

Study on the Application of Integrated Medical and Nursing Care Model in the Postoperative Period of Patients with Sclerotherapy for Esophageal Varicose Veins

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Abstract: *Objective:* To explore the application effect of medical and nursing integration management mode in the postoperative period of patients treated with sclerotherapy for esophageal varices. *Methods:* Randomly divided 64 cases of esophageal varices patients admitted to our hospital from October 2022 to October 2023 who underwent surgical treatment into two groups, and gave 32 cases of patients in the control group postoperative implementation of basic nursing care, and 32 cases of patients in the research group postoperative implementation of healthcare integration management mode, and compared the effect of the nursing care of the two groups of patients. *Results:* There are differences in nursing satisfaction, incidence of postoperative rebleeding, complication rate, and patients' knowledge of disease-related common grip scores between the two groups of patients with esophageal varices after nursing care ($P < 0.05$), which is statistically significant. *Conclusion:* The implementation of integrated medical and nursing management mode for postoperative patients with sclerotherapy for esophageal varices has a significant effect on the prognosis of patients, reduces the occurrence of complications, and shortens the length of hospital stay.

Keywords: Integrated medical and nursing management mode; Esophageal varices sclerotherapy; Applied research

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1. Introduction

Esophageal varices are mainly caused by portal hypertension due to liver diseases (portal vein obstruction, cirrhosis, hepatic vein obstruction, etc.). The portal vein flows into the heart through the anastomotic branch of the portal vein, which often triggers the dilatation and bruising of the venous plexus of the lower esophagus, and the rupture of the esophageal varices causes the patient to suffer from jet-like vomiting of blood, black stools, and shock, which affects the patient's life safety and is a common clinical emergency. Systematic esophageal varices sclerotherapy (EVS) can effectively prevent variceal rupture and bleeding, and make the varices disappear or reduce as much as possible to prevent rebleeding^[1-4]. Integrated healthcare nursing is

a new nursing model, that regards physicians and nurses as a whole, and improves the professionalism and scientificity of nursing work through mutual collaboration and cooperation [5]. To analyze the effectiveness of the integrated healthcare management model on the care of patients after sclerotherapy for esophageal varices, our hospital carried out a nursing analysis for 64 cases of esophageal varices patients admitted to our hospital, and is reported as follows.

2. Data and methods

2.1. Clinical data

64 patients with esophageal varices treated with endoscopic sclerotherapy admitted to our hospital from October 2022 to October 2023 were randomly divided into two groups: 32 patients in the control group had a male-to-female ratio of 18:14, with an age distribution of 42 to 79 years old, and a mean value of (59.68 ± 5.46) years old. The other 32 patients in the study group had a male-to-female ratio of 17:16, with an age distribution of 43 to 78 years old, and a mean value of (59.65 ± 5.52) years old. Statistical analysis of the basic data of the two groups of patients with esophageal varices showed that the differences between the groups were small and comparable.

2.2. Methods

32 patients in the control group were given postoperative basic nursing care. The study group implemented medical and nursing integrated care where doctors and nurses jointly checked the room, discussed and assessed the condition, and formulated individualized diagnosis and treatment and nursing measures. Preoperative precautions and preparations were explained, and psychological guidance was provided for individual conditions. After the operation, the responsible nurse will strengthen the monitoring of the patient's vital signs and condition, assess whether there are high-risk factors that may lead to bleeding again, observe and record whether there are signs of bleeding, such as active bowel sounds, accelerated heart rate, blood pressure abnormality, abnormal blood counts, and so on. If the patient has bleeding signs, inform the doctor the first time, and cooperate with the doctor to make the corresponding treatments. The doctor and nurse jointly guide the patient's diet, informing the patient of the importance and significance of a postoperative gradual diet. Postoperative dietary restrictions include providing warm water to patients, ensuring no active bleeding, and monitoring for any discomfort symptoms. Gradually transition patients from liquid food to semi-fluid food and then to soft food. Additionally, provide thorough education to patients and their families about the disease and postoperative dietary guidelines. Nursing staff should work with the doctor in charge to keep abreast of the patient's postoperative recovery, formulate intervention countermeasures and discharge guidance plan in combination with the patient's individual situation, inform the patient and his/her family in detail of the post-discharge diet, medication, and rest and activity matters, and review the patient's condition regularly.

2.3. Observation indicators

Compare the differences in nursing satisfaction, the incidence of postoperative rebleeding, the incidence of complications, and patients' scores of disease-related knowledge after the care of esophageal varices in the two groups.

2.4. Statistical analysis

Using Statistical Package for the Social Sciences (SPSS) 23.0 software for processing, when the P is less than 0.05, that indicates that the difference is statistically significant.

3. Results

The patients' disease-related knowledge mastery score after nursing in the control group was (69.38 ± 5.47), and the patients' disease-related knowledge mastery score after nursing in the observation group was (78.26 ± 6.13). Comparing the two groups, t -value = 6.16, P -value = 0.00, and the differences between the two groups of esophageal varicose vein patients' satisfaction with nursing care, the incidence of postoperative rebleeding, and the incidence of complications after nursing care were significant ($P < 0.05$), which is statistically significant. The data is shown in **Table 1**.

Table 1. Nursing satisfaction, incidence of postoperative rebleeding, and complication rate after nursing care of esophageal varices patients in two groups, n (%)

Group (n)	Satisfaction with care	Incidence of postoperative rebleeding	Incidence of complications
Control group (32)	23 (71.88)	6 (18.76)	10 (31.25)
Observation group (32)	31 (93.94)	1 (3.03)	3 (9.09)
χ^2	5.63	4.18	4.99
P	0.02	0.04	0.03

4. Discussion

Integrated healthcare management mode mainly refers to the process of mutual cooperation between doctors and nurses. Both doctors and nurses can recognize and accept the scope of their respective behaviors and responsibilities and can protect the interests of both parties and jointly achieve the goal, while there is a division of labor between health care workers, close contact and information exchange, mutual collaboration, mutual promotion and supplementation of the cooperative relationship.

In this observation, the integrated care model was given to endoscopically treated patients with esophageal varices, in which doctors and nurses checked the room together, formulated diagnosis and nursing measures together, and implemented health education together, which eliminated the doubts of the patients and their families, enhanced the communication between the doctors and nurses, and improved the trust of the patients and their families to the nursing staff, so that the patients felt a sense of security, which in turn improved the satisfaction with the nursing care. The integrated medical and nursing care model has a comprehensive grasp of the patient's disease. The doctor and nurse in charge communicate with the patient in a timely and proactive manner, patiently explaining and introducing the patient to relevant knowledge of the disease, diet and medication, rest and activities, special examinations, etc., so that the patient constantly learns and grasps the knowledge of the disease, thus avoiding the causative factors and lowering the reoccurrence rate of re-bleeding and complications.

5. Conclusion

In conclusion, the application of an integrated medical and nursing care model in the postoperative period of patients with sclerotherapy of esophageal varices has a significant effect, which can significantly improve the patient's nursing care satisfaction and reduce the incidence of postoperative rebleeding and complications, and it is recommended to promote this implementation in the clinic.

Disclosure statement

The authors declare no conflict of interest

References

- [1] Tangcheewinsirikul N, Suankratay C, 2019, Acute Pulmonary Embolism Following Endoscopic Sclerotherapy for Gastroesophageal Variceal Hemorrhage: A Case Report and Literature Review. *SAGE Open Med Case Rep*, 7: 2050313X19838946.
- [2] Michael PG, Antoniadis G, Staicu A, et al., 2018, Pulmonary Glue Embolism: An Unusual Complication Following Endoscopic Sclerotherapy for Gastric Varices. *Sultan Qaboos Univ Med J*, 18(2): e231–e235.
- [3] Frassei JDS, Franco CS, Brambilla VR, et al., 2021, Cyanoacrylate Pulmonary Embolism After Endoscopic Sclerotherapy of Gastric Varices. *Einstein (Sao Paulo)*, 19: eAI5778.
- [4] Belramman A, Bootun R, Lane TRA, et al., 2019, Endovenous Management of Varicose Veins. *Angiology*, 70(5): 388–396.
- [5] Leng Z, Cai B, Wu Y, 2018, Nursing Complementary Interventions on Postoperative Effects of Esophageal Variceal Ligation in Cirrhotic Patients. *Chinese Journal of Digestive Disease and Imaging (Electronic Version)*, 8(6): 271–274.

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