

# Nursing Effect of Standardized Nursing Intervention in Endoscopic Examination of Patients with Gastric Ulcer Complicated with Diabetes

Xue Hu

Department of Internal Medicine, Maternal and Child Health Hospital of Zibo City, Zibo 255000, Shandong Province, China

**Abstract: Objective:** To explore the nursing effect of standardized nursing interventions in endoscopic examination of patients with gastric ulcer complicated with diabetes. **Methods:** 90 patients with gastric ulcer complicated with diabetes who were treated in our hospital from May 2018 to May 2019 were selected and randomly divided into 2 groups, each containing 45. The control group received routine nursing, and the observation group performed standardized nursing intervention on the basis of the control group. The control group received conventional nursing, and the observation group performed standardized nursing intervention on the basis of the control group. After nursing, the two groups of patients were compared for their psychological state and nursing satisfaction. **Results:** After nursing, the HAMD and HAMA scores of the two groups were lower than before the nursing, and the observation group was lower than the control group, the difference was statistically significant ( $P < 0.05$ ). **Conclusion:** Standardized nursing intervention can alleviate the negative emotion of endoscopic examination of patients with gastric ulcer complicated with diabetes, which is conducive to the smooth progress of the examination.

**Keywords:** Gastric ulcer with diabetes; Standardized nursing intervention; Endoscopy; Psychological state

**Publication date:** May, 2020

**Publication online:** 31 March, 2020

**\*Corresponding author:** Xue Hu, 2684106935@qq.com

Gastric ulcer is a common gastrointestinal disease, and its clinical symptoms are upper abdominal pain. At present, endoscopy is an effective method for the

diagnosis. Endoscopic examination is of high safety and accuracy, but its examination method is likely to cause anxiety, depression and other negative emotions in patients, which hinders the smooth progress of endoscopic examination. Moreover, fasting is needed before the examination. A long period of fasting is easy to lead to gastric ulcer and hypoglycemia in patients with diabetes, thus causing adverse effects. Therefore, proper nursing intervention can help the examination proceed smoothly<sup>[1]</sup>. In view of this, this study explores the nursing effects of standardized nursing interventions in endoscopic examination of patients with gastric ulcer complicated with diabetes. The report is as follows.

## 1 Information and method

### 1.1 General Information

90 patients with gastric ulcer and diabetes who were treated in our hospital from May 2018 to May 2019 were selected. Approving by the Medical Ethics Committee, they were randomly divided into 2 groups, each with 45 cases. The control group included 23 males and 22 females; the age was 38-70 with an average age of ( $53.34 \pm 2.61$ ). There were 25 males and 20 females in the observation group; the age was 39-70 with an average age of ( $54.15 \pm 2.18$ ). Comparison of baseline data between the two groups showed no significant difference ( $P > 0.05$ ), and the study was comparable.

### 1.2 Method

#### 1.2.1 Control group

Adopt routine nursing: evaluate the patient's physical condition before endoscopic examination to know

whether there are contraindications or allergies to narcotic drugs, etc.; remind the patients to fast, prohibit drinking and drug before the examination, and inform the family to accompany him; instruct the patient to take water and eat (warm semi-liquid food) after 2h examination; inform the patient not to drive or do high-risk work within 24 hours.

### 1.2.2 Observation group

Standardize nursing intervention on the basis of the control group: (1) Set up a nursing intervention group: provide nursing training to duty nurses, improve their operating level and communication skills, focus on reducing patients' adverse reactions, reduce the risk of examination, and improve the success rate of endoscopic examination. (2) Health education: explain the knowledge and precautions of gastric ulcer, diabetes and endoscopic examination to the patients, test the blood glucose level of the patients, and provide personalized care according to the individual status of the patients. (3) Psychological nursing: patients are prone to anxiety, fear and other negative emotions before the examination. The duty nurses should communicate with them patiently, introduce the safety and necessity of the examination simply and clearly, so that they can relax and cooperate with the examination. (4) Environmental care: keep the room clean and bright, adjust the temperature and humidity to create a comfortable examination environment for patients. (5) Prevention of hypoglycemia: fasting is required before endoscopic examination. To avoid patients' hypoglycemia due to examination, the dosage of

hypoglycemic drugs before fasting can be appropriately reduced.

### 1.3 Evaluation index

Psychological status: The Hamilton Depression Scale (HAMD) [2] and the Hamilton Anxiety Scale (HAMA) [3] were used to assess the psychological status of the two groups of patients: HAMD has a total of 24 items, with a total score of 72 points. The lower the score, the lighter the depression symptoms; HAMA has 14 items, with a total score of 56 points. The lower the score, the lighter the anxiety symptoms.

### 1.4 Statistical method

Data were processed with SPSS18.0 software. The measurement data was expressed by  $\bar{x} \pm s$ , and the data between groups was tested by independent sample *t*. The data within the group was tested by paired sample *t*. The count data was expressed by percentage, and  $\chi^2$  test was used.  $P < 0.05$  was considered statistically significant.

## 2 Result

Before nursing, there was no significant difference in the scores of HAMD and HAMA between the two groups ( $P > 0.05$ ); after the nursing, the scores of HAMD and HAMA of the two groups were lower than before the nursing, and the scores of the observation group were lower than those of the control group, which has statistically significant differences ( $P < 0.05$ ). See table 1.

**Table 1.** Comparison of HAMD and HAMA scores before and after nursing ( $\bar{x} \pm s$ , points)

groups	HAMD		HAMA	
	before nursing	after nursing	before nursing	after nursing
control group(n=45)	26.51±4.23	10.63±1.26 <sup>a</sup>	25.16±5.26	11.36±1.58 <sup>a</sup>
observation group(n=45)	26.78±4.84	8.26±1.42 <sup>a</sup>	25.65±5.12	8.81±1.56 <sup>a</sup>
<i>t</i>	0.250	8.375	0.448	7.704
<i>P</i>	0.803	0.000	0.655	0.000

Note: Compared with the same group before nursing, <sup>a</sup> $P < 0.05$ .

## 3 Discussion

Gastric ulcer is caused by inflammation of the gastric mucosa that destroys the mucosal layer and reaches the submucosa. The main causes are gastric helicobacter

pylori infection and gastric acid and pepsin digestion. Most gastric ulcers are benign, and very few are malignant. At present, the examination methods of digestive tract diseases include blood routine examination, abdominal B-ultrasound and endoscopy.

Among them, endoscopy is the main examination method for the diagnosis, which can clearly and intuitively display the internal conditions of patients' digestive tract. Endoscopy needs to be performed on an empty stomach, which can lead to hypoglycemia in patients with gastric ulcer and diabetes, and its invasive examination method can easily cause anxiety, fear, and other resistance to the patient, leading to adverse reactions such as nausea and pain.

The results of this study show that after nursing, the HAMD and HAMA scores in the observation group were lower than those in the control group, indicating that standardized nursing interventions can improve the psychological status of patients undergoing endoscopy. The reason is that in accordance with the actual situation of the patients, the standardized nursing intervention is a nursing plan formulated by the nursing staff based on the relevant theoretical knowledge and clinical experience, which can take care of the patient's psychological and physiological conditions to achieve the purpose of a successful examination. The rich knowledge education and clinical experience explanation of the duty nurses can ease the patients'

fear and resistance. Psychological counseling and environmental intervention can eliminate patients' nervous and anxious emotions, and hypoglycemia prevention can avoid patients' adverse reactions, greatly improve the success rate of examination.

In summary, standardized nursing interventions can alleviate the negative emotions of patients with gastric ulcer complicated with diabetes when taking endoscopic examination, which is conducive to the successful examination.

## References

- [1] Yuan H, Zhao GF, Wang XX. The effect of high-quality nursing in improving the treatment compliance of elderly diabetic patients[J]. *Laboratory Medicine and Clinic*, 2016, 13(z2): 391-392.
- [2] Kang Y, Huang FX, Kang J. Application effect of standardized nursing in nursing quality management of digestive endoscope room[J]. *Chinese Journal of Modern Nursing*, 2016, 22(15): 2187-2189.
- [3] Yao Y, Zhou Y, Wang HB, et al. Study on the relationship between gastric hyperemic stripe congestion and indigestion symptoms and serum serotonin levels[J]. *International Journal of Digestive Disease*, 2019, 39(4): 291-294.