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Nursing Care for Post Op Orif Femur Fracture Patients with Ambulation Support Interventions in the Special Surgery Room Rsud Jenderal Ahmad Yani Metro Year 2024

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ABSTRACT

Background and Objectives: Femur fractures are one of the leading causes of complications and death that require proper management to prevent morbidity, complications, and accelerate patient recovery. The management of femur fractures includes pharmacological and non-pharmacological approaches, one of which is ambulation support. The purpose of this scientific work is to describe nursing care in postoperative patients with femur fractures through innovative ambulation support interventions. **Methods:** This research design uses a case study on a postoperative patient with a femur fracture, with early ambulation interventions carried out every day for 3 days of care. **Results:** The results showed increased left limb mobility, decreased edema, and tingling, and decreased pain intensity from scale 5 to scale 3 after 3 days of treatment. **Conclusion:** Early ambulation as part of postoperative management of femur fracture is effective in reducing pain, improving mobility, and accelerating patient recovery. This approach can be adopted in nursing practice to improve the postoperative rehabilitation process.

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Introduction

Femur fractures are serious injuries that can occur in all age groups, but are more common in elderly individuals, with a global incidence of approximately 1.6 million cases per year (World Health Organization, 2023). In Indonesia, data from the Ministry of Health records approximately 25,000 cases of femur fractures each year, with 40% of these requiring surgical intervention such as Open Reduction and Internal

Fixation (ORIF) (Ministry of Health of the Republic of Indonesia, 2023). Femur fractures are often caused by blunt trauma, motor vehicle accidents, or conditions such as osteoporosis.

The ORIF procedure is a commonly used surgical method to repair femur fractures with a high success rate. However, despite its aim to repair the bone structure, the procedure can cause significant physical mobility impairments post-surgery, such as pain and movement limitations. This requires special attention in recovery and optimal nursing support (American Academy of Orthopaedic Surgeons, 2023).

Treatment approaches for postoperative mobility recovery involve pharmacologic and non-pharmacologic therapies. Analgesics and anti-inflammatories are used to manage pain, while physiotherapy and ambulation support can help speed up recovery. Early ambulation in postoperative patients is essential to improve blood circulation, prevent complications, and accelerate recovery of limb function (Smith et al., 2017).

However, many postoperative femur fracture patients experience significant anxiety and fear associated with movement, which can hinder their recovery process. Studies show that approximately 40% of patients experience postoperative anxiety, potentially impairing their ability to initiate ambulation (Smith et al., 2017). Therefore, nursing interventions that focus on ambulation support are necessary to ensure optimal recovery for patients.

At RSUD Jenderal Ahmad Yani Metro, ORIF procedures for femur fractures are performed quite frequently, but ambulation support has not been provided optimally. This study aims to describe nursing care for patients after ORIF surgery for femur fracture with ambulation support interventions in the Special Surgery Room of RSUD Jenderal Ahmad Yani Metro in 2024.

Objective

The purpose of this case study was to determine the nursing care for patients with post op orif femur fracture with ambulation support interventions in the special surgery room at the General Ahmad Yani Metro Hospital in 2024.

Method

This research is a descriptive study using a case study method. The client in this case is Mrs. S, a 65-year-old female diagnosed with a distal 1/3 fracture of the left femur (os femur sinistra). The client underwent an Open Reduction Internal Fixation (ORIF) procedure and experienced problems related to impaired physical mobility. The nursing process followed standard steps, including assessment, diagnosis, intervention, implementation, and evaluation. Data collection was conducted through interviews with the client to obtain necessary information, followed by direct observation of the implementation of ambulation support techniques and the patient's responses during the monitoring period. All findings were documented and compiled into a nursing care report.

Results

On June 30, 2024, an assessment was conducted on Mrs. S, a 61-year-old female patient admitted to the Special Surgery Ward of RSUD Jenderal Ahmad Yani Metro.

The patient presented with a diagnosis of right femur fracture (femur dekstra) postoperatively, two days after a motorcycle accident on June 28, 2024. The accident involved a collision with a car, and the patient was immediately brought to the hospital for further treatment, including surgical repair of the fractured femur. During the assessment, the patient reported intense pain around the surgical wound, with numbness and tingling radiating from the thigh to the tip of the left foot. Additionally, the patient experienced swelling (edema) in the left lower extremity. The pain was intermittent, rated at a pain scale of 5, and worsened with movement.

The patient's general condition was weak, but she was alert, with a Glasgow Coma Scale (GCS) score of 15 (E: 4, M: 6, V: 5). Vital signs showed a blood pressure of 135/85 mmHg, pulse rate of 101 bpm, body temperature of 36.4°C, respiratory rate of 20 breaths per minute, and oxygen saturation of 98%. The patient had an IV line of Ringer Lactate at 20 drops per minute on the left upper extremity to support recovery. Although the patient was conscious and stable, the primary complaint was impaired physical mobility due to the fracture injury and postoperative recovery.

Data analysis and identification of nursing problems for Mrs. S resulted in several nursing diagnoses based on the Indonesian Nursing Diagnosis Standards (SDKI, 2017). One of the main issues identified was impaired physical mobility related to bone structure damage following the ORIF procedure for a right femur fracture. The main goal of the ORIF procedure for Mrs. S was to repair and stabilize the femur fracture. While this procedure is effective in structural repair, it presents several challenges that affect the patient's physical mobility (Doenges et al., 2019).

Postoperatively, the patient showed edema around the surgical area, which limited her range of motion and increased discomfort. Muscle weakness due to reduced physical activity during recovery further worsened her mobility issues. The patient also expressed anxiety about movement, fearing that it might worsen her condition. This fear contributed to reduced physical activity, posing challenges to her recovery process. To address the issue of impaired physical mobility, appropriate interventions are needed, focusing on improving the patient's ability to move. Early mobilization can help strengthen muscles, reduce edema through improved blood circulation, and boost the patient's confidence in her ability to recover. Therefore, nurses must facilitate patient movement in a safe and controlled manner, adhering to postoperative safety principles (Gulanick & Myers, 2021).

Recommended interventions include optimal pain management, physical therapy to enhance range of motion, and patient education on the importance of light movement to prevent further complications such as contractures or embolism. Early initiation of physical therapy can also accelerate the healing process and improve long-term postoperative outcomes. Additionally, nurses must regularly monitor the patient's vital signs to detect any changes requiring immediate medical attention (Lewis et al., 2022).

During the recovery period, nurses routinely evaluated Mrs. S's condition to ensure the effectiveness of the interventions provided. The patient's physical mobility

began to improve following regular physical therapy and effective pain management. The patient also demonstrated increased confidence in performing light movements, although assistance was still needed for some activities. Continued care should focus on long-term recovery. The patient still requires support in managing pain and swelling and must continue physical exercises to improve muscle strength and range of motion in the left lower extremity. Ongoing education on the importance of maintaining mobility and recognizing signs of complications is also a vital part of the care plan (Smeltzer et al., 2016).

Final Outcome:

Mrs. S showed improvements in physical mobility, although the recovery process is lengthy and requires ongoing care. The success of these interventions relies heavily on strong cooperation between the patient, family, and medical team, as well as attention to the details of daily care (Doenges et al., 2019).

Impaired physical mobility is a significant nursing problem for postoperative femur fracture patients. In Mrs. S's case, appropriate interventions—including pain management, early mobilization, and physical therapy—proved effective in enhancing the quality of recovery. Applying nursing interventions in accordance with professional care standards helps minimize the risk of complications and speeds up physical recovery. Continuous monitoring and evaluation are necessary to ensure the patient achieves optimal mobility and to prevent long-term problems (Brunner & Suddarth, 2020).

Discussion

In Mrs. S's case, the interventions focused on postoperative care for a femoral fracture, addressing the primary issue of impaired physical mobility. Mrs. S experienced various complaints, including pain, edema, tingling, and difficulty moving following the ORIF (Open Reduction Internal Fixation) surgery. These findings highlight the importance of effective pain management and early rehabilitation in accelerating patient recovery and reducing the risk of further complications such as muscle atrophy, venous thrombosis, and a decline in overall quality of life (Brunner & Suddarth, 2020).

Early ambulation, as a recommended nursing intervention, plays a critical role in Mrs. S's recovery process. As supported by various literature, early ambulation helps improve blood circulation, reduce edema, and maintain muscle strength. This process also helps prevent long-term complications such as venous thrombosis and the risk of blood clots in postoperative patients. Physical rehabilitation initiated immediately after surgery has been proven to relieve tension in the muscles and joints, thereby speeding up the healing process (Doenges et al., 2019).

After three days of early ambulation with the assistance of the physiotherapy team, Mrs. S's condition showed significant improvement. Edema in the left extremity decreased, the tingling sensation subsided, and the pain that previously interfered with her activities became more manageable. Increased muscle strength and range of motion indicated the success of the rehabilitation therapy. Furthermore, Mrs. S began

to feel more confident in her movements, which positively impacted her anxiety regarding the healing process. It is important to note that high levels of anxiety in postoperative patients can worsen their physical condition, as fear of pain or immobility may hinder the rehabilitation process. Therefore, psychological care must also be an integral part of nursing interventions, including providing clear information about the recovery process and offering the emotional support the patient needs. A patient's confidence in moving is crucial for boosting motivation to undergo rehabilitation (NANDA International, 2021).

Additionally, the outcomes observed in Mrs. S's case are consistent with previous studies that have shown early mobilization and care focusing on pain management can accelerate recovery and improve the quality of life in postoperative patients. Thus, early ambulation should be an integral part of postoperative care protocols for patients with femoral fractures to prevent further complications and improve long-term outcomes (Gulanick & Myers, 2021).

However, despite the significant improvements in Mrs. S's condition, ongoing monitoring is necessary to ensure the recovery process continues effectively. The success of rehabilitation depends not only on physical interventions but also on emotional support and health education provided to the patient during the recovery period. Overall, the findings from this case emphasize the importance of a multidisciplinary approach in managing postoperative patients—addressing physical, psychological, and educational aspects to support optimal recovery through early mobilization and rehabilitation (Smeltzer et al., 2016).

Conclusion

The case of Mrs. S highlights the crucial role of effective pain management and early ambulation in accelerating postoperative recovery following a femur fracture. Appropriate interventions such as analgesic administration, early mobilization, and psychological support significantly reduce pain, edema, and tingling, while improving mobility and the patient's confidence. The success of Mrs. S's physical rehabilitation underscores the importance of a multidisciplinary approach involving nurses, physiotherapists, and physicians to deliver comprehensive and coordinated care. Continuous monitoring and the implementation of rehabilitation tailored to the patient's capacity are essential to ensure optimal recovery and prevent further complications.

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