors can affect people's mood and mental state, and then cause gastrointestinal dysfunction, causing functional dyspepsia [3]. Therefore, strengthening the nursing intervention for patients, especially the psychological nursing intervention, is an important part of the treatment. Strengthening the health education of patients, eliminating patients' bad emotions, stimulating their confidence in the treatment of diseases, can effectively improve their psychological state, and contribute to the remission and rehabilitation of the disease. In view of the problem of gastrointestinal dysfunction, it is particularly important to strengthen dietary care. Patients should be required to avoid eating indigestible food, avoid eating fat and spicy food, regular and quantitative, eat less and more meals. At the same time, abstain from tobacco and alcohol, improve the gastrointestinal function environment.

Reference Documentation

[1] Ouyang Lihua, Zhou Hanyun. Analysis of the functional dyspepsia effect of holistic care intervention [J]. Chinese Journal of Misdiagnosis, 2011 (08): 1823-1824.

[2] Guo Yixiang. Analysis of the effect of nursing interventions on functional dyspepsia [J]. Jilin Medical Science, 2012 (28): 6234-6235.

[3] Liu Yangchun. Effect of nursing intervention on the clinical efficacy of functional dyspepsia syndrome [J]. Modern distance education of Traditional Chinese Medicine in China, 2012 (10): 82.