

The Nursing Analysis of Holmium Laser Treatment for Patients with Complicated Ureteral Stones under Ureteroscope

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Abstract: Objectives: This study discusses the perioperative nursing of holmium laser treatment for patients with complicated ureteral calculi under ureteroscope. **Methods:** 160 patients with complex ureteral calculi received in our hospital from December 2018 to January 2020 were selected and divided into a control group of (n = 80) and a research group of (n = 80) by random number method. While the nursing work of the control group adopts a conventional nursing methods, and the patient care of the research group adopts a comprehensive nursing methods. Observe and compare the treatment and complications of the two groups of patients. **Results:** The urinary indwelling time, time to get out of bed and hospitalization time in the study group were shorter than those in the control group (P <0.05); the success rate of stone crushing in the study group was significantly higher than that in the control group (P <0.05) The incidence of complications after nursing in the study group was significantly lower than that in the control group (P <0.05). **Conclusion:** A more comprehensive comprehensive nursing method is adopted in clinical practice for perioperative care of patients undergoing ureteroscope holmium laser treatment for patients with complex ureteral stones Patients with ureteral calculi are of great significance.

The holmium laser lithotripsy technique under ureteroscope is the main treatment method in treating patients with ureteral calculi, and the success rate of surgical lithotripsy is more than 95% [1]. However, due to the lack of disease-related knowledge of some patients, they are resistant to the operation, and the cooperation with medical staff is poor, which provides difficulties for the smooth operation of the operation. And a considerable number of patients will have fear, tension, anxiety and other emotions when facing the operation, which seriously affects the treatment effect [2]. Complex ureteral calculi is a ureteral calculus symptom due to the complexity of environmental factors, which leads to the increase of the patient's disease and the difficulty of treatment. It is a thorny problem in the urology department. The characteristics such as long, higher requirements for the operation of the operation, and the risk of postoperative complications are greater. In addition, improper postoperative care will also result in ineffective treatment, will increase the incidence of postoperative complications, and pose a serious threat to the physical and mental health of patients. Therefore, perioperative nursing of holmium laser treatment under ureteroscope for patients with complex ureteral stones is very important [3]. This article studies from this perspective, observes and analyzes the nursing methods and effects on its perioperative period, and provides an effective reference for further treatment. The report is shown below.

1. Information and method

1.1 General information

A total of 160 patients with complicated ureteral calculi received from our hospital from December 2018 to January 2020 were selected and divided into a control group (n = 80) and a research group (n = 80) by random number method. Among them, there were 58 males and 22 females in the control group, aged 25-56 years old, average age (42.856.35) years old, stone diameter 1.1-1.6cm, average diameter (1.450.25) cm; 62 males and 18 females For example, the age

is 26 to 58 years old, the average (43.135.86) years old, the stone diameter is 1.1 to 1.7 cm, and the average diameter is (1.480.32) cm. There was no statistically significant difference in general data such as gender, age and stone diameter between the two groups of patients ($P > 0.05$), which was comparable.

Inclusion criteria: (1) There are seven selection criteria for complex ureteral calculi, and two of them are included in the complex ureteral calculi. For example, patients with stone diameter ≥ 1 cm and ureteral stenosis < 0.5 cm can be included in the standard. (2) The 160 patients in this study have been known and voluntarily agreed to participate. Exclusion criteria:

- (1) Patients with severe diseases such as heart, lung, liver and other organs or blood and endocrine system.
- (2) Patients who are pregnant or lactating.

1.2 Method

The whole 160 patients were treated with holmium laser lithotripsy under ureteroscopy. After the operation, catheters were routinely placed, and medical staff were able to guide and lead the patients to drink more water to promote the discharge of stones.

The patients in the control group adopted conventional nursing methods. The specific contents were: the nurses gave health knowledge to the patients before the operation, and guided them to make preparations before the operation; they helped the patients in a comfortable position during the operation, and strictly controlled the vital signs Monitoring; guide patients to develop good diet and rest habits after operation, keep the ward environment safe and hygienic, and carry out regular disinfection treatment.

The patients in the observation group adopted the comprehensive nursing method based on the conventional nursing methods. The specific contents are as follows: (1) Preoperative care: from the time of patient admission, the nursing staff should actively guide the patient to familiarize themselves with the hospital environment, including canteens, toilets and other places Specific location. Tell the patient about the disease related to ureteral stones, improve the patient's self-care ability, and guide the patient to complete the examination of various physical indicators upon admission. According to the psychological state survey scale to investigate the psychological state of patients after admission, make a comprehensive assessment, formulate psychological care implementation plans, pay close attention to the psychological state of patients, help patients eliminate negative emotions, and establish treatment confidence. Admitted to practice cognitive therapy, tell patients about disease knowledge, treatment methods, etc., encourage patients to eliminate worries and worries.

(3) Intraoperative nursing: After the patient enters the operating room, the patient will be patiently enlightened by the nursing staff to help the patient reduce or eliminate the tension and panic mood. Adjust the temperature and humidity of the operating room to keep its index at the optimal value. Help patients adjust their posture, pay close attention to the vital signs of patients during surgery, and improve the safety of surgery. Nursing staff concentrated on cooperating wi(3) Postoperative care: Nursing staff should do the transfer work of the patients, pay attention to the factors that may occur during the transfer process, and avoid the infection of the patients. Inform patients of postoperative precautions, such as not eating or drinking for 6 hours after surgery. Carry out event relaxation care, organize entertainment activities that match the patient's physical condition, interests and hobbies, divert the patient's attention, and relax the tension generated by the treatment. Formulate reasonable duty arrangements, conduct regular inspections on patients' catheters and various physical indicators, report abnormalities to the doctor immediately, and make emergency rescue measures. Reasonable use of antibiotic drugs to prevent the occurrence of antibiotic abuse the doctor to complete the operation quickly.

1.3 Observation indicators

(1) The study observed the average urinary indwelling time, the average time to get out of bed, and the average length of stay in the two groups. (2) Record the success of the two groups of patients with stone crush, and review the statistics of the patients three months after the operation in order to

check the residual stones and calculate the proportion. (3) It observe and record the occurrence of complications such as infection, ureteral perforation, and bleeding after nursing.

1.4 Statistical methods

The research data is processed using SPSS22.0 software, the count data is represented by (n), line 2 is tested, and the measurement data is $\bar{y} \pm s$. Indicate that if t test is performed, $P < 0.05$ means that the difference is statistically significant.

2. Result

2.1 Comparison of treatment effect between the two groups of patients

The results of the study showed that the patients in the study group spent significantly less time than the control group in terms of urinary indwelling time, bed time, and hospitalization time ($P < 0.05$). The specific data is shown in Table 1.

Table 1. Comparison of treatment effect between two groups of patients

Groups (n)	Urinary catheter retention time	Bed time activities	Staying in the Hospital
Research group (80)	0.25±0.01	2.11±0.62	4.06±0.71
Control group (80)	0.62±0.02	3.56±0.75	6.03±0.82
t	11.368	9.151	9.956
P	<0.05	<0.05	<0.05

2.2 Comparison of surgical effect between two groups of patients

The results of the study showed that the success rate of lithotripsy in the study group was significantly higher than that in the control group ($P < 0.05$). The specific data is shown in Table 2.

Table 2. Comparison of surgical effects between the two groups [n (%)]

Groups (n)	Crushed stone success	Residual stones
Research group (80)	74 (92.50)	2 (2.50)
Control group (80)	60 (75.00)	14 (17.50)
χ^2	11.251	12.500
P	<0.05	<0.05

2.3 Comparison of complications between the two groups

The research statistics shows that the probability of infection, ureteral perforation and bleeding complications in the study group is significantly lower than that in the control group ($P < 0.05$). The detailed data is shown in Table 3.

Table 3. Comparison of the occurrence of complications between the two groups of patients n (%)]

groups (n)	Infection	Ureteral perforation	Bleeding	Total
Research group (80)	0 (0.00)	1 (1.25)	2 (2.50)	3 (3.75)
Control group (80)	8 (10.00)	3 (3.75)	4 (5.00)	15 (18.75)
χ^2	11.526	10.125	0.865	9.784
P	<0.05	<0.05	>0.05	<0.01

3. Discussions:

Ureteral stones are a urological disease that is more common in men. Patients with this condition will have symptoms such as waist discomfort, lower abdominal pain, and renal colic, and they are also more likely to have complications such as infections and bleeding, which will double

the physical and mental health of patients [4]. Complex ureteral stones may cause certain obstacles to the operation due to large stones, ureteral stenosis and other factors. In addition, the patient's psychological state is unstable, which is not conducive to the surgical treatment of patients with complex ureteral stones. Therefore, it is particularly important to pay attention to ureteral stones, receive treatment as soon as possible, and combine effective treatment methods with nursing methods [5]. The holmium laser lithotripsy technique under ureteroscope is the main method for clinical treatment of this disease. This technique has the advantages of less trauma, convenient operation, and good efficacy. The clinical treatment of ureteral calculi has a high utilization rate, which provides a powerful treatment for the disease Security [6]. However, the perioperative nursing of patients is also an important part of the treatment [7-8].

The results of this study show that the treatment effect of patients with preoperative, intraoperative and postoperative care through comprehensive nursing is better than that of conventional nursing treatment. The results of the study showed that the patient was taken care of by comprehensive care, and the urinary indwelling time was (0.250.01) d, which was significantly shorter than the time spent in conventional care. In addition, the hospitalization time and the time for getting out of bed were longer than those used in conventional care Short ($P < 0.05$), which means that the patient's recovery ability has been improved after receiving comprehensive care. In addition, comprehensive care has also effectively improved the success rate of gravel and achieved better surgical results. And after comprehensive care, patients with 0 infections, ureteral perforation and bleeding and other complications have relatively few cases [9-10]. It can be seen that the use of comprehensive care can also reduce the probability of complications of patients, which is of great significance for the treatment of ureteral stones.

Conclusion

The perioperative care of patients with complex ureteral stones using comprehensive care can effectively help patients recover, improve the success rate of lithotripsy, reduce the probability of complications of patients, and is conducive to holmium laser lithotripsy under ureteroscope The surgical treatment of the disease proceeded smoothly.

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