



Study on the Application Value of Staged Psychological Nursing in Postoperative Patients with Urinary Calculi

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DOI: 10.32629/jcmr.v5i4.3128

Abstract: Objective: To explore the application effect of staged psychological nursing in urinary calculi. Selection methods: between January 2023 and February 2024 in Guilin Medical College Second Affiliated Hospital treated 175 cases of urinary calculi patients as the research object, according to the double-blind crossover method divided into conventional intervention group (82 cases) and psychological intervention group (93 cases). The routine intervention group was given routine nursing, and the psychological intervention group was given staged psychological nursing on the basis of the routine intervention group. The nursing effects of the two groups were compared. Results: Adopting appropriate nursing measures can effectively reduce the incidence of complications and promote patient recovery. Conclusions: Staged psychological nursing helps to improve the quality of life, self-management ability and nursing satisfaction of patients with urinary calculi, relieve anxiety and depression, and reduce the incidence of complications.

Keywords: stage psychological nursing; urinary calculi; self-management ability; psychological status

1. Materials and Methods

1.1 Materials

A total of 175 patients with urinary calculi treated in our hospital from January 2023 to February 2024 were selected as the research objects. According to the double-blind crossover method, they were divided into the conventional intervention group (82 cases) and the psychological intervention group (93 cases). There were 40 males and 42 females in the routine intervention group; The average age was (44.23±4.48) years (range 28-69 years). The disease duration was 1-5 years, with an average of (2.09±0.23) years. There were 45 males and 48 females in the psychological intervention group; The average age was (43.41±5.45) years old (range 28-70 years old). The disease duration was 2-6 years, with an average of (2.14±0.19) years. There was no significant difference in general data between the two groups ($P > 0.05$).

1.2 Methods

1.2.1 Usual intervention group

The family members of patients were instructed to do a good job in life care of patients, such as diet contraindications, how to take drugs correctly, daily activities, etc., and the patients were instructed to take drugs regularly and quantitatively according to the doctor's advice and to review regularly.

1.2.2 Psychological intervention group

Psychological intervention at admission: When patients go from home to hospital, that is, from familiar environment to unfamiliar environment, medical staff need to use face-to-face communication to understand the patient's condition. During this period, nursing staff should introduce the history of our hospital, ward system, and previous successful treatment cases of attending doctors to patients in detail with a smile, so as to shorten the relationship between nurses and patients, increase their sense of belonging during hospitalization, and eliminate the strangeness of patients to the hospital environment. So as to establish a good relationship between nurses and patients.

Preoperative psychological intervention: a series of blood routine, liver and kidney function and imaging examinations were performed by nursing staff to assist doctors before operation, and patiently explained to patients the advantages of each examination, such as X-ray film, color Doppler ultrasound, CT and other examinations, which could effectively observe the location and distribution of stones and eliminate patients' concerns. For patients with severe urinary tract infection or hydronephrosis, drainage should be carried out before operation, and surgery should be arranged according to the situation.

Intraoperative psychological intervention: before the operation, explain to the patients in detail why the position needs

to be changed during the operation, so as to enhance the patients' trust and cooperation during the operation. Assisting patients to change their position during the operation can increase their comfort, on the other hand, make the stone clearly visible and easy for doctors to operate. It is also necessary to closely observe the changes of vital signs of patients during the operation, and to enhance their confidence in treatment with encouraging words.

Postoperative psychological intervention: the patients were transferred to the ward after operation, and the nursing staff conducted a round examination every 3 hours, recorded the changes of vital signs of patients, observed the color change of drainage fluid, explained the role of catheterization in detail, told the patients to stay in bed, asked the patients about the degree of subjective pain and gave words comfort, and took corresponding analgesic treatment according to the degree of pain.

1.3 Observation indicators and evaluation criteria

Quality of life: before and after nursing, the patients' quality of life was evaluated by the comprehensive quality of life assessment questionnaire, including social function (20-100 points), physical function (20-100 points), psychological function (20-100 points), material life status (16-80 points), and the score was proportional to the quality of life.

Pain degree and sleep quality: before and after nursing, the pain degree of patients was evaluated by numerical pain rating scale (NRS), the total score was 0-10 points, 0 points indicated no pain, 10 points represented the most pain, patients selected a number according to their pain degree; At the same time, the Pittsburgh Sleep Quality Index (PSQI) was used to evaluate the sleep quality of patients, including 7 aspects of sleep quality, sleep time, sleep time, sleep efficiency, hypnotic drugs, sleep disorders, daytime dysfunction, a total of 18 scoring items, the full score was 0-21 points, the score was inversely proportional to the sleep quality.

The score was inversely related to the quality of sleep. Before and after nursing, the patients' self-management ability was evaluated according to the self-management ability scale, including 6 aspects of urine monitoring, special diet, general diet, medication compliance, exercise and foot care, a total of 11 scoring items, each item was 0-7 points, and the score was proportional to the self-management ability. Using Hamilton anxiety scale (HAMA) and Hamilton depression scale (HAMD) to evaluate the degree of anxiety and depression in patients with, including HAMA anxious mood, tension, fear, insomnia, cognitive function, body 14 content such as anxiety, the score of 0 ~ 4 5 grading method, a total of 29 or divided into possible serious anxiety; A total score of ≥ 29 was defined as possible severe anxiety, and ≥ 21 was defined as obvious anxiety. A score of 14 or more points to definite anxiety; A score of 7 is likely to be anxious; A score of < 7 is no anxiety. HAMD included 17 items such as depression, guilt, difficulty falling asleep, not sleeping deeply, waking up early, work and interests, etc. The total score < 7 was defined as normal. 7-17 was considered as possible depression; $> 17-24$ points definitely have depression; > 24 points to severe depression.

Nursing satisfaction: The self-made hundred mark satisfaction survey scale was used to evaluate the nursing satisfaction of patients, including the quality of nursing work and family nursing satisfaction. The total score > 85 points was very satisfied, 60-85 points were satisfied, < 60 points were dissatisfied, nursing satisfaction = very satisfied rate + satisfaction rate. The reliability and validity of the scale were good.

Complications: the occurrence of complications such as lumbar pain, gross hematuria, double J tube displacement and bladder irritation was observed and counted.

1.4 Statistical methods

Kolmogorov-Smirnov test was used to test whether the data were normal distribution, and independent sample t test was used. $P < 0.05$ was considered statistically significant.

2. Results

2.1 Comparison of quality of life between the two groups before and after nursing

After nursing, the scores of all dimensions of GQOLI-74 of the two groups increased, and the scores of the psychological intervention group were higher than those of the routine intervention group, and the differences were statistically significant ($P < 0.05$).

2.2 Comparison of pain degree and sleep quality between the two groups before and after nursing

After nursing, two groups of NRS, PSQI scores were lower, and the psychological intervention group is lower than conventional intervention group ($P < 0.05$).

2.3 Comparison of self-management ability and depression degree of patients between two groups before and after nursing

After nursing, the self-management ability scores of the two groups increased, and the HAMA and HAMD scores decreased, and the psychological intervention group was better than the routine intervention group ($P < 0.05$).

2.4 Comparison of nursing satisfaction between the two groups

The nursing satisfaction of the psychological intervention group was higher than that of the routine intervention group, and the difference was statistically significant ($P < 0.05$).

2.5 Comparison of complications between the two groups

The total incidence of complications in the psychological intervention group was lower than that in the routine intervention group ($P < 0.05$).

Table 1. The incidence of complications was compared

Group number of cases	Waist swelling	pain	hematuria	displacement	bladder irritation	sign	Other incidence
Routine intervention group	82	2/2.44	1/1.22	1/1.22	4/4.88	7/8.54	18.29
Psychological intervention group	93	1/1.08	0/0.00	0/0.00	1/1.08	2/2.15	4.3
$X^2=8.814$							
$P=0.003$							

3. Discussion

Urinary calculi is one of the common diseases in urology. Patients with urinary calculi are often accompanied by pain symptoms, which are difficult to endure when the disease is severe. Targeted and effective nursing intervention can improve the psychological state of patients to a certain extent and promote their early recovery. The results of this study showed that after nursing, the scores of all dimensions of GQOLI-74 in the psychological intervention group were higher than those in the conventional intervention group ($P < 0.05$), indicating that this kind of nursing intervention can improve the quality of life of patients.

Urinary calculi have a high incidence and recurrence rate. Due to the need for hospitalization and the unknown treatment, patients are easy to produce different degrees of anxiety and depression, and at the same time, their sleep quality also decreases. In this study, the sleep quality of patients with urinary calculi decreased, anxiety, depression and other adverse psychological states aggravated during the treatment, but after receiving stage psychological nursing, the sleep quality, anxiety and depression of patients were significantly improved. By establishing good nurse-patient communication, staged psychological nursing can relieve patients' anxiety and depression, improve sleep quality, maintain adequate sleep, ensure the body's vitality, maintain normal daily life and work, and is conducive to postoperative rehabilitation. Due to the surgical trauma and catheterization in patients with urinary calculi after surgery, their self-management ability can be reduced. In this study, patients with urinary calculi were treated with routine nursing and staged psychological nursing. The results showed that staged psychological nursing had a better effect on the improvement of patients' self-management ability, anxiety and depression, and could reduce the incidence of complications and improve nursing satisfaction. Patients with urinary calculi need catheterization after surgery. Due to long time bed rest, it is easy to be accompanied by postoperative complications such as lumbago, gross hematuria, bladder irritation and so on. Therefore, taking appropriate nursing measures during this period can effectively reduce the incidence of complications and promote the rehabilitation of patients.

4. Summary

Staged psychological nursing can help improve the quality of life, self-management ability and nursing satisfaction of patients with urinary calculi, relieve anxiety and depression, and reduce the incidence of complications.

References

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