

## Nursing experience and effect analysis of laparoscopic fenestration of hepatic cysts

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**Keywords:** laparoscopic fenestration of hepatic cysts; Nursing experience; Effect analysis

**Abstract: Objective:** To analyze the nursing experience and effect of laparoscopic fenestration of hepatic cysts. **Methods:** Our hospital of 40 patients with hepatic cyst need surgery, were randomly divided into control group and observation group, 20 cases, control group of routine nursing care, observation group of targeted care, compared two groups of patients with postoperative complications of the risk, mainly for back pain, nausea and vomiting, bile leakage, subcutaneous emphysema, several common postoperative bleeding problems in statistics, survey postoperative nursing care of patients with satisfaction at the same time. **Results:** There were 1 case of back pain, 0 case of nausea and vomiting, 0 case of bile leakage, 0 case of subcutaneous emphysema and 1 case of hemorrhage in the observation group. In the control group, there were 1 case of back pain, 1 case of nausea and vomiting, 1 case of bile leakage, 0 case of subcutaneous emphysema and 1 case of bleeding. The overall complication rate was 10 percent in the observation group and 20 percent in the control group. There was 1 patient in the observation group, and the postoperative complications were obvious, so they were not satisfied with the nursing care. All the scores were low, and the overall score did not reach 60. Observation group said there are 3 patients are not satisfied, not in the care in a timely manner to understand the patient's demands and feelings, care of the patient's idea failed to communicate with nursing staff, leading to poor patients feelings, therefore reduce the overall evaluation, nursing observation group the satisfaction rate of 95%, final statistics evaluation rate higher than the control group is 85%. **Conclusion:** Nursing intervention according to the patient's situation under laparoscopic liver cyst windowing drainage can comply with the patient's individual situation to do a series of postoperative recovery work, improve the actual effect of nursing, increase the clinical nursing experience.

### 1. Introduction

In recent years the surgery in China has been seeking less pain, less bleeding, quick recovery, small trauma surgery mode, in the liver cyst operation, the use of laparoscopy for peep, after umbilical single-arch laparoscopic surgical technology operation steps are basically identical with conventional laparoscopic surgery, as long as the performer operation can overcome the conflict between viscera revealed and various kinds of operating instruments problem can be successfully completed surgery, but the skills to the operation of the surgeons and surgical patient demand higher. At the same time, a series of operating procedures should be combined with the doctor to enhance targeted nursing experience, understand the patient's situation and postoperative clinical status, and provide more sophisticated nursing assistance.

### 2. Materials and Methods

#### 2.1 General Materials

40 patients with liver cyst requiring surgical treatment in our hospital were selected and randomly divided into the control group and the observation group with 20 cases each. The control group received routine nursing and the observation group received targeted nursing. In terms of gender, there were 6 males and 14 females in the control group, 7 males and 13 females in the

observation group. In terms of age range, the age of the control group was 33~66 years old, and the age of the observation group was 34~65 years old. The mean age in the control group was  $(49.68 \pm 3.28)$  years old, and the mean age in the observation group was  $(50.26 \pm 6.27)$  years old. The following conditions have been excluded in this nursing survey: the elderly patients have important organ function insufficiency; The position of the cyst is deep in the liver or close to the important structure of the hilar of the liver. Small but densely distributed polycystic liver disease; Can not exclude cystadenoma or cystadenocarcinoma, or suspected for liver cysticercosis (due to different surgical methods, open the window easy to cause anaphylactic shock and cysticercosis spread).

## 2.2 Methods

### Routine care:

Understand and statistics the patient's past medical history, medication history, and history of surgery, the patient body check to determine the patient's blood biochemistry, blood coagulation function, positioning the patient's disease, guiding patients with perioperative diet, should guarantee every day to get enough protein, such as soy, milk, lean meat, are high in protein. Yams, shiitake mushrooms, honey, pig liver, kiwi, apples and grapes can provide the body with needed vitamins and minerals to boost immunity. Before surgery, understand the surgical procedures of the doctor, check the corresponding instruments and equipment, conduct aseptic disinfection and closely monitor the patients, report to the doctor at any time according to the clinical changes of the patients, check the perioperative environment sanitation of the patients, and create a safe and comfortable treatment space for the patients. Remind patients and their families not to pull, fold, pressure drainage tube, can not adjust the negative pressure. The effective sign of negative pressure is wound dressing collapse, shrink and become hard, tube type exists, there is no liquid accumulation under the film, there is liquid extraction, if there is anything abnormal, please immediately notify the medical staff for treatment. The color, nature and quantity of the drainage were closely observed. If there is a large amount of blood to draw out should consider whether there is active bleeding wound surface, should immediately notify the medical staff, do the appropriate and correct treatment.

### Targeted care:

(1) psychological nursing: for patients admitted to hospital first mission, and explain the relevant matters of the surgery, the patients have more fully cognition about the situation, avoid family members guess about the advantages of laparoscopic surgery for female patients should introduce surgical cosmetic effect, according to the concerns of the patients before and after the surgery, operation conditions, encourage patients psychologically prepared. Although the patient recovered quickly after surgery, but during the recovery period there are still a lot of doubts, should comfort the patient in nursing, explain the postoperative family nursing requirements, so that the patient's family members do a good job of nursing arrangements.

(2) Postoperative care: when the patient with liver cyst is not awake after anesthesia, he/she should lie on his/her back, fix the drainage tube appropriately, keep the drainage tube smooth, prevent deformation and extrusion, and accurately record the drainage volume, color and characteristics. After 24 hours of bed rest, early activities should not be conducted to avoid bleeding in the liver segment, and patients should be guided to perform flexion and extension or passive physical movement. After stable condition, make activity plan with the patient.

(3) Postoperative observation: the color and characteristics of wound dressing including bleeding, exudation and drainage were observed and recorded. If rapid pulse, pale complexion, decreased blood pressure, cold sweat and other shock symptoms or drainage fluid more than 100ml an hour, be alert for the possibility of intraperitoneal bleeding. Timely notify the doctor and cooperate with rescue.

(4) pain care: the patient pain, patients should try to take the daily preferences such as distraction, such as listen to the crosstalk, listen to music, watch movies, etc., can also play some handmade process, let patients in mind form handicraft production steps, no longer focused on surgery, patients with drugs under the action of analgesia effect, ask the patient's pain feeling, should fully understand the patient's postoperative pain of time, frequency, etc., find the law of communication

with the doctor, analysis the value of the pain of patients with lower or higher every day, and the corresponding nursing care arrangements.

(5) infection prevention care: patients should be kept on a wound dressing clean, dressing should be paid attention to the surrounding skin clean sanitation, change in time, pay attention to in wound dressing change in the process of examination, whether has the performance such as bleeding, swelling, asking whether patients feel pain, and at the same time, in view of the incision infection for prevention, pay attention to disinfection, check the cleanness of the patient's bed, clothes loose comfort, avoid improper skin friction during patients lie in bed, oppression, other complicated with skin problems.

## 2.3 Observation Indexes

The incidence of postoperative complications was compared between the two groups, and the main postoperative problems were back pain, nausea and vomiting, bile leakage, subcutaneous emphysema and bleeding. Meanwhile, patients' satisfaction with postoperative care was investigated.

## 2.4 Statistical Treatment

Excel software such as medical office under the discrete data statistics and classified count ( $X^2$  test, is used to infer that two or forming than there is difference between the overall rate), matching measurement data comparison between samples or groups (t test, observe the differences of this group of samples with overall),  $\bar{x}$  (average)  $\pm s$  (Standard Deviation) said mean add and subtract Standard Deviation, the small probability event of statistical quality control ( $P < 0.05$  said have significant difference (one hundred trials, the frequency is less than 5 times).

## 3. Results

In the observation group, there were 1 case of back pain, 0 case of nausea and vomiting, 0 case of bile leakage, 0 case of subcutaneous emphysema and 1 case of hemorrhage. In the control group, there were 1 case of back pain, 1 case of nausea and vomiting, 1 case of bile leakage, 0 case of subcutaneous emphysema and 1 case of bleeding. The overall complication rate was 10 percent in the observation group and 20 percent in the control group.

Table 1 comparison of postoperative complications between the two groups

group	n	back pain	nausea and vomiting	bile leakage	subcutaneous emphysema	hemorrhage	total rate
the observation group	2 0	1	0	0	0	1	10%
the control group	2 0	1	1	1	0	1	20%
$X^2$	-	3.265	3.471	3.426	2.596	2.458	2.756
P	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

There was 1 patient in the observation group, and the postoperative complications were obvious, so they were not satisfied with the nursing care. All the scores were low, and the overall score did not reach 60. Observation group said there are 3 patients are not satisfied, not in the care in a timely manner to understand the patient's demands and feelings, care of the patient's idea failed to communicate with nursing staff, leading to poor patients feelings, therefore reduce the overall evaluation, nursing observation group the satisfaction rate of 95%, final statistics evaluation rate higher than the control group is 85%.

Table 2 satisfaction scores of patients in the two groups during nursing [n(%)]

group	n	satisfaction	general satisfaction	dissatisfaction	the satisfaction rate
the observation group	20	9	10	1	19 (95%)
the control group	20	8	9	3	17 (85%)
X <sup>2</sup>	-	6.235	6.485	4.253	4.259
P	-	<0.05	<0.05	<0.05	<0.05

#### 4. Discussion

Although traditional forms of surgery to cure patients, in the process of treatment of the patient's body recover slowly, psychological pressure, also do not have too much focus on prognosis of nursing, medical has been in search of a more simple, faster recovery nursing mode, and under the liver cyst operation needs, created the laparoscopic minimally invasive model, through laparoscopic to reduce the size of the surgical trauma, greatly reduced the risk in patients with concurrent, parasites and non parasitic hepatic cysts can be divided into. Both can now be cured with laparoscopic surgery. The advantages of less pollution, less blood loss, less systemic inflammation, faster recovery of postoperative body function, early movement out of bed, early discharge and so on make patients more reliable in clinical treatment and nursing. Open a window for laparoscopic liver cyst drainage operation form, actively carry out corresponding nursing care, perioperative period based on the situation, positive psychological intervention patients, cancer patients and family members have sufficient cognitive operation, and reduce the perioperative psychological sense of confusion and conflict, nursing home after surgery, preoperative basic is health education and psychological guidance, intraoperative cooperate with the doctor, and postoperative recovery more in need of nursing staff fully cooperation, we should pay attention to strengthen postoperative each condition check, should be timely intervention for patients pain problem, severe cases analgesia with doctors, optimizing care of details, Especially for the elderly, poor health patients should do a good job in cleaning and education. In this nursing investigation, the observation group after targeted nursing, although ultimately unable to avoid complications, but in fact the incidence of complications is very low, compared with the control group has made great progress. And observation group overall nursing satisfaction evaluation is higher also, along with the progress of the medical level, the nurse should also continue to accumulate experience, listen to the opinions of the patients, and to understand the patient's feelings, thoughts, closer to the patients in the perioperative clinical characterization of nursing plan adjustment, detailed understanding of laparoscopic liver cyst drainage mechanism, the mechanism and advantages that open a window, the corresponding care arrangements. Adhering to the concept of "continuous improvement under nursing experience", we serve the majority of patients, form the hospital characteristic nursing mode of laparoscopic liver cyst windowing drainage, and strive to be accepted and recognized by more patients. Create a new era of minimally invasive treatment and nursing for laparoscopic fenestration of hepatic cysts!

#### References

- [1] Zhou Rui. Nursing experience and effect analysis of laparoscopic window drainage for hepatic cysts [J]. Chinese Medical Guide, 2016,14 (19) : 128-129.
- [2] He Jie, Wang Kun, Zhang Lei, et al. Nursing experience and effect analysis of laparoscopic fenestration of hepatic cysts [J]. Journal of General Stomatology, 2016,3 (10).
- [3] Zhang Xiaodong. Nursing experience and effect analysis of laparoscopic window drainage for hepatic cysts [J]. Contemporary Medicine, 2016,22 (29) : 55-56.
- [4] Song Yanhong. Application analysis of nursing intervention in laparoscopic fenestration of

hepatic cysts [J]. Contemporary Medicine, 2017(3).

[5] Zhu Xiaojuan. Nursing experience and effect of laparoscopic fenestration of hepatic cysts [J]. Clinical Medical Research and Practice (5):186-187.

[6] Li Yanyan. Perioperative nursing of laparoscopic fenestration for simple hepatic cyst [J]. Henan Journal of Surgery, 25(02):181-182.

[7] Cao Minhui. Nursing and cooperation experience in laparoscopic cholecystectomy operating room [J]. Chinese and Foreign Medical Research (27).

[8] Wen Lingyun. Application effect of targeted nursing in patients with hepatic cysts undergoing laparoscopic window drainage [J]. Xizang Medicine, 39(4):115-116.

[9] Zhu Xuedong, Wan Huilai. Comparison of clinical efficacy of laparoscopic and open window drainage for hepatic cyst [J]. Journal of Clinical Rational Drug Use, 12(10):146-147.