

## Clinical nursing effect analysis of high quality nursing for patients with orthopedic artificial joint replacement

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**Keywords:** quality care; Orthopedic artificial joint replacement; Patients; Clinical nursing; Effect analysis

**Abstract: Objective:** To analyze the clinical nursing effect of high-quality nursing on patients with orthopedic artificial joint replacement. **Methods:** Selected 100 cases of orthopedic artificial joint replacement in our hospital, according to the random classification, divided the patients into control group and observation group, the 50 cases, control group using conventional nursing, the observation group use the high quality nursing care, compared two groups of patient care in the level of pain (I II III, IV level), the investigation of the two groups of patients in nursing comfort feeling (completely comfortable, more comfortable, uncomfortable), the final statistics in the early stage of the cure in patients with care, patient satisfaction of whole data. **Results:** The observation group the pain level comparison, I level have 24 cases, 16 cases of II, III level have 7 cases, IV level have 3 cases. In the control group the pain level, I level have 20 cases, 17 cases of III level, III level have 8 cases, IV level have 5 cases. In the observation group, 29 patients were completely comfortable, 19 were relatively comfortable, and 2 were uncomfortable, with an overall comfort rate of 96%. In the control group, 22 patients were completely comfortable, 20 were relatively comfortable, and 8 were uncomfortable, with an overall comfort rate of 84%. The overall satisfaction rate of patients in the observation group was 96%, and that of patients in the control group was 82%. There was significant difference between the two groups ( $P < 0.05$ ). **Conclusion:** High-quality nursing in orthopedic artificial joint replacement can make progress in the original nursing mode, innovate the nursing mode, and make patients feel comfortable, which is helpful to reduce the pain value of patients and has positive nursing significance

### 1. Introduction

Traditional orthopedic the use of artificial joint replacement only have ten years time, with advanced medical conditions, the progress of science and technology, orthopedic medical treatment to prolong life of artificial joint replacement in our country, the service life of artificial knee joint or hip joint is general in more than 25 years, most people can use the same life of artificial joint. If the patient's own movement is limited, the orthopedic artificial joint replacement can be considered, without long-term pain tolerance. Combined with orthopedic artificial joint replacement, high-quality nursing can improve the quality of life of the patient, reduce the patient's pain value as soon as possible, and improve the patient's comfort, which has certain nursing significance.

### 2. Materials and Methods

#### 2.1 General Materials

Selected our hospital orthopedic artificial joint replacement patients 100 cases were investigated, according to the random classification, divided the patients into routine nursing of 50 cases and 50 cases of high quality health care, from the aspect of gender distinction, the control group (33 male: female 17 cases, observation group of 32 cases of male: female 18 cases, from the aspects of age range, control group age height in 50 ~ 79 years old, and age level in observation group 55 ~ 82 years old, to distinguish from the average age of the statistics, the control group was (65.26 + 3.29)

years, average observer group average calculation result was (64.58 + / - 7.15). The patient underwent the orthopedic artificial joint replacement smoothly, and no postoperative joint dislocation or other problems occurred. The patient had no other surgical history, and was willing to cooperate with the nursing care.

## 2.2 Methods

Routine care:

(1) preoperative: to understand the patient's age, gender, etc, to understand time, medication history, and to feel pain, to ask patients in recent years or recent experience pain, pain in patients with value assessment, through clinical imaging diagnosis, joint gap size, intra-articular loose bodies, such as bone spur formation conditions, preoperative communication with patients, treatment, and the mechanism of how surgery patients with preoperative preparation, and explain the corresponding operation process with their families, alleviate the pressure of the patients and families of strange.

(2) intraoperative: assisted the surgeon and anesthesiologist in the corresponding work, observed various clinical monitoring indicators of patients, helped the patients put themselves in the right position, covered the non-surgical parts with blankets to keep warm, avoided excessive exposure of patients' skin, and protected patients' privacy, etc.

(3) postoperative: supplementary nutrition, the patient to carry out health education, to avoid blind patients do not change, according to the condition and according to the doctor ordered, strengthen the function of exercise and early activities, calcium loss should best be supplemented by food, food to milk as the most important source of calcium; Other foods rich in calcium include dried fish, shrimp, egg yolks, soy and its products (such as soy juice, soy peel, dried spiced beans), dark green vegetables, laver, black sesame, white sesame, yeast, etc.

Quality care:

(1) preoperative: after skin preparation, ask the patient to shower and change clothes and trim the nail. Fasting for 8 hours and water deprivation for 4 hours before surgery. Sleep well and give sedatives when necessary. On the morning of the operation, we assisted the patients to change the operation clothes, remove the denture, contact lenses, etc., hand over valuables to the family for safekeeping, and take the temperature, blood pressure and pulse. Carry out psychological care for patients, have cordial communication with patients, and ask patients' feelings, introduce successful cases of the operation in the past, and explain the possibility of the operation in advance, express the confidence and responsibility of medical staff, explain the operation time and cost related to the family.

(2) intraoperative: the same as the above routine, understand the surgical requirements of the doctor in advance and make preparations. Here is not the main part of the nursing, surgical simulation should be carried out in advance, so as to cooperate with the work.

(3) Postoperative: after anesthetic effect disappeared, began to do foot plantar flexion and back extension movement and quadriceps, gastrocnemius long contraction movement. Hold each movement for 5 to 15 seconds, relax for 5 to 15 seconds, and repeat. Starting from the 1st day after the operation, continue the active exercise method the day before and increase the functional exercise of straight leg lifting as appropriate.

Passive exercise: follow the doctor's advice to apply the knee joint continuous passive exercise instrument twice a day, 0.5 ~ 1 each time. 2 ~ 5 days after surgery, in addition to the above exercise methods, can guide the patient to sit up, assist the patient to move the legs to the bed, calf prolapse, knee natural bending, knee flexion by gravity, and begin to practice knee flexion, knee flexion exercise after adaptation. 3 ~ 7 days after the operation, the doctor instructed the patients to stand on the ground and gradually increased walking exercise. Psychological care was carried out for the patients, related to the patient's description of pain, the stability of catheterization was checked, the monitoring frequency was increased in the first three days, until the patient's indicators were stable, and the monitoring record was changed to once a day.

(4) guidance for discharge: For patients to illustrate the application of hospital carry medication

requirements, such as charged families remind patients medication, guiding introspection wound inflammation, abnormal in patients with fever, limb swelling and the increases of knee pain status, self feelings and wounds to check on a daily basis, in order to facilitate early detection of abnormality, check to the hospital, according to the way of hospital nursing training, nursing for patients in the family in continuous movement, but pay attention to mix a, don't do heavy housework activities, maintain the ideal weight, not in the postoperative regression family blindly supply, reduce to an activity, in indoor sports such as to avoid injury, keep hospital phone, Facilitate patient feedback and communication.

### 2.3 Observation Indexes

Compared two groups of patient care in the pain level (I, II, III, IV level), the survey of the two groups of patients in nursing comfort feeling (completely comfortable, more comfortable, uncomfortable), the final statistics in the early stage of the cure in patients with care, patient satisfaction of whole data.

### 2.4 Statistical Treatment

Excel software such as medical office under the discrete data statistics and classified count ( $X^2$  test, is used to infer that two or forming than there is difference between the overall rate), matching measurement data comparison between samples or groups (t test, observe the differences of this group of samples with overall),  $\bar{x}$  (average)  $\pm s$  (Standard Deviation) said mean add and subtract Standard Deviation, the small probability event of statistical quality control ( $P < 0.05$  said have significant difference (one hundred trials, the frequency is less than 5 times).

## 3. Results

Observation group pain level comparison, I level 24 cases, 16 cases of II, III level 7 cases, IV level 3 cases.

In the control group the pain level, I level 20 cases, 17 cases II, III level 8 cases, IV level 5 cases.

Table 1 pain grade classification of nursing stage of patients in the two groups

group	n	I	II	III	IV
the observation group	50	24	16	7	3
the control group	50	20	17	8	5
$X^2$	-	5.236	5.421	5.486	5.965
P	-	<0.05	<0.05	<0.05	<0.05

In the observation group, 29 patients were completely comfortable, 19 were relatively comfortable, and 2 were uncomfortable, with an overall comfort rate of 96%.

In the control group, 22 patients were completely comfortable, 20 were relatively comfortable, and 8 were uncomfortable, with an overall comfort rate of 84%.

Table 2 comparison of comfort in nursing stage between the two groups

group	n	completely comfortable	relatively comfortable	uncomfortable	overall comfort rate
the observation group	50	29	19	2	96%
the control group	50	22	20	8	84%
$X^2$	-	2.365	2.745	2.485	2.956
P	-	<0.05	<0.05	<0.05	<0.05

The overall satisfaction rate of patients in the observation group was 96%, and that of patients in the control group was 82%.

Table 3 satisfaction scores of patients in the two groups during nursing [n(%)]

group	n	satisfaction	general satisfaction	dissatisfaction	the satisfaction rate
the observation group	50	33	15	2	96%
the control group	50	27	14	9	82%
X <sup>2</sup>	-	3.275	3.475	3.159	3.845
P	-	<0.05	<0.05	<0.05	<0.05

#### 4. Discussion

At present, artificial joint replacement technology has been widely used in clinical, especially artificial hip joint and artificial knee joint are relatively mature. Equipment and materials in development, high quality nursing care of postoperative care, mainly for the preoperative should also be prepared to corresponding, pay attention to check the routine index of patients and psychological guidance, intraoperative situation compare quality of different patients, intraoperative care simulation should be ahead of time, in order to cooperate with the doctor in surgery more tacit understanding, in the postoperative recovery of key link, as a nursing home, should be combined with postoperative patients with specific situation to give guidance, grope for training, help patients find patients form of training, training plan, step by step, should be paid attention to during some patients psychological pressure is relatively large, movement disorders, Should not be directly to a large number of sports, but first body awareness, gradually control the body, should be combined with the conditions of time and the recovery of patients with postoperative exercise discretionary choice exercise and the length of time, as soon as possible to help patients restore movement function, and patients in stable, still need to return to the family, at this time, should not let themselves go, dealing with patients and care arrangements, requires patients to return to family after exercise in accordance with the requirements, using plain language to introduce the doctor's advice, at the same time, combining with the detail of weight to maintain and guide done, arranged for patients with review of the time, and in the relative time phone to remind, Perioperative, high quality nursing care should not only focus on the patient's physical condition, the patient's psychological activities is also very important, should communicate with their families, to avoid sympathetic to patients, such as psychology, should the surgery as a blessing to work opportunities, with common heart, ordinary tone to communicate with patients, the patients pain can try to distract the patient, introducing scientific knowledge of artificial joint replacement, let patients and families have scientific cognition, correctly self care. In this survey, quality care was adopted, specific conditions of patients were analyzed, relevant nursing conditions were added, and relevant requirements in routine nursing were refined. Patients' comfort was improved, pain was reduced, and overall satisfaction evaluation of nursing was also high. Orthopedic care should take patients' pain value and comfort as the main evaluation content, and pay attention to ask patients' opinions, understand patients' feelings, modify in quality care, bring patients more sound nursing experience.

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