

Risk Factors in Biliopancreatic Surgical Nursing and Management Countermeasures

Liping Liu

Jingzhou Institute of Technology, Jingzhou, Hubei, 434100, China

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Abstract: To observe the risk factors of biliopancreatic surgical nursing and management countermeasures. Methods: 76 hepatopancreatobiliary surgical patients admitted to our hospital (from February 2019 to December 2019) were selected and divided into the control group and the observation group according to the filing time, with 38 patients in each group. The control group was given routine nursing management, while the observation group was given risk prevention management on the basis of control group. The nursing risk factors were analyzed and summarized, and targeted management countermeasures were taken as part of intervention. Two groups were compared in terms of the incidence of adverse nursing events, the satisfaction of patients and their families, and the nursing quality scores before and after risk management. Results: The incidence of adverse nursing events (5.26%) of the observation group was lower than that of the control group (23.68%) ($P < 0.05$). The satisfaction rate of the observation group (97.37%) was higher than that of the control group (78.95%) ($P < 0.05$). After risk management, the nursing quality score of the observation group was higher than that of the control group ($P < 0.05$). Conclusion: Risk prevention management for hepatopancreatobiliary surgical nursing can greatly improve nursing and treatment, effectively lower the incidence of adverse nursing events, produce a positive effect on the improvement of the satisfaction of patients and their families and is conducive to the long-term development of hospitals.

Introduction

Hepatopancreatobiliary surgery department is one of the large departments of the hospital. Patients are involved in a variety of diseases, their conditions are complicated and the treatment risks are high, so clinically nursing support is administered. The conclusions of many studies have shown that biliopancreatic surgical patients are often complicated by basal metabolic diseases, such as diabetes and hypertension, so the medical risk and the incidence of adverse nursing events are high. Previously, only routine nursing and nursing management was adopted, both the evaluation of medical staff and the knowledge of risk factors were insufficient, and to improve the management approaches of nursing and enhance nursing quality has become focuses in current biliopancreatic surgical nursing. Under this background, in this paper, 76 hepatopancreatobiliary surgical patients of our hospital were selected and the risk factors in hepatopancreatobiliary surgical nursing and management countermeasures were observed. Below, the process will be reported.

Data and Methods

General Data. Upon the approval of the Ethics Association, 76 hepatopancreatobiliary surgical patients admitted to our hospital (from February 2019 to December 2019) were divided into the control group and the observation group according to the filing time, with 38 patients in each group. In the control group, there were 17 females and 21 males, aged 24~68, with an average age of 51.07 ± 4.93 years; on education level, there were 2 cases for primary school or below, 7 cases for junior or senior high schools, 19 cases for junior or regular colleges, 10 cases for masters or above. Among them, there were 9 patients with cholecystitis, 8 patients with gallstone, 7 patients with bile

duct stone or cholangitis, 5 patients with pancreatitis, 3 patients with gastrointestinal bleeding, and 6 with others. In the observation group, there were 16 females and 22 males, aged 23~69, with an average age of 50.74 ± 4.88 years; on education level, 3 cases for primary school or below, 6 cases for junior or senior high schools, 18 cases for junior or regular colleges, 11 cases for masters or above. Among them, there were 8 patients with cholecystitis, 8 patients with gallstone, 7 patients with bile duct stone or cholangitis, 6 patients with pancreatitis, 3 patients with gastrointestinal bleeding, and 6 with others. The general data (disease type, age, education level and gender) of two groups were balanced and comparable ($P > 0.05$).

Inclusion and Exclusion Criteria. Inclusion criteria: Those who (1) met the diagnostic criteria of hepatopancreatobiliary surgery department; (2) was admitted and treated for the first time; (3) signed an informed consent.

Exclusion criteria: Those who had (1) coagulation disorder; (2) renal insufficiency; (3) the complication of malignant tumor; (4) women in gestation or lactation period.

Methods. Control group. The control group was given routine nursing management, including the routine keeping of pathography, the instructions and counseling for patients and their families, and the explanation on precautions during treatment.

Observation group. The observation group was given risk prevention management on the basis of control group, their nursing risk factors were analyzed and summarized, and targeted management countermeasures were taken as part of intervention. The nursing risk factors were analyzed as follows: (1) the disease itself was dangerous, progressed quickly, and recurred easily. If the patients were old or complicated by cardiac, hepatic or pulmonary dysfunctions, the nursing difficulty and nursing risk would be greatly increased. (2) The nursing work was heavy. If the nursing staff was inexperienced, unfamiliar with the rescue process, and cannot find the changes in the conditions in time, nursing omission, nursing delay, wrong infusion, wrong dispensation of drugs and other mistakes were apt to occur, and the nursing risk would also be greatly promoted. (3) The nursing staff was young and mostly only children. Most of them were self-centered and cannot learn modestly. While some older nursing staff found it difficult to accept new knowledge, their nursing level and nursing concept were backward, their service attitude was poor, so the nursing quality decreased significantly and the nursing risk was increased. (4) Some patients in hepatopancreatobiliary surgery department needed intubation, and improper intubation nursing was one of the causes for nursing risk events. Once the tube fell out, a second intubation would lead to a higher risk of airway injury, and the satisfaction of patients and their families would also decrease significantly. (5) Many operations in hepatopancreatobiliary surgery department were invasive, with greater traumas and higher infection risks. Improper nursing would lead to infection and greatly affect the prognosis of patients. Given the above nursing risk factors, targeted management countermeasures were adopted as follows:

(1) To strengthen the training of professional nursing knowledge, improve the nurses' understanding of common diseases, step up their nursing practice on patients with common hepatopancreatobiliary surgical diseases and improve their knowledge of common nursing risks of patients. (2) To arrange work for nursing staff reasonably, to commit specific responsibilities to individuals and increase the sense of duty and law of nursing staff, so that they can be aware of the graveness of nursing errors. (3) To strengthen the communication between nurses and patients, encourage patients and their families to communicate more with the nursing staff, establish a harmonious nurse-patient relationship, and ensure that the nursing staff served patients sincerely. (4) To strengthen aseptic operation in nursing and avoid disposing drugs without authorization. Once a safety accident occurred, it was treated promptly and actively to minimize the injury of patient. (5) To fully inform the patient of possible risk events during the treatment and nursing of diseases, to enable them to understand that most of the risk events can be avoided. But once an adverse event occurred, there was no need to worry or fear, the harmful effects can be eliminated by active treatment.

Observed Indicators (1) Two groups were compared in terms of the incidence of adverse nursing events. (2) The satisfaction degree of patients and their families with the nursing services was

investigated using a satisfaction questionnaire drawn up by the department. The total score was 100 points, 85 or more points were considered as very satisfied, 60~85 points as satisfied and below 60 points as dissatisfied. Satisfied and very satisfied were included in satisfaction calculation, and the satisfaction rates of two groups were calculated. (3) Two groups were compared in terms of the nursing quality scores before and after risk management. The nursing quality was evaluated from five aspects, that is, nursing attitude, professional degree, proficiency level, nursing error and risk prevention. 20 points were assigned to each item, and the total score was 100 points. The higher score, the better nursing quality.

Statistical Analysis The data were analyzed using SPSS22.0. The measurement data were expressed as ($\bar{x} \pm s$) and compared with *t*-test. The enumeration data were expressed as n (%), and compared with χ^2 -test. $P < 0.05$ indicated that the difference was statistically significant.

Results

Comparison of Adverse Nursing Events The incidence of adverse nursing events of the observation group (5.26%) was lower than that of the control group (23.68%) ($P < 0.05$), as shown in Tab. 1.

Tab. 1 Comparison of Adverse Nursing Events between Two Groups n (%)

Group	n	Disease Progression	Nursing Error	Improper Intubation Nursing	Nosocomial Infection	Incidence
Observation Group	38	0(0.00)	1(2.63)	1(2.63)	0(0.00)	2(5.26)
Control Group	38	2(5.26)	2(5.26)	3(7.89)	2(5.26)	9(23.68)
χ^2 Value						4.2932
P Value						0.0216

Satisfaction The satisfaction rate of the observation group (97.37%) was higher than that of the control group (78.95%) ($P < 0.05$), as shown in Tab.2.

Tab. 2 Comparison of Satisfaction between Two Groups N (%)

Group	n	Satisfaction Score (Points)			Satisfaction Rate	Satisfaction Score (Points)
		85~100	60~85	Below 60		
Observation Group						
Control Group	38	14(36.84)	15(39.47)	8(21.05)	37(97.37)	92.28±3.23
χ^2 Value	38	8(21.05)	8(21.05)	14(36.84)	30(78.95)	85.07±3.17
P Value					4.2019	7.2184
					0.0236	0.0000

Nursing Quality Score Before risk management, the comparison between the observation group and the control group in terms of nursing quality score showed no difference ($P > 0.05$). After risk management, the nursing quality score of the observation group was higher than that of the control group ($P < 0.05$), as shown in Tab. 3.

Tab. 3 Comparison of Nursing Quality Scores before and after Management Between Two Groups ($\bar{x} \pm s$, Points)

Group	n	Before Management	After Management
Observation Group	38	73.29±2.49	94.27±2.37
Control Group	38	72.96±2.57	78.36±2.86
χ^2 Value		0.0021	5.3940

Discussion

Risk prevention management for hepatopancreatobiliary surgical nursing is aimed at factors affecting nursing risk events, which were obtained through a comprehensive analysis, based on previous experience in the nursing of hepatopancreatobiliary surgical diseases, and literature search results on related diseases, which mainly include the characteristics of the disease itself, the errors of nursing staff, social-psychological factors, improper intubation nursing, and nosocomial infection induced by invasive operation, etc..

Risk prevention management for hepatopancreatobiliary surgical nursing means designing a solution according to the factors above and managing the operations of hospital nursing in a unified way, through trainings on the attitude, sense of duty and professional level, etc. of nursing staff, to greatly improve the comprehensive nursing management and lay a foundation for the enhancement of nursing quality. The results of this study suggested that the incidence of adverse nursing events of the observation group (5.26%) was lower than that of the control group (23.68%) ($P<0.05$), indicating that risk prevention management for hepatopancreatobiliary surgical nursing can lower the incidence of nursing risk events. In addition, the results of this study also showed that after risk management, the nursing quality score of the observation group was higher than that of the control group ($P<0.05$), indicating that risk prevention management for hepatopancreatobiliary surgical nursing can enhance the quality of nursing service. On the other hand, the satisfaction of patients and family members with nursing service was also considered in this study, and the results showed that the satisfaction rate of the observation group (97.37%) was higher than that of the control group (78.95%) ($P<0.05$), indicating that risk prevention management for hepatopancreatobiliary surgical nursing was conducive to the long-term development of the hospital.

Summary

To sum up, risk prevention management for hepatopancreatobiliary surgical nursing can greatly improve nursing and treatment, effectively lower the incidence of adverse nursing events, produce a positive effect on the improvement of the satisfaction of patients and their families and is conducive to the long-term development of hospitals.

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