

Evaluation of the Effect of Endoscopic High-Frequency Electrocoagulation Electrodesiccation of Intestinal Polyps in the Clinical Nursing Pathway

Rui Cao*

Shaanxi Provincial People's Hospital, Xi'an 710068, Shaanxi Province, China

*Corresponding author: Rui Cao, 787430906@qq.com

Copyright: © 2024 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: *Objective:* To evaluate the effect of endoscopic high-frequency electrocoagulation electrodesiccation (HFEE) of intestinal polyps in the clinical nursing pathway. *Method:* A total of 120 patients who underwent HFEE of intestinal polyps were randomly divided into two groups of 60 cases. The control group received conventional nursing care while the observation group received the clinical nursing pathway of HFEE. *Results:* The average length of hospitalization, hospitalization costs, and mastery of the three health education of the observation group was lower than that of the control group ($P < 0.01$). The satisfaction of care in the observation group was significantly better than the control group ($P < 0.01$). *Conclusion:* The clinical care path was suitable for HFEE of intestinal polyps, which shortened the patient's length of hospitalization, improved their awareness of health education, improved their satisfaction with care, reduced medical disputes, and promoted the good development of nurse-patient relationships.

Keywords: Intestinal polypectomy; Clinical pathway; Nursing care

Online publication: April 22, 2024

1. Introduction

A clinical care pathway is a standardized scientific and efficient nursing model developed recently. It targets specific patient groups, with time as the horizontal axis and hospital guidance, inspection, medication, treatment, nursing, dietary guidance, health guidance, discharge planning, and other ideal care means as the vertical axis. A schedule planner is established so that nursing care work can be planned comprehensively. Through this care model, the patient also better understands their own care plan goals and actively participates in the nursing process, thus enhancing the patient's self-care awareness, to achieve the best nursing care result. Both patient and nurse complement each other to develop a nursing care model that combines active nursing care and active patient participation. To adapt to the development of a modern nursing service model and increase the patient's awareness of health education, our department applied the clinical nursing pathway model to patients who underwent endoscopic high-frequency electrocoagulation electrodesiccation (HFEE) of intestinal polyps from January 2021 to December 2022 and achieved good results.

2. Clinical data and methods

2.1. General information

A total of 120 patients who underwent HFEE of intestinal polyps in our department from January 2021 to December 2022 were selected for this study and randomly divided into an observation group and a control group, with 60 cases each. There were 66 males and 54 females aged 21–80 years old. There were no significant differences between the two groups of patients in terms of gender, age, literacy level, and treatment protocols, and all data were comparable ($P > 0.05$). Before discharge, each patient was surveyed on the health education content, compliance rate, hospitalization time and cost, and satisfaction with nursing care. This study was carried out with the patient's consent.

2.2. Methods

Both groups received nursing care based on holistic nursing. The control group received conventional nursing care, whereby nurses randomly provided health education, nursing assessments, diagnosis, and randomly implemented nursing plans without specifying the time frame of these events.

The observation group received the clinical nursing pathway. A team that comprises the department director, head nurse, doctor in charge, and several nurses was formed with reference to the disease nursing routine and adhered to the principle of patient-centeredness. A clinical nursing pathway flow chart was formulated with the guideline of achieving the best therapeutic and nursing effect, and the responsible nurse completed the examination, treatment, nursing care, health guidance, and records in time, per the contents and time set by the clinical nursing pathway. The clinical nursing pathway involves various aspects. On the first day of hospitalization, the patient's temperature, pulse, respiration, and blood pressure were recorded. The patients were then introduced to the ward environment, facilities, and the doctor in charge. Nurses provided safety education and guidance to prevent colds, scalds, falls, and other accidents during hospitalization. Patients were also informed about the laboratory test items and specimen retention precautions, including dietary guidance and how to prepare for fasting venous blood sampling the following day. On the second day of hospitalization, the patients were provided with basic life and psychological care, and disease knowledge education. They were also informed about the procedure of enteroscopy and endoscopic treatment of intestinal polyps, the need to take bowel cleansing agents before surgery, and the importance of bed rest after surgery. The patient's family was then informed of the operation schedule. On the third day of hospitalization, the patient's clothing was removed and their bladder was emptied. The necessary supplies (gastroscopy application form, intraoperative medication, electrocardiogram) were gathered and the patient was sent to the luminal cavity center. After surgery, the patient's body temperature (T), pulse rate (P), respiration rate (R), and blood pressure (Bp) was measured. The patient was instructed to fast for 24 hours and was only given a small amount of water. The nurses assisted in bed urination and defecation, where antibiotics were prescribed, along with hemostatic rehydration and other treatments according to the doctor's orders. The patient was closely monitored for any side effects, abdominal distension, abdominal pain, vomiting of blood, black stools, and other complications. The patient was advised to pull up the bilateral bed gears during bed rest to prevent bed fall. On the fourth day of hospitalization, changes in the patient's vital signs were monitored, and the efficacy of drugs and any side effects were observed. Patients were given warm, cool, and soft food for easier digestion. If there is any discomfort, the medical staff is informed promptly. During the fifth to eighth day of hospitalization, changes in the patient's vital signs were monitored twice a day, and they were given warm, cool, and soft food. The patients were then issued an out-of-hospital instruction card upon discharge.

2.2.1. Evaluation indexes

The average length of hospitalization, hospitalization costs, health education knowledge rate, and satisfaction with nursing care between the two groups were compared. The evaluation of the two groups was carried out 1 day before discharge, using a questionnaire designed by the department itself and tested by the head nurse on the patients.

2.2.2. Statistical methods

The data obtained were statistically analyzed using the SPSS 17.0 software, in which a *t*-test was used for quantitative data comparison and a chi-squared (χ^2) test was used for qualitative data comparison. Results were considered statistically significant at $P < 0.05$.

3. Results

3.1. Comparison of the health education attainment rate between the two groups

As shown in Table 1, the health education attainment rate of the observation group (95%) was higher than that of the control group (75%) ($P < 0.01$).

Table 1. Comparison of health education attainment rate between the two groups

Group	Cases, <i>n</i>	Compliant	Non-attainment	Achievement rate (%)	χ^2	<i>P</i>
Observation group	60	57	3	95	9.41	< 0.01
Control group	60	45	15	75		

3.2. Comparison of the satisfaction with care between the two groups

As shown in Table 2, the satisfaction rate of the observation group (95%) was higher than that of the control group (70%) ($P < 0.01$).

Table 2. Comparison of patient satisfaction between the two groups

Group	Cases, <i>n</i>	Very satisfied	Satisfied	Dissatisfied	Satisfaction rate (%)	χ^2	<i>P</i>
Observation group	60	57	2	1	95	12.99	< 0.01
Control group	60	42	14	4	70		

3.3. Comparison of average length of hospitalization and hospitalization costs between the two groups

As shown in Table 3, the average length of hospitalization and hospitalization costs in the observation group was lower than that of the control group ($P < 0.01$).

Table 3. Comparison of average length of hospitalization days and hospitalization cost between the two groups

Group	Cases, <i>n</i>	Average length of hospitalization (days)	Average hospitalization cost (\$)
Observation group	60	5.2 ± 0.75	5450.54 ± 653.30
Control group	60	8.2 ± 1.45	7654.60 ± 931.82
<i>t</i>		14.23	15.00
<i>P</i>		< 0.01	< 0.01

4. Discussion

Implementation of the clinical nursing pathway can establish standardized nursing work, reduce work duplication, and improve work efficiency, and job satisfaction. It also enhances the sense of medical and nursing cooperation and cultivates team spirit. In this study, patients with intestinal polyps are selected for clinical nursing pathway, in strict accordance with the pathway flow chart that reasonably schedules the various inspections, treatments, care, and medication, to avoid the arbitrariness of medical and nursing work ^[2]. This was also to eliminate unnecessary and unreasonable diagnostic and therapeutic behaviors, effectively reduce the patient's hospitalization costs, and shorten the length of hospitalization. Results showed that the application of the clinical nursing pathway improved the effect of health education. It can effectively guide nurses and outline when and how tasks should be carried out. It also consistently emphasizes key issues to ensure the effectiveness and coverage of health education among patients.

The application of the clinical nursing pathway managed to improve patient satisfaction with care and reduce the incidence of nurse-patient disputes. It allows patients to complete all preoperative preparations quickly, thus shortening the preoperative waiting time. In the clinical nursing pathway, standard nursing plans and rehabilitation guidance are provided for patients every day, ensuring that health education is carried out throughout all aspects of the patient's hospitalization from admission to discharge. It also ensures the continuity and completeness of the nursing care work, so that the patients and their family members can understand the whole treatment process, subsequently strengthening the patient's active participation. This reduces the patient's psychological barriers and improves their adherence to treatment and rehabilitation.

The implementation of a clinical care pathway aims to meet the psychological needs of the patient. The psychological needs of a hospitalized patient are often more important than their physiological needs. Regardless of their original social status, the patient seeks respect and care from the nursing staff with the ultimate goal of a speedy recovery. The nursing pathway can guide the patient during different stages of the disease from admission to discharge, and provide disease knowledge and psychological guidance to better meet the patient's psychological needs ^[3].

5. Conclusion

The clinical nursing pathway as a new nursing model is the product of continuous innovation of quality care amidst profound changes in the medical field, which provides rich connotations to the intrinsic characteristics of the disease. This puts forward higher requirements for nursing staff, who must continue to learn, make quick diagnoses, and amend and improve the content of clinical nursing pathways to make them more scientific and practical and better serve the majority of patients.

Disclosure statement

The author declares no conflict of interest.

References

- [1] Kong C, Wang Y, 2010, Application and Reflections on Clinical Nursing Pathways Contemporary Medicine. Contemporary Medicine, 16(14): 205
- [2] Wang Y, Liang P, 2013, Progress of Critical Study on Evaluation of Clinical Nursing Pathway Application. Nursing Research, 2013(12): 3841.

- [3] Yao X, Zhou H, Li L, 2013, Application of Clinical Nursing Pathway in Endoscopic Colon Polypectomy Patients. Huaihai Pharmaceutical, 2013(5): 273.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.