Clinical Nursing of Indwelling Catheter for Patients with Benign Prostatic Hyperplasia Complicated with Acute Urinary Retention

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Abstract: Objective To study the clinical nursing of indwelling catheter for patients with benign prostatic hyperplasia complicated with acute urinary retention. Methods 40 patients with benign prostatic hyperplasia complicated with acute urinary retention who were admitted to our hospital from February 2017 to February 2018 were selected and their clinical treatment and nursing were summarized. Results Successful indwelling catheterization and one-stage successful operation were performed in all patients. Conclusion Indwelling catheterization for BPH complicated with acute urinary retention is effective in patients with clinical symptoms and no obvious complications.

1. Introduction
Benign prostatic hyperplasia (BPH) is the most common male benign proliferative disease. The prevalence rate of BPH is more than 20% after men reach 50 years, and increases gradually up to 90% at 90 years. Its clinical symptoms include: frequent urination, urinary incontinence, increased nocturnal urination, urination hesitation, dysuria, intermittent urination, urinary retention, incomplete urine, urinary drip and so on. These symptoms will affect the work and life of patients to varying degrees, and BPH symptoms will increase with age. Acute urinary retention is a common and serious complication of BPH. The main clinical manifestations are urine discharging, lower abdominal pain, tossing and turning uneasily, and sometimes overflowing urinary incontinence. The incidence of acute urinary retention is as high as 25\%\textsuperscript{2}, accompanied by obvious anxiety and anxiety. Indwelling catheterization is a common treatment for acute urinary retention. The clinical nursing of patients with benign prostatic hyperplasia complicated with acute urinary retention who were admitted to our urology department from February 2017 to February 2018 is summarized as follows.

2. Data and Methods
2.1. Clinical Data
40 patients, aged 62-86 years and with a history of 3-10 years, were admitted to our hospital from February 2017 to February 2018. They all suffered from acute urinary retention for the first time. Among them, 2 cases had bladder diverticulum and 9 cases had bilateral hydronephrosis. Transrectal color Doppler ultrasonography of the prostate indicated prostatic hyperplasia (marked hyperplasia of the internal gland), and indwelling catheterization was performed. The residual urine volume was 400-1200ml. The diagnostic criteria of all patients were in accordance with 2104 Chinese urological disease diagnosis and treatment guidelines. The diagnostic criteria of urinary retention were: sudden incapacity to urinate, abdominal distension and pain, indwelling catheter, residual urine flow greater than 300 ml. Patients with prostate cancer, neurogenic bladder, urethral stricture and bladder neck...
contracture were excluded.

2.2. Method
After admission, all patients underwent indwelling catheterization after PSA blood collection, relieving symptoms of patients, giving clinical nursing of indwelling catheterization, giving definite diagnosis, and transurethral resection of prostate after stable condition.

3. Treatment and Nursing
3.1. Communication of Indwelling Catheterization
According to the psychological factors of patients and their families, strengthen health education, communicate well with patients and their families, stabilize the emotions of patients and their families, let patients and their families understand the role of urethral catheterization treatment and possible situations and coping measures, curative effect, help patients alleviate anxiety, avoid fear, actively cooperate with medical staff, and successfully complete indwelling catheterization.

3.2. Treatment of Urinary Retention
Aseptic urethral catheterization routine operation urine disinfection vulvar skin, tetracaine hydrochloride gel extended into the urethra along the external orifice of the urethra, and inject 10 ml, 3-5 minutes later lifted the penis curvature straight pubic anterior bend, instructed patients to open mouth deep breathing, communicate with patients, eliminate tension, vascular clamp insertion catheter, slow and gentle insertion of the urethra about 20-22 cm, see urine drainage and then insert 3-5 cm, inject water sac. Connect the drainage bag and fix the catheter. [4]

3.3. Nursing Care of Indwelling Catheterization
The first indwelling catheterization was not more than 1000ml. The bladder of patients with BPH complicated with urinary retention was highly dilated. After large amount of urination, the bladder pressure dropped sharply, resulting in bladder hemorrhage. It can be put about 400 ml at first, about 400 ml every 20 minutes until urine is emptied. Inpatients are elderly patients and weak, easily complicated with urinary tract infection, prevention of urinary tract infection is essential. Bladder irrigation can be given, 500-1000ml saline is used to wash the bladder, keep the catheter unobstructed, observe the color of urine and urine volume, such as heavy hematuria, communicate with doctors in time, and use antibiotics when necessary. Ask patients to drink plenty of water, eat nutritious and easily digestible food, urine volume is about 2000 ml per day, disinfect the external urethra twice a day, check the catheter water bag every day to avoid catheter prolapse. If the patient has bladder spasm, Vesicare can be taken orally to relieve bladder spasm

4. Surgical Treatment
Admission to the hospital to improve the relevant auxiliary examinations. Prostate plasma resectoscope, electric cutting power 240-280 W, coagulation power 60-80 W. For general anesthesia, lithotomy position. The F24 resectoscope was placed and cystoscopy was performed to understand the anatomical relationship between the bladder, bilateral ureteral opening, urethral sphincter, and verumontanum. The distance from the bladder neck to the verumontanum was measured. Infusion of 3L isotonic perfusate, perfusion pressure 4.9-5.9 kPa, intermittent perfusion. Use the cutting electrode to cut from 4-5 points and 7-8 points to the near Prostate surgical envelope, and cut the middle leaf along this level to form a wider space. From 11point and 1 point, cut to the prostate surgical capsule, in addition to Elik rinse clean tissue and blood clots, tightly stop bleeding. F22 three-lumen catheter, water injection 30-40 ml.
5. Bladder Irrigation Care
First, the isotonic saline is immersed in warm water of 35 °C for about 30 minutes. When the temperature of the physiological saline is 20-35 °C, it is more suitable for rinsing [5], avoiding low temperature of the rinsing liquid and causing low body temperature. The connecting tube is connected with isotonic saline, one end is connected to the three-chamber balloon catheter, and the other outlet of the catheter is connected with the drainage bag. The bladder irrigation pressure and washing speed are determined by the hanging height of the flushing device, and the speed of the bladder washing is generally controlled at 70-120 drops / minute, the bladder irrigation is related to the color of the drainage fluid. If the color of the drainage fluid is red, consider the amount of bleeding. At this time, the drip rate of the rinse solution can be adjusted to be more than 300 drops/min. Rinse for 2 days, No gross hematuria can stop rinsing [6]

6. Results
Forty patients were successfully treated with indwelling catheterization, the operation was smooth, the catheter was pulled out before discharge, and the symptoms of dysuria were significantly relieved. No obvious complications.

7. Discussion
Prostatic hyperplasia is the most common cause of dysuria in middle-aged and elderly men, and it is also a common disease in urology. In recent years, with the aging of China's population, the proportion of elderly patients with prostatic hyperplasia and urinary retention after 65 years of age has gradually increased, which seriously threatens the survival of older men [7]. It has been reported that 65% of acute urinary retention is caused by benign prostatic hyperplasia [8], and acute urinary retention caused by benign prostatic hyperplasia is a well-recognized clinical progression of prostate disease, often requiring surgical treatment to relieve symptoms. acute urinary retention can cause pain in patients, and it is often necessary to give indwelling catheterization treatment. Indwelling catheterization is a common treatment in nursing work. It requires medical personnel to master the operation process and perioperative indwelling catheterization. The patient's family members are anxious and smoothly cooperate with the medical staff. In summary, it is extremely necessary to be proficient in benign prostatic hyperplasia with acute urinary retention and indwelling catheterization and perioperative care, which can alleviate the suffering of patients and accelerate the recovery.

References