

Research on the application of nutrition support therapy combined with nursing in patients with severe cancer

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Keywords: nutritional support therapy; Integrated care; Patients with severe cancer; application

Abstract: Objective: In view of the situation of patients with severe cancer, we recommend nutritional support in nursing, observe the effect of nursing and the quality of life of patients after nursing. **Methods:** Our hospital from August 2018 to August 2019 were between tumor with a total of 60 patients with severe, respectively in 30 cases of routine nursing (control group), 30 cases of combined routine nursing and nutrition support therapy (observation group), respectively, compared two groups of patients after nursing MNA score (points), BMI (kg/m^2), HBG (g/L), propagated numerical differentiation (g/L), etc. The complication rates of abdominal distension, infection, blurred consciousness, nausea and vomiting in patients with severe tumor were compared. In the patient's conscious state through the form of dialogue and inquiry, help patients to fill in the questionnaire, statistics of patients' satisfaction with nursing. **Results:** The statistical scores of the observation group were higher than that of the control group. There was a significant difference between the two groups ($P < 0.05$). **Conclusion:** For patients with severe cancer, the emphasis on nutritional supplement in nursing, support the implementation of patients' treatment and rehabilitation plan, can improve the level of nursing for patients with severe cancer under the application of nutritional support method.

1. Introduction

After the establishment of targeted treatment programs for patients with severe cancer, attention should be paid to the patients' autoimmunity and nutrition supply during the disease, so as to improve the patients' sense of tolerance to drugs and life. Nutrition support therapy pays attention to internal and external nutrition. By supplementing the vitamins and trace elements needed by patients, it adopts the nutritional supplement method suitable for patients' gastrointestinal digestion and formulates the nutrition support plan for patients in combination with patients' eating habits, so as to be more thoughtful and humanistic in nursing.

2. Materials and Methods

2.1 General Materials

Select our hospital from August 2018 to August 2019 were between tumor with a total of 60 patients with severe, respectively to execute routine nursing (control group), 30 cases of 22 cases of patients with men, women have 8 cases, patients' age range at the age of 32 ~ 76, take the average of (38.51 + 5.28) years, including 30 cases of combined conventional nursing and nutrition support therapy (observation group) and 14 cases of male patients, women have 16 cases, patients' age range at the age of 32 ~ 70, take the average of (62.35 + 5.27) years. The cancer types, treatment conditions and course of the patients in the two groups were of no statistical significance in this survey, and no comparative analysis was conducted.

2.2 Methods

Routine nursing: based on patients with PICC catheter for a long time, pay attention to patients with phlebitis and drug exosmosis of prevention, such as restrictions on one side of the catheter in patients with the arms don't lift heavy things, don't do sports, reduce the number of repeated flexion

and extension, and to avoid large swing of the arm, not allowed to bath, swimming, etc, in water for a long time in patients with shower before cases, should be provided in the case of no temporary prepare cases available in cling film winding, to avoid loss or too much time to shower appear harmful interference. Insulate the tubes from soaking, thereby reducing infection rates. Patients are required to know how to use the PICC care package, timely replace the dressing, replace the infusion joint of the catheter, and flush the PICC catheter. Patients and families should also remember catheter examination time, regular maintenance, the patient's own can combine to make analysis the condition of PICC catheter, timely maintenance and nursing personnel communication, patients after colostomy, dealing with patients on medical education and required to master the nursing methods of colostomy patients, and pay attention in our daily life, during the shower to avoid directly flushing, where the colostomy patients was unable to control the discharge can wear made pocket, select clean without excitant towels will be built around the pocket, colostomy stain gently pressed absorption, patients should pay attention to body recovered with prepare wet paper towels, clean up colostomy, In colostomy under the condition of a small amount of bleeding, press the bleeder guide patients, the value assessment of the patient's pain, pain area and law, etc., analysis of the patient's pain factor, combined with patient organizations oppression, bone pain, neuralgia, radiation therapy, chemotherapy sequelae, such as reasonable control, pay attention to the law of life, in patients with sleep and behavior actively guide. In the quiet and private environment, encourage patients to say their true feelings, convenient nursing staff to understand the nature of patients' pain, combined with the patient's situation to give massage, hot compress, cold compress, traction exercise, pressure therapy, muscle relaxation training, psychotherapy, relaxation therapy, attention transfer therapy. Through drug pain, psychological comfort and other guidance to improve the patient's tolerance. Can guide patients to close their eyes in psychological care, in the daytime can wear an eye mask, deep breathing, patients open eyes, calm observation of the plants in the ward, conditions can be regularly changed under the condition of plants, promote patients to relax, feel happy life. To guide patients with drugs, to avoid patients randomly take a supplement, such as patients during the first medicine, or drug doses adjusted several days ago, the drug should be in time to ask whether patients with the drugs, whether as prescribed medication, patients during a series of adverse drug reactions, combined with the doctor's advice to observe conditions appropriate to reduce dosage, necessary topical analgesic paste such as inhibition of patients with pain.

Nutrition support therapy: use nutrition screening tool (malnutrition screening tool, MST) to investigate the nutritional status of patients, patients with record body such as the weight of indicators, the protein target requirement for 1.0 ~ 2.0 g; Increase the proportion of fat in the diet and nutrition support formula and increase the dietary energy density; Supplement vitamin and trace elements needed by physiology; If food cannot be eaten through mouth or ONS cannot meet the nutritional needs of the body, artificial nutrition should be given in time; Enteral nutrition (EN) should be preferred for artificial nutrition; Parenteral nutrition (PN) is given when EN cannot be implemented or cannot meet the nutritional needs of the body or when it is hoped to improve the nutritional status of the patient within a short period of time; Patients with tumor EN preferred nasogastric tube or nasointestinal tube feeding; If the expected feeding time is > for 4 weeks, gastric or jejunostomy catheterization is recommended; Immunoenhanced EN preparations containing arginine, omega-3 PUFA, glutamine, nucleotide and other immunomodulatory components are beneficial to patients undergoing surgery for head, neck and upper gastrointestinal tumors. At the same time, according to the patient's eating habits and preferences, make a diet plan for the patient, provide appropriate fruits and vegetables according to the patient's type of tumor disease, require the patient to eat a few meals, reduce the intake of snacks, reduce drinks to drink water. The amount of calories is 25-30kcal/(kg.d), the protein requirement is 1.5-2.0g/(kg.d), and the fluid volume is 30-45ml/(kg.d). Meanwhile, minerals and vitamins are provided according to the normal recommended amount.

2.3 Observation Indicators

The differences of MNA score (score), BMI(kg/m²), HBG (g/L), ALB (g/L) and other values after nursing were respectively compared between the two groups. The complication rates of abdominal distension, infection, blurred consciousness, nausea and vomiting in patients with severe tumor were compared. In the patient's conscious state through the form of dialogue and inquiry, help patients to fill in the questionnaire, statistics of patients' satisfaction with nursing.

2.4 Statistical Method

The excel SPSS20.0 system was used to carry out the data statistics and analysis. The X² test was performed on the counting data, and the t test was performed on the counting data, which was expressed as $\bar{x} \pm s$. There was a significant difference in the comparative analysis between the two groups (P<0.05).

3. Results

MNA score, BMI (kg/m²), HBG (g/L) and ALB (g/L) in the observation group were all higher than those in the control group, and there were significant differences in the comparative analysis between the two groups (P<0.05).

Table 1 comparison of scores during treatment between the two groups

Group	n	MNA score(score)	BMI(kg/m ²)	HBG (g/L)	ALB (g/L)
observation group	30	17.2±1.9	30.2±17.2	168±12.2	44.6±3.7
control group	30	13.2±2.1	17.6±13.2	109.3±14.2	35.4±3.8
X ²	-	6.392	6.574	5.823	5.687
P	-	<0.05	<0.05	<0.05	<0.05

In the observation group, abdominal distension occurred in 1 case, infection in 0 cases, blurred consciousness in 1 case, nausea and vomiting in 1 case. In the control group, there were 2 cases of abdominal distension, 2 cases of infection, 1 case of blurred consciousness, and 1 case of nausea and vomiting. There was a significant difference between the two groups (P<0.05).

Table 2 comparison of adverse symptoms during treatment between the two groups

Group	n	abdominal distension	infection	blurred consciousness	nausea and vomiting	Total rate
observation group	30	1	0	1	1	10%
control group	30	2	2	1	1	20%
X ²	-	6.325	5.263	3.258	4.025	5.274
P	-	<0.05	<0.05	<0.05	<0.05	<0.05

In the observation group, 4 patients were dissatisfied, 13 were generally satisfied, and 13 were satisfied. In the control group, 5 patients were dissatisfied, 17 were generally satisfied and 8 were satisfied. There was a significant difference between the two groups (P<0.05).

Table 3 comparison of patients' satisfaction during treatment between the two groups [n(%)]

Group	n	satisfied	generally satisfied	dissatisfied	satisfaction rate
observation group	30	13	13	4	26(87%)
control group	30	8	17	5	25(83%)
X ²	-	5.693			
P	-	<0.05	<0.05	<0.05	<0.05

4. Discussion

Severe cancer patients “three separate treatment, seven separate feeding”. Established after

treatment, combined with clinical feedback give appropriate medication, can achieve different treatment effect, should be paid attention to during the observation of patients' nutrition situation, only a patient needed nutrition and metabolism to maintain a balanced state, more conducive to the inhibition of tumor, patients nutritional deficiencies, carcinogenic substances more active, and itself cooked food hygiene and health or may produce aflatoxin, polycyclic aromatic hydrocarbons, amino acid, high temperature pyrolysis products, such as sodium nitrite carcinogens. It makes the patient's condition worse. Understands through observation of the patients, patients with cancer during the intensive, high risk of malnutrition, anorexia, patients who are mainly with the body's metabolic abnormalities, tumor treatment factors, such as patients at the time of nutrition supply more directly reflect changes in body weight, weight loss not only, also easy to feel weak patients, even show cancer cachexia, at the same time, the risk of adverse symptoms, complications of patients, can't control the end of the patients with cancer. Affect the effectiveness of drug control. Cancer should especially pay attention to nutrition problems in intensive care, through nutrition support therapy, combined with the patient's gastrointestinal function, through the intestines nutrition, or in the form of parenteral nutrition, or both, in the form of a short period of time changes in patients with malnutrition problems, the energy for the supplement, vitamin, protein, etc., make weight record and combination of patients with tumor types, sickness parts respectively, such as nutritional supplement plan by general, through the functional sex of the patients with nutritional support to improve organ, improve patients with autologous immunity, and patients in the intensive treatment for cancer control provides the basis of adverse reaction, Nutritional supplementation improves the quality of life and the survival rate of patients in the critical stage of cancer.

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