Intelligent Surgery Nursing Work for Elderly Patients with Acute Appendicitis

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Abstract. Objective: To explore the nursing effect of clinical, surgical nursing on patients with acute appendicitis. Methods: A total of 80 patients with acute appendicitis admitted to our hospital from May 2016 to July 2018 were randomly divided into two groups. The patients in the control group received routine nursing. Those in the observation group received clinical, surgical nursing based on that in the control group. After nursing for a period, the nursing effectiveness, incidence of complications. Results: The incidence of postoperative complications in the observation group was 6.67% (4/60), and that in the control group was 21.67% (13/60). The effective nursing rate was 91.67% in the observation group, and that in the control group was 80.00%. Conclusions: The implementation of personalized surgical nursing intervention in the treatment of elderly patients with acute appendicitis can effectively alleviate the adverse emotions of the patients, shorten the time required for anesthesia recovery, reduce the occurrence of various adverse symptoms, with relatively high safety.

Keywords: Acute Appendicitis, Surgical Nursing, Effect Observation

1. Introduction
Until the present, 0.1% ~ 0.5% of patients with acute appendicitis developed complications or even died due to incorrect diagnosis or improper treatment[1, 2]. For acute appendicitis, reducing the incidence of misdiagnosis is a problem to be considered by surgical professionals, which also deserves great attention in the clinic. Scientific and reasonable surgical nursing plays a vital role in the treatment and recovery[3, 4]. In particular, especially the close cooperation between dietary nursing and psychological nursing can shorten the course of the disease and reduce the pain of patients[5, 6].

Appendiceal obstruction is the most common cause. Fecal stones, foreign bodies, tapeworms, tumors, and other obstructions are often the most common. Fecal stones are the most common. After
obstruction, the appendix lymphatic follicles are blocked, and the mucous membrane secretes mucus to increase the intraluminal pressure and cause blood disorders. Meanwhile, bacterial invasion can aggravate appendix inflammation. The pathogenic bacteria are mostly gram-negative bacilli and anaerobic bacteria in the intestine. In this study, some elderly patients with acute appendicitis were selected as the research object, and personalized nursing intervention was implemented in the treatment of some patients.

2. Data and methods

2.1. General information
From May 2016 to July 2018, 80 elderly patients with acute appendicitis were selected, including 61 males and 21 females, aged 9 ~ 79, with an average age of 42.8. The body temperature of patients was 37.4 ~ 39.5℃. The onset time was 1.4 ~ 13 h, with an average of 5.3 h. All patients have the clinical characteristics of acute appendicitis, and some patients have symptoms such as vomiting, diarrhea, and nausea. Routine blood tests show an increase in the proportion of neutrophils and an increase in white blood cell counts. The nursing effects on the patients were observed and analyzed.

2.2. Methods
In this study, the elderly patients with acute appendicitis were selected to receive routine nursing, including health knowledge publicity, preoperative preparation, etc., and to provide the patients with a quiet and comfortable rest environment and suitable food. One group received the personalized nursing intervention. The specific methods were as follows: All patients presented clinical manifestations of acute appendicitis, and some patients have symptoms such as vomiting, diarrhea, and nausea. Routine blood tests showed an increase in the proportion. Patients in the observation group received clinical nursing care. The patient's nursing effect was observed and analyzed. Acute appendicitis is a common surgical disease, and its incidence ranks first among all kinds of acute abdomen. Most patients presented increased white blood cell and neutrophil counts. Tenderness in the right lower abdomen appendix (Mc's point) was an essential sign of the disease.

2.3. Observation indexes and evaluation criteria
Before and after the nursing intervention, anxiety and depression rating scale was used to evaluate the patients' anxiety and depression. Record the time required for the patient to recover from anesthesia. Through the above working indexes to analyze the actual situation and effect of patient care.

2.4. Statistical methods
Using SPSS17.0 medical statistics software the count data was detected by χ², the measurement data was expressed by (x̄ ± s).

In the classification problem, the importance of each feature dimension is different. To some extent, the sample data shape can overcome the shortcoming that the sample data shape treats each feature dimension equally. Its definition is as follows:

The sample data shape between samples is defined as follows:
\[ d_s(x_i, x_j) = \sqrt{(x_i - x_j)^T A(x_i - x_j)} \]  

(1)

The above equation can be expressed as follows:
\[ d_s(x_i, x_j) = \sqrt{(x_i - x_j)^T A(x_i - x_j)} = \sqrt{(x_i - x_j)^T L^T L(x_i - x_j)} \]
\[ = \sqrt{(Lx_i - Lx_j)^T (Lx_i - Lx_j)}. \]  

(2)

It is equivalent to the matrix as a mapping, mapping the data of the original sample to the new sample, and transforming the original data form to the sample data form of the new sample.

3. Results

Hence, clinical care of patients with acute appendicitis surgery could effectively improve the situation of patients, shorten the length of hospitalization, and improve their quality of life. For the prevention and care of abdominal abscess, an appropriate supine position was taken. After the blood pressure of the patients was stable, a semi-recumbent position was taken to facilitate the accumulation of intraperitoneal exudate in the pelvic cavity or drainage to prevent the spread of infection and formation of an abdominal abscess. The drainage was kept smooth, and the drainage tube was fixed to prevent compression, distortion, blockage, etc. To control infection, sufficient and sensitive antibacterial drugs were administered based on the doctor's advice. Timely treatment of abdominal abscess was performed where an abdominal abscess was formed. Flushing or catheter drainage should be carried out in time. Surgical incision and drainage were prepared to prevent and treat incision infection, and dressings were changed regularly. If massive exudates were generated, the contaminated dressings should be replaced in time to keep the incision dressings clean and dry. Antibacterial drugs were administered rationally based on pus or exudate bacteria culture. The drug sensitivity test was performed according to the sensitive antibacterial drugs selected. The observation was strengthened. If the incision site presented red, swollen, tender, and fluctuant signs 2 ~ 3 d after the operation, accompanied by an increase in body temperature, incision infection should be considered. Timely treatment of incision infection should be performed in cooperation with the doctor to perform puncture and extract the pus or remove the sutures to discharge the pus and place drainage.

The experimental group was (24.5 ± 1.5) points, and the control group was (35.5 ± 3.0) points. The depression score of the patients after the nursing intervention was (22.5 ± 2.0) and (36.8 ± 1.8) points in the control group. The time required for anesthesia recovery was (20.3 ± 6.8) min in the experimental group and (30.0 ± 8.4) min in the control group, significantly less (T = 5.677, P = 0.000). The patients with acute appendicitis often had diarrhea after the operation. The stool was cultured after the operation, and medication was administered based on the culture result, as shown in Tables 1 and
Clinical acute appendicitis is treated by operation method generally, give the patient's body injury is bigger, therefore should strengthen the nursing work of the elderly acute appendicitis patient, and need less time to wake up after anesthesia, it is widely used in the treatment of acute appendicitis, tracheal intubation general anesthesia should carry out safety guarantee work in the treatment of the elderly acute appendicitis patient, ensure the safety of the patient during operation, and provide guarantee for the treatment effect.

Patients' bad emotions are not conducive to the development of surgical treatment and the recovery of the patient's body, so it is necessary to carry out psychological intervention in the course of treatment, to understand the causes of all kinds of bad emotions in patients, and to formulate targeted measures. The main reason for the common postoperative complications is that the balance state of water and electrolyte in human body is destroyed, so it is necessary to find and correct the problem of water and electrolyte disturbance in time during the treatment process, so as to help the patients recover their health as soon as possible. The effect of nursing has been widely recognized by patients and their families, indicating that the application value of individualized nursing intervention is obviously better than that of routine nursing, and it can be applied to the treatment of elderly patients with acute appendicitis enough to provide patients with safety and security, improve the patient's physical recovery speed, worthy of full implementation of the use.

4. Conclusions
Acute appendicitis surgery is most common in surgery. Due to the short operation time and simple procedure, it can hardly attract the attention of medical staff after surgery. Postoperative patients are often worried that premature and excessive activities may cause incision hemorrhaging, pain, etc., thereby reducing their activities and prolong the bedtime. After surgery, patients are encouraged to get out of bed early, conduct activities, and eliminate fear, to shorten the time of postoperative anal exhaustion, avoid abdominal distension, and promote bowel function recovery and incision healing. In the past few years, in the observation and nursing of patients with postoperative complications of acute appendicitis, we have realized that any patient, whether after a major or minor operation, should be treated as those in critical conditions during the nursing to eliminate paralysis, encouraging them to observe, think, act, and move frequently, strengthening inspections, identifying abnormal conditions,
assisting patients to get out of bed early, providing timely health education guidance, and helping them understand relevant disease knowledge, thereby reducing postoperative complications and the occurrence of medical disputes.

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