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Application of Health Education in Preventing Venous Thromboembolism After Gynecological Pelvic Surgery

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Abstract

Objective: To evaluate the application value of health education in the postoperative prevention of venous thromboembolism in gynecological pelvic surgery, provide effective reference for clinical research, and promote its development process. **Methods:** The experiment was carried out from May 2022 to May 2023, The included sample was the inpatients undergoing pelvic surgery in our hospital during this period, The total number of 150 cases, With the numerical numbering method as the grouping benchmark, The 1-150 numbers are randomly numbered, The even numbers are the reference and analysis groups, Each group was entered into (n=90), Develop a routine care protocol for the patients in the reference group, Develop routine care + health education care strategy for the analysis group, And to collect and organize the relevant data, Using statistical methods to implement the comparison, The comparison data include: occurrence of discomfort, length of stay and satisfaction with nursing. Use the test (normal measurement data); use χ^2 test (count data); calculate means with ($\overline{x} \pm s$) instead. **Results:** The experiment proved that the intervention program of the analysis group was more feasible, the patients were better than the other group ($P < 0.05$), and the clinical advantages were different. **Conclusion:** After giving different forms of intervention strategies to the two groups of patients, it is found that the integration of health education has a more prominent clinical impact on patients after gynecological pelvic surgery, and the impact on the incidence of venous thromboembolism is more accurate, far-reaching and significant, which is worthy of reference.

Keywords

Health education; Postoperative gynecological pelvic surgery; Prevention of venous thromboembolism; Application

Since the 21st century, science and technology, culture, and the like have been changing with each passing day. People's living conditions have become more and more affluent, and their living needs have become more and more extensive, so there have been earth-shaking changes in lifestyles and living habits. As an important role in society and family, women have also shouldered greater responsibilities and pressures [1]. A large sample survey found that in recent years, the incidence of gynecological pelvic diseases has increased year by year, seriously endangering women's physical and mental health and quality of life. Fortunately, we have progressed from the past era of taking medicine and injections to the current era of scientific progress and medical development, so that many diseases can be detected, diagnosed, treated, and cured early [2]. Gynecological pelvic surgery is one of the most effective ways to treat various pelvic diseases and is very popular. However, everything has its pros and cons. After the operation, patients will be affected by various factors and are very likely to develop deep vein thrombosis, which will cause great trouble to subsequent rehabilitation and prognosis [3]. Therefore, seeking a feasible, safe and effective

intervention plan to be implemented in the perioperative period of the above patients has become an important goal that relevant scholars continue to explore and expect to achieve [4]. To this end, this article takes the patients who underwent surgical treatment for pelvic diseases in the author's hospital from May 2022 to May 2023 as an example, focusing on the application value of health education in the clinical prevention of venous thromboembolism, hoping to provide effective reference for research in the field. The specific content is reported as follows.

1. Materials and Methods

1.1 General information

This experiment was conducted from May 2022 to May 2023. The samples included were inpatients who underwent pelvic surgery in our hospital during this period, with a total of 150 cases. The digital numbering method was used as the grouping basis, and the numbers 1-150 were randomly numbered. The odd and even numbers were the reference group and the analysis group, respectively, with each group (n = 90). During this period, the classification and summary of the patients' basic data were processed using relevant software, and no differences were found ($P>0.05$); detailed data: reference group: patient age range: 25-68 years old; median age (46.5 ± 4.17) years old; analysis group: patient age range: 27-70 years old; median age (48.5 ± 5.14) years old.

1.2 Care methods

1) Reference group (n=90): Specific contents include: giving patients routine oral education, closely monitoring changes in patients' vital signs, and providing nursing interventions in medication, diet, and exercise.

2) Analysis group (n=90): While providing routine care to patients, health education intervention strategies were also incorporated: Specific contents included: (1) Preoperative health education: Nursing staff should provide patients with disease-related knowledge and postoperative thromboembolism risk factors education in a gentle, friendly and easy-to-understand manner. Including: a: Blood stasis: For patients undergoing pelvic surgery, they need to receive 6-8 hours of anesthetic intervention to ensure the smooth progress of the operation. Since patients are in anesthesia for a long time during the operation and need to stay in bed for 6 hours after the operation, they are very likely to have pelvic congestion and reduced blood flow rate after the operation [5]. b: Increased blood viscosity: This situation is caused by the patient losing some blood during the operation. In addition, preoperative fasting, enema and other operations also cause the patient to be in an ischemic state, which gradually increases the blood viscosity. c: Venous endothelial injury: Clinical experience shows that gynecological pelvic surgery can cause damage to the patient's vascular endothelial cells, and the injured area is very likely to form thrombi under the action of platelets [6]. (2) Health education on activity knowledge: Because if patients start exercise as soon as possible after surgery, it will effectively prevent thrombosis. Therefore, nursing staff need to remind patients that they can start related exercise on their own 6 hours after surgery. Key points: Exercise must be carried out under the guidance of nursing staff to maximize the health of patients [7]. (3) Health education after surgery: Specifically covered: a: Nursing staff need to inform patients of the relevant postoperative activity plan before surgery, and educate patients through personal demonstration and detailed explanation. b: Close observation: Instruct patients to carefully observe their own body condition. If symptoms such as swelling and pain occur in the lower limbs, they should immediately inform medical staff for corresponding maintenance [8]. c: Posture intervention: Posture intervention education is of great significance to the clinical impact of patients after pelvic surgery. First, nursing staff need to assist patients in choosing a comfortable and appropriate posture, and guide patients to raise their lower limbs to 20-30 cm above the heart level to promote blood return and avoid the occurrence of venous thrombosis. d: Dietary intervention: Based on the actual situation of the patient, a scientific diet plan should be formulated for the patient, and the patient should be advised to drink no less than 2000 ml of water every day, because sufficient water can effectively control blood viscosity, reduce the risk of constipation, prevent the patient from exerting excessive force during defecation and causing abdominal pressure [9], and prevent abnormal venous blood return. (4) Psychological intervention: Nursing staff should establish a good nurse-patient relationship with patients through good emotions, warm words, and dignified and skilled work skills, carefully observe the patient's psychological and emotional changes, and provide targeted guidance and encouragement in a timely manner, thereby effectively improving the patient's satisfaction with nursing work.

Note: The article was originally published in *Contemporary Nursing*, and this is an authorized translation of it.

1.3 Observation indicators

During the study, the differences in the incidence of discomfort, hospitalization time and nursing satisfaction between the two groups of patients were observed and analyzed.

1.4 Statistical methods

SPSS26.0 system was used for professional analysis of data. The measurement data were calculated as mean±standard deviation, the difference between the two groups was compared using t and χ^2 test, and the counting data was replaced by percentage (%). If the comparison results of the two groups showed $P < 0.05$, it meant that the experimental value was demonstrated.

2. Results

With the help of chart data, it was found that different intervention plans had a positive effect on the overall effect of patients. However, the patients in the analysis group were significantly better than those in the reference group in terms of various data indicators ($P < 0.05$), as shown in Table 1 for details.

Table 1. Comparison of overall nursing effect between the two groups of patients ($\bar{x}$±s, n, %)

Group	Comparison of discomfort symptoms		Comparison of hospital stay	Satisfaction with care
	Patients with venous thromboembolism	Prevalence	Length of hospital stay	After intervention
Reference group 90	10	11.11	10-12	70 (77.78)
Analysis Group 90	0	0.00	7-9	88 (97.78)

3. Discussion

According to clinical manifestations, patients undergoing gynecological pelvic surgery may be affected by various factors and develop various complications, one of which is deep vein thrombosis of the lower extremities. Its pathogenesis is mainly due to slow blood flow, hypercoagulable state and damage to the vein wall [10]. Studies have pointed out that the implementation of effective intervention strategies is crucial to the subsequent rehabilitation and prognosis of such patients. This article uses a comparative experiment to divide the groups using a digital numbering method, taking 150 patients undergoing gynecological pelvic surgery as an example.

With the advancement of current medical technology, the coagulation process is considered to be a complex enzymatic reaction involving a series of coagulation factors. Endogenous coagulation is considered to be a meaningful process in the body. Exogenous coagulation is an important pathway for coagulation in the body, and surgical trauma can lead to the intensification of the exogenous coagulation pathway. In addition, pelvic malignancies in women can lead to the activation of the hematopoietic system. In addition, there can be monocytes and endothelial cells that release coagulation active substances, causing blood coagulation. For patients undergoing pelvic surgery, the iliac-femoral venous system is vulnerable to damage, and they are anesthetized during surgery. The limb muscles are in a relaxed state, the blood flow rate slows down, vortices will appear, and the blood viscosity increases. Slow blood flow and vortices can cause platelets to deposit on the damaged blood vessel walls, and the active leaf flap of platelets increases local coagulation substances and accelerates thrombosis. After the operation, the patient is in bed, with abdominal distension and intestinal anesthesia, which leads to a decrease in the venous return rate of the lower limbs.

Different forms of intervention strategies were then implemented, and the final nursing results were presented: the incidence of venous thrombosis, length of stay, and satisfaction with nursing work of the patients in the analysis group were significantly better than those in the reference group (P<0.05). Contrast meaning. Reason analysis: Integrate health education into the clinical care of gynecological pelvic surgery patients, implement targeted intervention measures before, during and after surgery. Nursing staff communicate with patients through professional and friendly language, focusing on psychological, dietary, and Provide comprehensive and systematic popularization and guidance on emotions, disease knowledge, treatment methods, and related precautions, so as to improve patients' awareness and reduce mental stress; in addition, avoid long-term sagging and pressure of lower limbs during surgery, which is scientific and reasonable Carry out campaigns to effectively reduce the occurrence of all phenomena that lead to venous thrombosis.

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Based on the above, we can conclude that after giving different forms of nursing intervention to the two groups of patients, it can be seen that the integration of health education has a definite, far-reaching and significant impact on the prevention of venous thromboembolism in patients. It can prevent the incidence of venous thromboembolism and promote the recovery of patients. It is worthy of promotion and recommendation.

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