

# The Effect of Patients Receiving Targeted Nursing Care on Bladder Spasm after Electrosurgical Resection of the Prostate

Xiaoying Liu

Qingyang City People's Hospital, Qingyang, Gansu, 745000, China

**Keywords:** Prostatic hyperplasia, Vaporization resection, Evidence-based medicine, Nursing intervention, Bladder spasm

**Abstract:** Objective To explore the clinical value of targeted nursing measures on patients with bladder spasm after prostatectomy. Methods A random sample of 72 patients who underwent electrovaporization of the prostate in our hospital from June 2019 to March 2020 was randomly divided into an observation group and a control group, 36 cases in each group, based on the admission serial number. The patients in the control group were given routine perioperative care, and the patients in the observation group were given evidence-based medicine targeted care. The probability, frequency, duration, disappearance time, pain degree of the onset and other indicators of the two groups of patients were compared and evaluated. Nursing effect. Results After operation, there were 4 cases of bladder spasm in the observation group. The total incidence was 11.11%, which was lower than 30.56% (11/36) in the control group. The difference between the groups was significant, and the comparison was statistically significant ( $P < 0.05$ ); In the observation group, the incidence of spasm was lower, the duration was shorter, the spasm disappeared earlier, and the pain degree was less when the spasm occurred. All indicators were relatively good compared with the control group. The differences between the groups were obvious and statistically significant ( $P < 0.05$ ). Conclusion The targeted nursing intervention for patients undergoing electrosurgical prostatectomy can prevent postoperative bladder spasm, relieve spasm pain, shorten the duration of complications, and have a positive impact on improving the prognosis of patients.

## 1. Introduction

In the diagnosis and treatment of urology, patients with prostate disease occupies a certain proportion, and pathological hyperplasia of the prostate is the most common [1]. Vaporization resection is a routine clinical operation for the treatment of benign prostate lesions. However, after the operation, an auxiliary catheter is needed for bladder irrigation, and the operation will cause a series of stress reactions in the patient, and it is very easy to cause bladder spasm in the patient. It is not conducive to its postoperative recovery and affects the patient's normal physiological functions. Appropriate clinical care plays an important role in the recovery of patients after surgery. Targeted nursing intervention is an evidence-based nursing based on the characteristics of electrosurgical resection of the prostate and the individual differences of patients. It aims to analyze the causes of bladder spasm after prostatectomy and adopt corresponding intervention measures to reduce this type of prostatic resection. The adverse reactions of patients after surgery can improve the prognostic effect and help patients recover their physical functions as soon as possible. On this basis, our hospital carried out the following research from June 2019 to March 2020. Some patients undergoing transprostatectomy in our hospital's urology department were treated with targeted care and achieved satisfactory results. The following clinical research The report is as follows.

## 2. Materials and Methods

### 2.1 Basic Information

Approved by the medical ethics committee of our hospital, from June 2019 to March 2020, 72 patients were randomly selected from patients undergoing electrovaporization of the prostate in our

hospital as the survey subjects of this study, and they were randomly selected according to their admission serial number. Divided into observation group control group, each with 36 cases. The age span of patients in the control group ranged from 53 to 79 years, with an average age of  $(69.32\pm 7.56)$  years, a hospital stay of 6-13 days, and an average hospital stay of  $(10.32\pm 2.13)$  days. Among them, 11 cases had hypertension, 14 cases had diabetes, and heart disease. 11 cases of vascular disease; patients in the observation group ranged from 55 to 81 years old, with an average age of  $(67.29\pm 8.42)$  years, a hospital stay of 7-14 days, and an average hospital stay of  $(8.32\pm 3.07)$ , including 11 patients with hypertension and 14 diabetes Cases, 11 cases of combined cardiovascular disease. After evaluation, there was no statistically significant difference between the two groups of patients in basic data such as age, treatment time, physical fitness, and education level ( $P>0.05$ ). The hospital stay is too long and does not meet the current clinical path management

## **2.2 Case Selection and Exclusion Criteria**

Case selection must meet the following conditions: (1) The patient is conscious and willing to participate in this investigation; (2) The clinical data is complete, and the whole investigation was treated in our hospital, and there was no halfway transfer; (3) The treatment compliance was good, Cooperate with the investigator throughout the process.

The following cases will not be accepted: (1) patients with mental illness; patients with major physical diseases; (2) patients with other illnesses who suddenly turn to the ward during the course; (3) patients with severe urinary system diseases.

## **2.3 Method**

This group of patients implement routine nursing intervention. Give patients timely rehydration therapy after surgery to prevent postoperative infections; timely non-invasive vital signs monitoring; observe the smoothness of drainage catheter catheterization, inform patients and family members to observe the amount of fluid in the flushing bag at any time, and empty the urine in the drainage bag in time , While avoiding the phenomenon of urinary tube compression; when patients have bladder spasm, give oral analgesics or indomethacin suppository to the anus to relieve the spasm pain.

On the basis of the control group, targeted care was given to this group of patients. First, set up a nursing team, which includes senior doctors of prostate hyperplasia, head nurses of urology and nurses with more than 3 years of experience in urology. Regular seminars are held to understand the causes of bladder spasm in patients after transvaporization of the prostate combined with clinical experience and a large number of literature materials, and make corresponding nursing implementation plans based on this. Secondly, collect the basic information of the patient, such as age, family composition, self-care ability, education level, etc., and carry out personalized health education to the patient or family member before the operation, and explain concisely the cause of prostate hyperplasia and the reason for this treatment. Purpose, expected results, possible problems during and after surgery, and corresponding intervention measures, etc., to enable patients and their families to enhance the awareness of the disease and avoid unnecessary psychological panic. Thirdly, take corresponding nursing measures based on evidence-based nursing evidence, including: (1) Before surgery, instruct patients to repeatedly practice deep breathing, perform effective coughing, and strengthen the contraction of the anal sphincter, so as to deepen the patient's functional rehabilitation training and make the patient form Self-consciousness; (2) Instruct patients to fast or eat a small amount of semi-liquid diet before surgery to avoid the possibility of secondary prostate bleeding caused by dry stools after surgery; preoperative sedation for patients who are too nervous and even affect normal sleep Intervention with similar drugs to keep the patient adequate sleep and receive surgical treatment in the best physical condition; clean the skin of the patient before the operation and perform local disinfection to avoid infections caused by unclean skin; (3) assist or guide the patient at the beginning of the operation Maintain the correct posture and perform anesthesia operations. After the anesthesia takes effect and the patient's vital signs are stable, perform electrovaporization. During this period, in order to ensure smooth bladder drainage, medical staff should assist the patient in a slope lying position and implement warm nursing

interventions. (4) Surgery will involve operations such as bladder irrigation and indwelling urinary catheters, which will cause certain stress damage to the patient and cause uncontrolled contraction of the bladder, which will cause the patient to hold back urine, pain and other physical discomfort. It is easy to cause nervousness and anxiety in patients, which can induce bladder spasm. After this kind of situation occurs, medical staff should encourage the patient, give corresponding psychological counseling, and guide them to adjust their breathing. The clinical physician should take corresponding treatment measures and standardize operations to minimize the stimulation of the patient and eliminate the patient's tension. . (5) After the operation, fix the urinary catheter with bandage or gauze to reduce the chance of collision and pulling of the urinary catheter and prevent it from shifting and falling off; 3-7d after the operation, the normal saline rinsing solution is heated in the incubator to Adapt to the temperature to flush the patient's bladder, and control the speed during flushing. The color is fast and light is slow. The drainage fluid should be light red. (6) For patients with repeated bladder spasm, give antispasmodic drugs, such as topical anesthetics, lidocaine or anti-M cholinergic drugs, Xiaoxuan Anisodamine hydrochloride added to the bladder irrigation solution for flushing, or use the epidural wall Self-controlled analgesia system.

## 2.4 Observation Indicators

The degree of bladder spasm was compared between the two groups. Among them, the patient had several bladder spasms within 1 hour, the blood color of the irrigation fluid was significantly darkened, the patient had an obvious sensation of holding back urine, the patient's pain was severe and the shortness of breath caused by the severe bladder spasm; the bladder spasm occurred once in 1-2 hours, and the irrigation fluid did not drip. Bladder holding back urine and pain and other physical discomforts are not obvious, bloody urine overflow beside the catheter is moderate bladder spasm; the frequency of spasm is 5-6 times/d, the washing fluid has no obvious color change but bloody urine overflows around the catheter For mild bladder spasm.

The number of bladder spasm, the duration of bladder spasm and the disappearance time of bladder spasm were compared between the two groups of patients, and the pain degree of the two groups of patients with bladder spasm was evaluated by digital grading method.

The data processing of this research center uniformly adopts SPSS 22.0 software. According to the actual survey needs, the data is tested by t and X<sup>2</sup>. The final result is expressed as the mean ± the variance and the rate, and P<0.05 is considered as the difference is statistically significant.

## 3. Results

### 3.1 Comparison of the Occurrence of Bladder Spasm between the Two Groups

There were 4 cases of bladder spasm in the observation group, with a total incidence of 11.11%, including 1 case (2.78%) with severe bladder spasm, 1 case (2.78%) with moderate bladder spasm, and 2 cases (5.56%) with mild bladder spasm; A total of 11 patients in the control group had bladder spasm, with a total incidence of 30.56%, 3 cases of severe bladder spasm (8.33%), 3 cases of moderate bladder spasm (8.33%), 5 cases of mild bladder spasm (13.89%), two Compared with the group data, the contrast is sharp, and the statistical significance is prominent (P<0.05), see Table 1.

Table 1 Comparison of The Incidence of Bladder Spasm between the Observation Group and the Control Group [n (%)]

Degree of bladder spasm	Observation group(n=36)	Control group(n=36)	X <sup>2</sup> /P
Severe	1(2.78)	3(8.33)	4.186/0.013
Moderate	1(2.78)	3(8.33)	4.186/0.013
Mild	2(5.56)	5(13.89)	7.596/0.004
TTI	4(11.11)	11(30.56)	12.576/0.000

### 3.2 Comparison of Frequency, Duration, Disappearance Time, Pain Degree, Etc. of Bladder Spasm between the Two Groups

It can be seen from the data in Table 2 that the frequency of occurrence of spasticity in the observation group is lower, the duration is shorter, the spasticity disappears earlier, and the degree of pain is less when the spasticity occurs. All indicators are relatively good compared with the control group, and there are significant differences between the groups. , Statistically significant ( $P<0.02$ ).

Table 2 Comparison of Bladder Spasm Related Indexes between Observation Group and Control Group ( $\pm s$ )

Eva Index	Observation group(n=36)	Control group(n=36)	t/P
Bladder spasm frequency(Times/d)	2.13±1.06	5.07±1.32	5.792/0.013
Duration of cramps(min)	0.91±0.39	2.17±0.63	7.378/0.009
Time to disappearance of cramps(d)	6.91±1.24	11.86±2.42	6.596/0.010
Pain degree	3.76±0.67	5.12±0.92	12.576/0.000

#### 4. Discussion

Prostatic hyperplasia is a common type of disease in the urology department of hospitals, and the patients are mostly middle-aged and elderly people over 50 years old [2]. Transurethral resection of the prostate is currently an effective method for the treatment of benign prostatic hyperplasia. Because of its small trauma, simple economy, short hospital stay and quick recovery after this operation, it is favored by the majority of urology clinicians and patients. . However, after the operation, the patient needs to be flushed with the bladder, and the urinary catheter needs to be indwelled in the early postoperative period to maintain the normal physiological needs of the human body. The combined effect of various stress reactions can easily cause the patient to have bladder spasm, which increases the patient's bladder follow-up. Occurrence rates of epilepsy or other urinary system infections are not conducive to postoperative recovery and body function recovery.

Targeted nursing intervention is a feed-forward evidence-based medical care model based on the patient's actual condition and the surgical application characteristics of prostatic resection. Through analysis and demonstration, the cause of bladder spasm in postoperative patients is systematically analyzed. Scientific analysis and argumentation, and formulation of preventive nursing measures, aim to reduce the probability and degree of bladder spasm after surgery, improve the efficacy of surgery, and reduce patient pain [3]. Based on this, our hospital carried out this study, and included some patients who underwent prostatectomy in our hospital from 2019 to 2020. The subjects were treated with routine care and targeted care. The final results confirmed the above. The above statement is highly consistent with the relevant domestic research results.

The results of the study showed that the observation group had fewer bladder spasms, lower frequency, short duration, and mild pain. Compared with the control group, there were significant statistical differences ( $P<0.05$ ). It suggests that targeted nursing interventions have significant clinical effects when applied to patients undergoing resection of the prostate, which can not only reduce the chance of postoperative bladder spasm, but also reduce the pain of patients with bladder spasm, which has important clinical promotion value.

#### References

- [1] Cao Liping, Wang Yuhong. Application of evidence-based nursing in bladder spasm after TUR-P. *International Journal of Nursing*, 2009, 28(2):223-225.
- [2] Wang Jing. Investigation on the causes of bladder spasm after transprostatectomy and the application value of evidence-based nursing. *International Medicine & Health Guidance News*, 2016, 22(19): 3020-3022.
- [3] Zhao Hu, Wu Bin, Li Wenjun, Jiang Yuefang, Zha Zhenlei, Jiang Bin, Zhang Lijin. Analysis of the therapeutic effect of plasma electrotony of prostate on urodynamic parameters in patients with benign prostatic hyperplasia. *Chinese and foreign medical care*, 2020, 39 (29):12-14+19.