Comparative Observation on Nursing Effect of Nursing Intervention and Routine Nursing in Patients with Renal Calculi and Gastric Ulcer and the Impacts on Epidermal Growth Factor

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Abstract

Objective: To explore the comparative observation on nursing effect of nursing intervention and routine nursing in patients with renal calculi and gastric ulcer and the impacts on epidermal growth factor. **Methods:** A total of 72 patients with renal calculi and gastric ulcer were selected and treated in our hospital from January 2018 to December 2018. They were divided into the observation group and the control group, 36 for each. Comprehensive nursing intervention was implemented in the observation group, whereas routine nursing was implemented in the control group. The level of epidermal growth factor, nursing satisfaction, renal calculi recurrence rate, average hospital stay and postoperative blood loss were compared between the two groups after nursing. **Results:** There was no significant difference in the level of epidermal growth factor between the two groups before nursing (P > 0.05), while after nursing, the level in the observation group was higher compared with the control group, and the difference between the two groups was significant (P < 0.05). Similarly, in comparison with the control group, the nursing satisfaction score of the observation group was higher, the average hospital stay was shorter, the postoperative blood loss was less, and the calculi recurrence rate was lower. The between-group differences for all mentioned indexes were significant (P < 0.05). **Conclusion:** With regard to patients with renal calculi and gastric ulcer, comprehensive nursing intervention can improve nursing satisfaction and quality of patients' lives, reduce calculi recurrence rate, and increase the level of epidermal growth factor, which has clinical application value.

Keywords

Nursing Intervention, Epidermal Growth Factor, Renal Calculi, Gastric Ulcer

1. Introduction

Gastric ulcer (GU) is a chronic ulcer that occurs between the cardia and pylorus, and is a type of peptic ulcer. At present, it has developed into a ubiquitous disease clinically, with the characteristics of long course and slow development. The disease is associated with the patient's living rules, food habits, psychological factors, etc. It is difficult to achieve a complete cure in a short period of time, which will have a certain impact on its treatment [1]. In recent years, people have gradually attaches importance to the applied research on the nursing of renal calculi. In this study, comprehensive nursing intervention was adopted for patients with renal calculi and gastric ulcer. The results are as follows.

2. Materials and Methods

2.1. Case Information

A total of 72 patients with renal calculi and gastric ulcer were selected and treated in our hospital from January 2018 to December 2018. They were divided into the observation group and the control group, 36 for each. Comprehensive nursing intervention was adopted for patients in the observation group, whereas routine nursing was adopted for those in the control group. The level of epidermal growth factor, nursing satisfaction, calculi recurrence rate, average hospital stay and postoperative blood loss were compared between the two groups after nursing. All participants provided signed informed consent. Those with high blood pressure and high blood sugar were excluded from the experiment. Patients in the observation group (20 males and 16 females) aged from 30 to 45 years, with an average age of 42.2 ± 1.1 years. Their average disease duration was 3.48 ± 1.43 years, and the average weight was 65.25 ± 5.54 kg. As their counterparts, patients in the control group (19 males and 17 females) aged from 31 to 46 years, with an average age of 41.8 ± 1.3 years. Their average disease duration was 3.52 ± 1.26 years, and the average weight was 65.21 ± 5.39 kg. There was no statistical difference in case data between the two groups.

2.2. Inclusion and Exclusion Criteria

Inclusion criteria: 1) Patients aged 18 years or older; 2) Informed consent can effectively cooperate with therapeutic intervention patients; 3) Patients diagnosed with kidney stones and gastric ulcers. Exclusion Criteria: 1) Patients with hypertension; 2) patients with diabetes; 3) patients with mental disorders; 4) Severe loss of renal function, severe heart disease patients. All patients signed informed consent forms. The study was approved by the ethics committee officer.

2.3. Methods

Two different nursing modes were implemented in the two groups, underpinned by the basic treatment of gastric mucosal protective agents and proton pump inhibitors for both groups.

2.3.1. The Control Group

Routing nursing was adopted. Starting from the time of admission, the relevant disease diagnosis and knowledge education were carried out. First of all, it was necessary to encourage patients to fully understand the basic knowledge about the disease, and comprehensively educate patients about the knowledge of renal calculi and gastric ulcer. Secondly, we tried to change their long-standing psychological state of fear and anxiety, and implemented health education. Finally, we had to encourage patients to quit smoking, live life in a scientific and reasonable way, and do appropriate physical exercise.

2.3.2. The Observation Group

Comprehensive nursing intervention

Before surgery, patients were excluded from surgical contraindications, and various routine examinations were implemented. In order to ensure that reasonable nutrition could be provided to patients, a special diet plan was formulated according to their own conditions. It is necessary to obtain the expected effect of surgical treatment before surgery, and implement psychological care according to the patient's own character to avoid postoperative emergencies [2]. ECG monitoring was provided to the patient after surgery. Various physical indexes and blood oxygen saturation of the patient were detected. Medicinal water was guaranteed to be 37°C, and the operating room temperature was about 29°C. During postoperative nursing, the vital signs of patients should be monitored, and their underlying conditions should be closely observed [3]. It was necessary to actively prevent the occurrence of related complications. When complications occurred, corresponding measures should be taken to deal with them immediately. Additionally, as for the physical condition of patients after surgery, there was a need to give health guidance for them, and adjust the diet plan in time, so as to prevent the occurrence of complications.

Medication guidance

During the treatment, acidic foods and dairy products should be banned for patients who were not treated with antacids. Taking the relevant drugs before meals were exactly those taking bismuth therapy [4].

Psychological care

Due to the long course of the disease, it was more difficult to obtain a complete cure. Patients were therefore lack of strong confidence in the treatment and had low enthusiasm, which led to the emergence of anxiety, depression and other negative emotions, so it was necessary to encourage patients, step up psychological intervention for patients, and increase their confidence in treatment.

2.4. Observation Indexes

The level of epidermal growth factor, satisfaction, calculi recurrence rate, nursing satisfaction, average hospital stay, postoperative blood loss were compared between the two groups after nursing, postoperative rehabilitation effect. The Likert level 5 scoring method is adopted, with the nurse's service attitude and the

attention to patients as the evaluation indicators. Among them, 0 points for very dissatisfied, 1 point for dissatisfaction, generally 2 points, 3 points for satisfaction, and 4 points for satisfaction. The total score of all items is transformed into an overall "feeling score" of 0 - 100 points, the higher the score, the higher the satisfaction. The percentage conversion formula is: the sum of the scores of effective answer items/number of effective answer items/4 × 100 [5].

2.5. Statistical Analyses

SPSS23.0 Software was utilized for data analysis. All data used were analyzed after being processed by Epidata. A value of 0.05 was the test standard, and t test was used for comparison between groups. A value of P < 0.05 was considered statistically significant.

3. Results

3.1. Comparison of the Level of Epidermal Growth Factor between the Two Groups

Before nursing, there was no significant difference in the level of epidermal growth factor between the two groups (P > 0.05), while after nursing, the level in the observation group was higher compared with the control group, and the difference between the two groups was significant (P < 0.05). See Table 1.

3.2. Comparison of Nursing Satisfaction between the Two Groups

Compared with the control group, the nursing satisfaction score of the observation group was higher, and the difference between the two groups was significant (P < 0.05), as shown in Table 2.

3.3. Comparison of the Average Hospital Stay and Postoperative Blood Loss between the Two Groups

Compared with the control group, the average hospital stay of the observation group was shorter, and the postoperative blood loss was less. The differences between the two groups were significant (P < 0.05), as shown in Table 3.

3.4. Comparison of Renal Calculi Recurrence Rate between the Two Groups

The renal calculi recurrence rate of the observation group was lower than that of the control group, and the difference between the two groups was significant (P < 0.05). See Table 4.

Table 1. Comparison of the level of epidermal growth factor between the two groups.

	Number of cases	Before nursing	After nursing
The observation group	36	248.33 ± 29.57	477.77 ± 65.24
The control group	36	250.14 ± 31.03	580.24 ± 71.14

Table 2. Comparison of nursing satisfaction score between the two groups (x ± s, point).

	Number of cases	Score
The observation group	36	95.26 ± 2.10
The control group	36	80.02 ± 3.44

Table 3. Comparison of the average hospital stay and postoperative blood loss between the two groups (x ± s).

	Number of cases	Average hospital stay (d)	Postoperative blood loss (mL)
The observation group	36	7.12 ± 1.24	30.01 ± 3.31
The control group	36	11.02 ± 2.47	62.35 ± 5.35

Table 4. Comparison of calculi recurrence rate between the two groups [n (%)].

	Number of cases	Renal calculi recurrence rate (%)
The observation group	36	2 (5.56)
The control group	36	9 (25.00)

4. Discussion

Addiction to tobacco and alcohol, irregular diet, mental stress and other factors can cause the occurrence of chronic gastric ulcer in patients [6]. Because patients often do not understand its inducing factors and lack of the knowledge about the disease, the cure of the disease is delayed in the treatment. However, patients do not pay attention to change lifestyle after the cure, so there is no significant improvement in the inducing factors, resulting in repeated attacks of the disease. In addition, it is relatively difficult to treat canal calculi clinically. Surgical treatment can easily induce renal failure and cause great damage to patients [2]. In the current stage, extracorporeal shock wave therapy is a satisfactory means. The concept of fast rehabilitation has gradually gained attention in surgical nursing work in recent years [3], and in perioperative patient care, fast rehabilitation nursing can shorten the length of hospital stay and accelerate recovery, which plays an extremely critical role [4].

Additionally, renal calculi combined with gastric ulcer often occurs in clinic, with the characteristics of being difficult to treat and slow onset, so it is emphasized to do nursing work from various aspects. It is necessary to be comprehensive. In clinical practice, nursing intervention is a commonly used method, which can provide patients with better and comprehensive nursing services [7]. Preoperative intervention can make good preoperative preparations to effectively prevent the occurrence of postoperative emergencies, and ensure patients to receive treatment in the best state. Postoperative intervention can reduce the disease recurrence rate, reduce the occurrence of complications, and ensure the efficacy of surgery. In this study, all the indexes that we investigated in the obser-

vation group were better than those in the control group. The results of this study have confirmed that helicobacter pylori infection and imbalance of pepsin secretion are the main factors for the disease in patients with renal calculi and gastric ulcer. The main use of the comprehensive nursing intervention can somewhat increase the level of epidermal growth factor, improve nursing satisfaction, reduce renal calculi recurrence rate, and improve the quality of life of patients.

5. Conclusion

In a nut shell, traditional clinical nursing plan adopts the "disease-centered" nursing mode, and the nursing staff is often difficult to deal with the various needs of patients, which leads to poor nursing quality, which increases the incidence of medical disputes. Comprehensive nursing intervention is a pertinent nursing mode with "patient-centered". When different patients appear untimely due to various factors, they adopt an individualized and humanized nursing method to help patients reduce pain and improve the quality of nursing. If the sample size is small, it is suggested to adjust the sample screening criteria to expand the sample size and scope. For patients with renal calculi and gastric ulcer, the comprehensive nursing intervention can bring a series of better effects, which has clinical application value.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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