

Analysis on the Effect of Holistic Nursing Intervention in Patients Undergoing Bone Trauma Surgery

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Keywords: Bone trauma, Nursing, Intervention treatment, Rehabilitate

Abstract: This article mainly explores the clinical nursing effect of holistic nursing intervention, rehabilitation nursing and functional exercise on postoperative patients with bone trauma surgery. In this article, 120 patients with bone trauma in a hospital were randomly divided into test group and general group (60 cases in each group). Patients in the general group were given routine orthopedic nursing intervention after operation, while patients in the test group were given targeted comprehensive rehabilitation exercise on the basis of routine nursing intervention. The experimental results show that the hospitalization time of patients in the test group is shorter and the fracture healing time is shorter; The incidence of adverse reactions was 4.85%, which was significantly lower than that of patients in the general group (21.87%). All the data were significantly different from those of the general group ($P < 0.05$), and the effect of the test group was better. The results show that rehabilitation nursing and functional exercise can shorten the rehabilitation time of patients with bone trauma and improve the effect of functional rehabilitation. And it can effectively reduce the incidence of postoperative complications and improve the quality of life of patients. This method has a positive role in promoting the recovery of patients, and it is worth popularizing and applying in clinic.

1. Introduction

Bone trauma is common in orthopedics, and the main causes of bone trauma are traffic accidents, falling from a height and accidental falls[1]. According to the location of the injury, it can be subdivided into different types of diseases, most of which are caused by external attacks on bones or joints and surrounding tissues[2]. Patients can judge the type and condition of bone trauma by CT or X-ray and MRI, and take symptomatic treatment after determining the degree of trauma, such as acupuncture, massage, oral medicine and surgery. The vast majority of patients need surgical treatment after injury, and whether patients can recover as soon as possible after operation has a great relationship with their postoperative rehabilitation nursing. With the continuous development of clinical medical technology and the continuous improvement of people's living standards, patients' requirements for treatment and nursing are also increasing, but the rehabilitation effect of patients with bone trauma is not ideal because of the great limitations of conventional nursing measures[3]. The purpose of bone trauma surgery is to restore patients' normal life and joint function, but in fact, patients are prone to complications such as venous thrombosis, constipation, pressure sore and so on because they need to stay in bed for a long time after surgery, and the recovery of joint function is not good. There are many reasons that affect patients' rehabilitation after operation, so it is necessary to pay attention to patients' rehabilitation nursing intervention after operation[4]. Only a scientific rehabilitation training can effectively improve the recovery effect of patients and shorten the recovery period. In clinic, patients with bone trauma are usually given routine nursing measures, which can ensure the postoperative recovery effect of patients, but it is not helpful to improve the recovery speed of patients, and the recovery of quality of life of patients after treatment is relatively limited[5].

For patients with bone trauma undergoing surgery, it is necessary to cooperate with good nursing

intervention measures after surgery in order to reduce the incidence of complications and improve the prognosis[6]. With the continuous development of medicine, professional rehabilitation instruments and perfect rehabilitation programs have brought great effects on patients' rehabilitation[7]. In order to better improve the postoperative recovery effect of patients with bone trauma surgery, relevant medical experts put forward to implement rehabilitation nursing and functional exercise on the basis of routine nursing for patients[8]. Many studies show that patients with bone trauma receive careful and systematic rehabilitation nursing and functional exercise after operation, which plays an important role in improving blood supply and promoting the recovery of joint function[9]. Compared with routine nursing, postoperative rehabilitation exercise for patients with bone trauma surgery can improve their clinical efficacy, reduce the probability of surgical complications and improve their postoperative quality of life[10]. In this study, 120 patients with bone trauma surgery in a hospital were randomly selected, and the clinical nursing effect of holistic nursing intervention, rehabilitation nursing and functional exercise on patients with bone trauma surgery after operation was mainly analyzed. 120 patients were randomly divided into test group and general group, and the general group received routine orthopedic nursing intervention after operation. Patients in the test group were given targeted comprehensive rehabilitation exercise on the basis of routine nursing intervention. In this article, the recovery of joint function, the improvement of postoperative pain and the length of hospitalization of the two groups were compared and analyzed. The details are as follows.

2. Data and Methods

2.1 Material

120 patients with bone trauma who received surgical treatment in a hospital were selected as the research object. In order to explore effective nursing methods, this study randomly divided them into groups. They were divided into test group with routine nursing intervention and test group with holistic rehabilitation nursing and functional exercise, with 60 cases in each group. In the test group, there are 38 male patients and 22 female patients, with an average age of 35.2 1.5 years, ranging from 18 to 60 years old. In the general group, there are 36 male patients and 24 female patients, with an average age of 35.9 1.8 years, ranging from 18 to 59 years. Comparing the general data of patients between the two groups, there was no statistical significance ($P>0.05$), which was comparable.

The inclusion criteria are as follows: after TC examination and X-ray examination, the patient was diagnosed as traumatic fracture; Patients undergo elective or emergency surgery; Patients volunteered to participate in the study.

Exclusion criteria: the patient has coagulation mechanism disorder; The patient has liver and renal insufficiency; Patients' compliance is poor; The patient is seriously ill and unconscious.

2.2 Method

Routine nursing care of orthopedic surgery was given to two groups of patients during perioperative period. When the patient completes the surgical treatment and returns to the ward, the nursing staff should help him to remove the occipital supine position and raise his affected limb slightly. Among them, patients in the general group were given routine nursing methods. Its main contents include routine basic nursing, posture nursing, psychological intervention, health education, anti-infection nursing and so on. After the patient is admitted to the hospital, the patient's condition is evaluated, health education is carried out, basic care is given to the patient, and a good ward environment is created for the patient. Patients in the general group were monitored for their vital signs after operation, and their face and body temperature were observed. If the routine indexes were abnormal, they should be reported to the attending doctor for diagnosis in time.

Patients in the test group were treated with holistic nursing intervention, which mainly included rehabilitation nursing and functional exercise.

(1) Psychological aspects. In the specific implementation process, psychological care should be

given to patients first. Postoperative patients usually have pain, discomfort and worry, and their acceptance of rehabilitation exercise is low. In general, patients' understanding of rehabilitation exercise is insufficient, which leads to relatively poor compliance, which is not conducive to patients' postoperative recovery. It is necessary for nurses to actively communicate with patients and promote patients to explain their psychological concerns[11]. Secondly, inform patients of the important role of postoperative functional exercise in disease recovery, explain the role of muscle strength in postoperative recovery of joint stiffness, guide patients to carry out appropriate limb functional exercise, control the number and intensity of exercise, and avoid the occurrence of previous situations.

(2) Technical aspect: After the patient has established the confidence of mindfulness training, the nursing staff should help the patient to exercise joint function under the permission of physical conditions. Firstly, the patient's condition is evaluated and a rehabilitation training plan is made for the patient as soon as possible. In its early rehabilitation exercise, passive ways were used to help patients train, such as turning over regularly for patients and promoting blood circulation by massage. Exercise intensity should not be too strong, and it is advisable not to cause pain to patients. After patients can contract their muscles independently, they should be given targeted exercise, and nursing staff should guide patients to carry out rehabilitation exercise. The test group carried out rehabilitation exercises with different degrees and resilience according to different fracture types of patients. According to the patient's daily recovery, the intensity of rehabilitation exercise is improved, and the transition is made from passive training-active activity training-getting out of bed training-walking training-daily activity training. Patients are required to complete it with the assistance of nursing staff or their families to avoid injury caused by improper exercise.

(3) Continuous functional exercise: The rehabilitation process of bone injury surgery is long, which requires patients to cultivate their bodies for a long time and pay attention to scientific rehabilitation in daily life in order to achieve the best therapeutic effect. Therefore, during hospitalization, nurses need to track patients' rehabilitation exercise and record their recovery, and compare patients' recovery with patients in routine care every day, so that patients can understand the significance of rehabilitation exercise and keep their enthusiasm for rehabilitation exercise. After discharge, the family members will supervise and guide the patients to exercise, and call the medical staff in time if they encounter any problems. Record and supervise the patient's functional training. After 6 months of treatment and nursing, the joint function score was used to evaluate the curative effect, and the clinical efficacy was divided into two levels: excellent and poor.

2.3 Effect Judgment and Data Statistics

Observe and record the fracture healing time and hospitalization time of the patients in the two groups. After the patients were discharged from the hospital for 6 months, make statistics and analysis on the treatment effect of the patients, and make a comparison between the two groups. In addition, this article uses SPSS software to do statistical processing on the research data of the subject, and uses chi-square and t to test the counting and measuring data, and the output results are described in the form of rate (%) and ($\pm s$). $P < 0.05$, which shows that the research data are obviously different and have statistical significance.

3. Result

3.1 Clinical Index of Patients

The experimental results show that the data of fracture healing time and hospitalization time in the test group are significantly lower than those in the general group, and the patients in the test group recover faster. There was a significant difference ($P < 0.05$). See Table 1 for details.

Table 1 Comparison of Clinical Indexes between Two Groups of Patients

| Group | Number of cases | Fracture healing time | Length of stay |
|---------------|-----------------|-----------------------|------------------|
| General group | 60 | 14.12 \pm 3.36 | 24.01 \pm 3.26 |
| Test group | 60 | 11.03 \pm 1.25 | 17.98 \pm 3.16 |

| | | | |
|---|---|--------|--------|
| t | - | 4.2301 | 6.8978 |
| P | - | <0.05 | <0.05 |

3.2 Functional Recovery of Patients

See Table 2 for the functional recovery of the two groups of patients.

Table 2 Comparison of Functional Recovery between the Two Groups

| Group | Number of cases | Good | Discrepancy | Excellent rate |
|---------------|-----------------|------|-------------|----------------|
| Test group | 60 | 55 | 5 | 91.7% |
| General group | 60 | 41 | 19 | 68.3% |
| χ^2 | - | - | - | 16.198 |
| P | - | - | - | <0.05 |

According to the data in the table, the excellent and good rate of functional recovery in the test group was significantly higher than that in the general group. The difference was significant ($P < 0.05$).

3.3 Incidence Rate of Adverse Reactions

The incidence of adverse reactions in the test group was 4.85%, which was significantly lower than that in the general group (21.87%). There was significant difference between the two groups ($P < 0.05$). See Table 3 for details.

Table 3 Comparison of The Incidence of Adverse Reactions between the Two Groups

| Group | Constipation | Venous thrombosis of lower extremity | Pressure sore | Incidence rate |
|---------------|--------------|--------------------------------------|---------------|----------------|
| Test group | 1.58% | 3.27% | 0.00% | 4.85% |
| General group | 6.54% | 10.35% | 4.98% | 21.87% |
| χ^2 | - | - | - | 8.276 |
| P | - | - | - | <0.05 |

4. Discussion

With the rapid development of social economy, the number of patients with bone trauma caused by various accidents is on the rise, so how to improve the therapeutic intervention effect of such patients has become a hot field in orthopedic research. Bone trauma mostly occurs in the joint, which is the main position of people's limb function movement. If trauma occurs, it will lead to movement difficulties in daily activities and seriously affect the quality of life of patients. Among them, patients with limb fractures are prone to bad mood and complications such as deep venous thrombosis and pressure sore of lower limbs when their recovery speed is slow after operation, which seriously affects their postoperative recovery. The conventional treatment of bone trauma is surgery, but surgery is traumatic, and patients need a period of rest after surgery to return to normal life and work. During the recovery of patients after operation, nursing methods are very important for the speed and effect of fracture healing. Clinically, the postoperative nursing effect will directly affect the treatment effect and rehabilitation effect of patients, so improving the postoperative nursing effect of patients is the key to promote patients' rapid recovery. Clinical rehabilitation nursing combined with functional exercise for patients with bone trauma after operation can effectively improve the recovery of physical function of patients after operation, so that patients can gradually restore limb function. Through psychological rehabilitation and cognitive rehabilitation nursing, patients' negative emotions are reduced, and the importance of active rehabilitation exercise is recognized, thus improving patients' compliance with rehabilitation nursing and promoting patients' recovery as soon as possible. Through targeted functional exercise, the joint function of patients can be effectively improved, the occurrence of various complications can be reduced, the prognosis can be improved, and patients can recover as soon as possible. Based on this, this study focuses on the holistic nursing intervention of patients undergoing bone trauma surgery, and helps patients improve their postoperative rehabilitation effect by means of rehabilitation nursing and exercise.

The results of this study show that the hospital stay and fracture healing time of patients in the test group are shorter than those in the general group through rehabilitation nursing and exercise ($P < 0.05$). Functional exercise and rehabilitation nursing can accelerate the blood circulation of the affected limb, improve the muscle strength of the affected limb, promote the recovery of the motor function of the affected limb faster and reduce the probability of surgical complications. This result shows that rehabilitation nursing and functional exercise have high clinical application value in promoting postoperative rehabilitation and all recovery time. At the same time, this study found that the test group using holistic nursing intervention recovered better, and the incidence of adverse reactions of patients was less, which could enable patients to reach the discharge standard as soon as possible and return to normal life as soon as possible.

It is also a gradual and persistent recovery process for patients to exercise their limbs after operation. The implementation of postoperative nursing intervention for patients is mainly to improve the effect of surgical treatment and relieve postoperative pain. Rehabilitation exercise and nursing methods can give targeted exercise and nursing care to patients after operation, and help patients recover joint function to the maximum extent; At the same time, it can improve the blood circulation of patients, reduce the incidence of postoperative complications and improve the quality of life of patients. In the follow-up of patients, it was found that the excellent and good rate of postoperative rehabilitation in the test group was significantly higher than that in the general group ($P < 0.05$), which suggested that rehabilitation nursing and exercise could also contribute to the quality of rehabilitation, improve the prognosis of patients and reduce the negative impact of fractures on the rest of their lives. It can be seen that targeted postoperative rehabilitation nursing and functional exercise can effectively improve the postoperative quality of life and comprehensive curative effect of patients with bone trauma surgery, and can promote their limb function to recover faster. This method is worth popularizing and applying in clinic.

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