Prevention of Delayed Recovery of Right Hemicolectomy in Patients with Ascending Colon Cancer

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Abstract

Objective: This paper aims to analyze perioperative nursing care given to patients with ascending colon cancer who had right hemicolectomy.

Methods: Interventions provided in the form of perioperative education, deep breathing relaxation exercises, effective cough exercises, and early postoperative mobilization.

Results: The results of the evaluation of the implementation of nursing showed the results of patients able to do post-operative exercises in accordance to education that has been given, the patient was satisfied, and there was no delay post-surgical recovery.

Conclusion: Operative education can be used to improve postoperative recovery in colon cancer patients. Some interventions can be made a protocol and applied to improve patient independence, reduce post-operative care days, and increase satisfaction for patients and families.

Keywords: Colon cancer; deep breathing; early mobilization; effective coughing; preoperative education

Introduction

Cancer is a group of more than 200 diseases characterized by uncontrolled and unregulated cell growth. Cancer is the second highest cause of death in the world with 8.8 million cases in 2015 or in other words 1 in 6 deaths caused by cancer. In Indonesia, the prevalence of cancer in all ages is 1.4%. Cancer prevalence in cities (1.7%) tends to be higher than in rural areas (1.1%)³. The increase in the number of colorectal cancer cases is due to changes in the Indonesian diet, such as changes in western ways of eating (westernization) which are high in fat and low in fiber⁴.

Colectomy is one of the management of colon cancer that has a risk of postoperative complications. Patient conditions, such as: age, gender, nutritional status, and previous surgery history can be a risk factor. In addition, immobilization for too long postoperatively should also be avoided because it can cause a decrease in muscle strength, atelectasis, insulin resistance, thromboembolism, and decreased ability to exercise⁵. If complications occur it will increase the risk of delay in postoperative recovery.

The risk of postoperative complications in high-risk patients with colon cancer can be avoided by pre-operative education by nurses. Some research results show that these interventions can help recovery of postoperative colonic patients and shorten treatment time⁷,⁸,⁹.

Method

This paper was written by using a case study method for patients with ascending colon cancer using nursing care starting from assessment, data analysis, nursing diagnosis, planning, implementation, and evaluation. This study was conducted at a national referral hospital in Jakarta Indonesia from May 14, 2018 to May 31, 2018 by following the condition of the patient from pre-operative and post-operative periods.

Result

Mrs. A (63 years old) came to the hospital from provincial hospital with the result of ascending colon cancer biopsy and resection was planned. In the past, the patient was a farmer but she was currently no longer works. Patient was admitted to the surgical ward at on May 14, 2018 with a medical diagnosis of cancer of colon ascendance T2N0M0. Patient complained diarrhea since February 2018, felt her weight down, defecate 3-4 times a day with thick characteristics which tend to be rather
liquid and brownish. Initially, the patient went to the clinic, and then the patient was referred to provincial hospital. The patient has planned a surgical procedure at the provincial hospital, but the specialist doctor who handles the patient died so that the patient was referred to the RSCM. Patient had never had surgery before.

In the national referral hospital, patient was referred to an outpatient clinic and was currently being treated on the surgical ward for elective surgery. The patient said his brother had suffered from a lump that appeared repeatedly in the neck. Patient or her families never had surgery. When the case study was carried out, the patient complained of slight pain, with NRS 1 scale (range score 0-10) and there was a change in fecal elimination. Patient experienced diarrhea since early February 2018. At the assessment, patient had defecated 2 times with characteristics of thick, brownish color.

The results of subjective and objective data analysis obtained major nursing diagnoses, which were: Risk for delayed surgery recovery with risk factors for infection, malnutrition, pain, and age (elderly). Nutritional status of BMI was 17.3 kg / m² (thin), albumin value was low (2.51 mg/dl), hemoglobin 7.4 mg/dl, and age 63 years. In addition, postoperative data were found for albumin: 2.58 mg/dl, Hb: 9.6 mg/dl, leukocyte count: 18.11x103, procalcitonin: 0.13, patients pain in the wound incision with NRS: 3-4 scale, pain arised especially during mobilization. This was feared to have an effect when the patient carries out early mobilization.

The intervention of risk for delayed surgery recovery was pre-operative education in the form of early mobilization. Pre-operative education was carried out on May 21, 2018. Education regarding postoperative early mobilization was given by lecturing using flipchart and leaflet media, and then the demonstration was carried out in stages by involving patients and families. Mobilization education provides information about the purpose of the exercise, and further explanation of foot exercises, deep breathing exercises and effective coughing, and sitting and walking exercises.

Early mobilization did on day 3 postoperatively because the patient was 2 days at HCU. On May 27, 2018, the patient's condition was able to sit without a backrest. Patients and families say at HCU, patients practice moving their legs. In addition, while at HCU patient was helped to sit with their backs. Patient was also able to do an effective cough that has been taught by hugging a pillow over the stomach. There was no feeling of dizziness when mobilizing. On May 28, 2018 or day 4 post surgery, the patient began to learn to sit with her legs hanging and was able to stand for 5 minutes. The patient said that pain was still there, but can still be restrained and reduced by relaxation taking a deep breath. The patient was able to sit with legs hanging over 1 hour.

On the following day, May 29 2018 or day 5 postoperatively, the patient was able to stand for about 15 minutes and walk with the handle of the bed, no feeling dizzy during exercise. The patient's family also looked very cooperative while they were maintaining and accompanying patient. On May 30, 2018, the patient was able to exercise walking around the bed and sitting alone in bed. On May 31, 2018, the patient was seen as capable of self-mobilization, no complaints of dizziness or excessive pain. On June 1, the patient was given permission to go home so that the patient was also given education for home care.

The information given to patient for home care was about the recommended and avoided diet, physical activity, how to take a bath with postoperative incision, problems that may occur at home (diarrhea or constipation), and health hazards that need attention. Information was provided through delivery using leaflet media.

Discussion

The results of evaluation of nursing intervention that have been carried out to patients to overcome the problem of risk of slowing postoperative recovery are the ability of patients to mobilize on day 7 after surgery. Patient was able to adhere to the exercise independently and assisted, and there was no feeling of dizziness or weakness and excessive pain when the patient was doing the exercises.

Risk for delayed surgery recovery with poor nutritional status risk factors, advanced patient age, and signs of infection can make long hospitalization. In addition, the effects of anesthesia such as bed rest also contribute to increasing worsening during recovery. Not only early mobilization, aspects that need to be considered for preoperative education, but also relaxation of deep breathing and effective coughing. Therefore, some of these aspects are very important to be taught from the preoperative period.

Then, the education about early mobilization was carried out postoperatively. There are nursing actions that have a purpose to prevent the slowing of postoperative recovery. Some exercises that need to be done are as follows: a) early mobilization exercises are useful to reduce the risk of blood clots in the legs or lungs, b) effective coughing by hugging a pillow to prevent airway infection (pneumonia) that can occur due to side effects of anesthesia, c) educate discharge planning regarding diet and home activities. Early mobilization interventions and effective coughing exercises are still safe for elderly patients (63 years). Early mobilization interventions and effective coughing exercises provide the same benefits as younger age groups.
Conclusion

Colon cancer is a cancer that appears in the part of the colon which is characterized by cell growth that cannot be controlled and can spread to other parts. The prevalence of colon cancer is more common in cities, but there are also phenomena that occur in rural areas. Several factors such as changes in a diet high in red meat and low in fiber, family history (genetic), lifestyle such as alcohol consumption, and smoking can be a risk factor for the increased incidence of colon cancer.

Colectomy has a risk of causing postoperative complications. In addition, the effects of anesthesia and immobilization for too long postoperatively should also be avoided because it can cause a decrease in muscle strength, atelectasis, insulin resistance, thromboembolism, and decreased ability to exercise. So that preoperative education and early mobilization is needed to reduce the risk of postoperative complications in colon cancer patients. In addition to preoperative education and early mobilization, there are also deep breathing relaxation exercises to reduce postoperative pain and effective coughing exercises to reduce the risk of pneumonia. It can be concluded that operative education can be used to improve postoperative recovery in colon cancer patients. Some of these interventions can be made a protocol and applied to improve patient independence, reduce post-operative care days, and increase satisfaction for patients and families.

References

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