

## Application of Quality Nursing Service in Patients Undergoing Total Hip Arthroplasty for Femoral Head Necrosis

Ding Wenqian, Gu Shanling, Feng Na, Xu Yan \*

The First Hospital of Jilin University, Changchun, Jilin, 130021, China

\*Corresponding Author

**Keywords:** Quality nursing service, Necrosis of femoral head, Total hip replacement, Application analysis

**Abstract:** Objective: To apply quality nursing services in the clinical treatment of patients with femoral head necrosis and total hip replacement, and to continuously improve the level of nursing services by analyzing the promotion value of quality nursing methods, so as to meet the actual needs of more patients and build a harmonious nurse-patient relationship. Methods: A total of 100 patients with femoral head necrosis who underwent total hip arthroplasty in our hospital from February 2018 to February 2019 were selected as the main observation subjects. Family communication was done in advance, and the patients were divided into experimental group A and experimental group B according to the scientific grouping principle. The conventional nursing effect of group A and the quality nursing effect of group B were compared and analyzed, and the effective statistics of the nursing service satisfaction of patients in the two groups were carried out. In order to reflect the existence value of different nursing methods, the incidence of complications during clinical treatment should be obtained. Results: The quality nursing effect of group B was better than that of group A. The nursing service satisfaction of group B was higher than that of group A. The incidence of complications was 6.49% in group B and 22.24% in group A. Conclusion: After a period of observation and comparison, the concept of quality nursing service has been continuously permeated. It is beneficial to optimize the nursing effect of total hip joint replacement for femoral head necrosis. It will also play a role in promoting the improvement of clinical nursing quality and the efficient implementation of diagnosis and treatment plan to widely promote high-quality nursing methods and always achieve “patient-centered”. Nursing staff should make full efforts in the supplement of quality nursing services, innovation of methods, accumulation of experience and other aspects, win the full trust of patients and their families, and usher in the new tomorrow of sustainable development of modern medical and health undertakings with the support of harmonious nurse-patient relationship.

### 1. Introduction

Femoral head necrosis is a very complex pathological evolution process, and the causes of osteonecrosis will not be eliminated, can not be completely repaired, for the normal life of patients, work and exercise all have adverse effects. Osteonecrosis of the femoral head can be remedied with total hip arthroplasty to help patients gradually regain mobility and improve quality of life. After the patients received femoral head necrosis and total hip arthroplasty, it is very important for the nursing staff to provide them with quality nursing services. The patients' postoperative recovery is concerned from different perspectives, and their families actively cooperate with the specific implementation of the nursing plan. Therefore, the diagnosis and treatment work is sure to get twice the result with half the effort. This paper mainly analyzes the application effect of quality nursing service to provide favorable conditions for other nurses to better accumulate nursing experience and continuously improve their professional level.

## **2. Materials and Methods**

### **2.1 General Materials**

All the 100 patients with femoral head necrosis were selected to participate in the investigation voluntarily. Examples were given to illustrate the significance of the experiment and the purpose of the study during the communication with their families. All the patients met the surgical requirements of total hip replacement, and were assigned to groups by professionals to perform specific operations according to the scientific grouping principle. After grouping: the ratio of male to female in group A was 31:19, and the age range was 30-75 years, with an average age of  $(45.16 \pm 3.33)$  years. The ratio of male to female in group B was 38:12, with an age range of 30-75 years, with an average age of  $(45.16 \pm 3.33)$  years. Other clinical data of patients in the two groups were not statistically significant ( $p > 0.05$ ). In addition, pregnant and lactating women, mental disorders, family history of heritage, and drug allergic reactions were excluded to ensure certain comparability of experimental results.

### **2.2 Methods**

The responsible, high quality and experienced nurses should be sent to provide safe and guaranteed nursing services for patients undergoing femoral head necrosis and total hip replacement. In experiment group A, the routine nursing method was used, which was mainly used for drug use guidance, ward inspection, family communication, etc., and education activities were regularly arranged, and the family members of the patients volunteered to participate. The quality nursing contents of experiment group B include:

- 1) instruct patients to make preoperative preparations and organize them to complete a series of adaptive exercises, such as routine ankle joint training. Comprehensive strengthening of disinfection and sterilization, efforts to reduce the possibility of cross-infection of patients. To understand the patients' different psychological problems in communication and communication, we can take remedial measures to remove their resistance and promote the continuous improvement of their surgical confidence. We can enumerate successful cases and patiently answer all kinds of questions raised by patients and their families, so as to shorten the relationship between nurses and patients and promote the diagnosis and treatment work smoothly.

- 2) monitoring the change of patient's vital signs during the operation, cooperating with the doctor to complete the operation, and checking the patient's breathing, heart rate, complexion, etc. After the end of the operation. After the operation, ward patrol was strengthened, and the patients were found to have bad conditions such as blood and liquid seepage in the surgical incision. The first time the patient contacted the doctor for disinfection treatment, which effectively prevented the deterioration of the situation. Listen to patients' subjective feelings carefully, pay attention to use simple and understandable language, express the pain to patients and their families is a normal reaction after the operation, encourage them to work actively and optimistically, or watch TV to distract their attention, also can participate in interested cultural and sports activities.

- 3) with regard to complication care, nurses should adhere to the "patient-centered" service purpose, try to understand them, trust them and give them the greatest respect. Combined with the physical health status of different patients, we can prevent the common complications such as lung infection, bedsores, deep venous embolism of lower limbs and joint disconnection in advance, and put forward a reasonable prevention and treatment plan to satisfy the patients' families and reflect the existence value of quality nursing services. In addition, pay attention to diet care and exercise training, according to the actual needs of different patients arrange corresponding activities, strictly control the time of activities, to promote the recovery of patients' joint function.

### **2.3 Effect Observation**

To observe and analyze the nursing quality after total hip arthroplasty in group A and group B, the higher the known nursing quality score, the more obvious the nursing effect. The patients' satisfaction with nursing services and the incidence of postoperative complications were compared.

Professional software SPSS22.0 was used to process the relevant data. The data in the table were expressed as mean standard deviation and tested with 2.  $P < 0.05$  means the comparison results were statistically significant.

### 3. Results

Comparative analysis of the nursing quality and nursing effect of the two groups of patients undergoing total hip arthroplasty for femoral head necrosis was conducted, as shown in table 1 below:

Table 1: Nursing Quality and Nursing Effect of Patients

group	n	nursing quality	nursing efficiency
Group A	50	65.89±10.02	34(68.77%)
Group B	50	81.44±12.75	45(90.28%)
$\chi^2$		9.192	5.006
p		<0.05	<0.05

Investigation Results of Nursing Service Satisfaction after Total Hip Arthroplasty for Femoral Head Necrosis in the Two Groups Were Calculated, as Shown in Table 2 Below:

Table 2: Nursing Service Satisfaction of Patients

group	n	satisfied	generally satisfied	dissatisfied	satisfaction rate
Group A	50	24(48.76%)	14(28.01%)	12(23.23%)	38(76.77%)
Group B	50	36(72.21%)	11(21.79%)	3(6.00%)	47(94.00%)
$\chi^2$		5.450	4.112	3.097	5.882
p		<0.05	<0.05	<0.05	<0.05

After total hip arthroplasty for 100 patients with femoral head necrosis, there was a significant difference in the incidence of complications due to different types of nursing services, as shown in table 3 below:

Table 3: Complication Rates of the Patients

group	n	lung infection	pressure ulcers	DVT	dislocation	occurrence rate
Group A	50	4(8.02%)	3(5.77%)	2(4.35%)	2(4.10%)	11(22.24%)
Group B	50	2(4.00%)	1(2.49%)	0(0.00%)	0(0.00%)	3(6.49%)
$\chi^2$		3.011	3.275	3.224	3.109	5.288
p		<0.05	<0.05	<0.05	<0.05	<0.05

### 4. Discussion

Osteonecrosis of femoral head is a common disease. Because of its high incidence and adverse effects on the daily life and normal work of patients, clinical research on relevant treatment methods has been in-depth. Although surgery has certain risks, at present, surgical treatment for femoral head necrosis is relatively effective. With the development of modern medical technology, total hip replacement has attracted more and more people's attention. It not only plays the advantages of less trauma and faster recovery, but also greatly improves the success rate of surgical operations. Specifically providing high-quality nursing services for patients undergoing femoral head necrosis and total hip replacement is a kind of investigation on the working ability of nursing staff, which requires them to make more efforts to consider the patients from different levels and perspectives, so as to maintain a very harmonious nurse-patient relationship. This study, the effect of high quality nursing service of the experimental group B is better than experimental group A, there are many disadvantages of the application of conventional nursing way, by improving the deficiency, the continuous optimization of solution, at the same time involving diet management, health education, family communication, training, etc., can promote patients' recovery and rehabilitation discharge at an early date. In high quality nursing service concept penetration, nursing staff always adhere to the "patient-centered" principle of work, learn professional knowledge seriously, to enhance the level of operation, effectively reduce the femoral head necrosis, the incidence of complications after total

hip replacement patients, diagnosis and treatment work orderly goes ahead, the hospital can establish a good social image.

## References

- [1] Wang Yue. Evaluation of the effect of quality nursing services on the prevention of complications after total hip replacement for patients with femoral head necrosis. *Chinese and Foreign Health Digest*, vol. 20, no. 11, pp. 45-47, 2018.
- [2] Jiang Kaixuan. Quality care after total hip replacement for patients with femoral head necrosis. *Chinese and Foreign Medicine*, vol. 25, no. 7, pp. 60-61, 2019.
- [3] Yang Tingmei. Application of quality nursing service model in the nursing of patients with orthopaedic artificial joint replacement. *Contemporary Nurses*, vol. 8, no. 4, pp. 299-299, 2019.
- [4] Wang Zhifeng. Effect evaluation of quality care combined with systematic sexual function training in total hip replacement for femoral head necrosis. *Chinese Modern Doctor*, no. 14, pp. 129-131, 2015.
- [5] Che Xiaolin. Application of quality nursing service in patients undergoing total hip replacement for femoral head necrosis. *Chinese Journal of Chinese Medicine*, vol. 28, no. 4, pp. 104-105, 2016.
- [6] Huang Xuan. Quality nursing service for patients undergoing total hip replacement for femoral head necrosis. *Chinese and Foreign Medicine*, vol. 10, no. 16, pp. 153-154, 2014.
- [7] Chen Yanqin. Application of quality nursing service in total hip replacement for femoral head necrosis. *Journal of Baotou Medical College*, no. 6, pp. 139-140, 2016.
- [8] Wu Juehui, Chen Zhizhe, Feng Haiyan. Effect analysis of high quality nursing in total hip replacement for patients with femoral head necrosis. *Modern Diagnosis and Treatment*, no. 24, 2016.
- [9] Mao Sufang. Application of quality nursing service in total hip replacement for femoral head necrosis. *Frontiers of Medicine*, no. 18, 2017.
- [10] Qu Shanrong. Application of quality nursing service in total hip replacement for femoral head necrosis. *China Health & Nutrition*, vol. 24, no. 2, pp. 844-845, 2014.