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## NURSING CARE FOR CLIENTS WHO EXPERIENCE POST OPERATING FEMUR FRACTURES WITH ACUTE PAIN NURSING PROBLEMS IN THE BIMA ROOM, JOMBANG HOSPITAL

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### ABSTRACT

**Background :** Fracture is a break or damage to the continuity of bone tissue caused by an external pressure that is greater than can be absorbed by the bone.

**Method :** The research design was a case study using 2 postoperative femur fracture clients as subjects with acute pain nursing problems, nursing care was carried out for 3 consecutive days using cold compress therapy .

**Result :** The results of the study showed acute pain by administering cold compress therapy, the problem was resolved by reducing pain scale to mild pain scale.

**Analysis :** The results of the evaluation carried out by the researchers during the three days of treatment on both clients with postoperative femoral fracture problems found the diagnosis of acute pain was resolved .

**Conclusion:** Non-pharmacological management of postoperative fracture patients with pain is to use cold compress therapy. Giving cold compresses can reduce pain, increase the release of endorphins which block the transmission of painful stimuli.

**Keywords:** Postoperative Femur Fracture, Acute Pain, Cold Compress Therapy

## 1. INTRODUCTION

Fracture is a health problem with a high incidence which is one of the operative treatments performed (Rozi, Tekwan, & Nugroho, 2021). Fracture is a term for partial or complete loss of continuity of bone, cartilage. Fractures are fractures caused by direct or indirect trauma (Ihza, Tekwan, & Mu'ti, 2022). Several problems can affect the prognosis as well as the healing of surgical wounds and can be assessed based on the length of stay of fracture patients.

Fracture is a break in the continuity of bone tissue which is generally caused by pressure or trauma (Aulia, 2020). Fracture is defined as a condition in which the continuity of bone tissue is interrupted due to pressure or force on the bone due to blows, pulls, twists and pressures. Typical symptoms that can be felt directly from a fracture condition are pain that occurs due to muscle spasm, pressure from broken bones and because of damage to the tissue around the bone. If this condition is not treated properly, complications can occur, such as damage to blood vessels, and nerves, bone infection, or infection of the surrounding tissue, physical mobility, causing pain and swelling (Ikafah & Lestari, 2021).

The World Health Organization (WHO) in 2019 stated that the incidence of fractures is increasing, fractures have been recorded in approximately 15 million people with a prevalence rate of 3.2%. Fractures in 2017 there were approximately 20 million people with a prevalence rate of 4.2% and in 2018 it increased to 21 million people with a prevalence rate of 3.8% due to traffic accidents (Pratiwi AE, 2020). According to Desiartama & Aryana (2018), in Indonesia the most common fracture cases are femur fractures by 42% followed by humerus fractures by 17%, tibia and fibula fractures by 14% where the biggest cause is traffic accidents which are usually caused by car, motorcycle accidents or recreational vehicles by 65.6% and falling by 37.3%, among these incidents the most or the majority were men by 73.8%. Fractures that occurred in East

Java in 2016 were 1,422 people, in 2017 there were 2,065 people, in 2018 there were 3,390 people who experienced fractures (Riskedas 2018). The survey results stated that the prevalence of post o (Soesanto, 2022).

Fractures are caused by a single trauma applied with excessive force and suddenness such as impact, twisting, and pulling. In addition, a single trauma also causes soft tissue to be damaged (Rastu Adi Mahartha, Maliawan, & Kawiya, 2021). Postoperative patient pain that is not treated immediately will result in the patient's rehabilitation process being delayed, the patient's hospitalization being longer, the complication rate high. This is because the patient focuses all his attention on the pain he feels. Management that can be done to treat pain, namely pain management includes pharmacological and non-pharmacological actions. Pharmacological actions are collaborative actions between nurses and doctors that emphasize the administration of analgesic drugs. Non-pharmacological actions can apply cold compresses to reduce pain, increase the release of endorphins which block the transmission of pain stimuli. Cold compress action apart from providing physiological effects such as reducing tissue inflammatory response, reducing blood flow and reducing edema (Pratama, 2021).

The mechanism for reducing pain by giving cold compresses is based on the gate control theory. This cold compress uses a towel that is put into ice cubes mixed with water and placed on the skin for 5-10 minutes. Physiologically, in the first 10-15 minutes after giving a cold compress, blood vessels constrict. It can be concluded that the effect of cold compresses on pain is through increasing endorphins which block the spread of painful stimuli so that they can relieve the pain that is felt (Bahrudin, 2017).

Based on the data above, the authors are interested in making a Scientific Paper (KTI) with the title "Nursing Care for Clients Post Femoral Fracture Surgery with Acute Pain Nursing Problems".

## 2. METHODS

The research design used is a case study. The case study which is the subject of this research is used to explore the problem of nursing care for postoperative femur fracture clients with acute pain nursing problems in the Yudistira Room of Jombang Hospital. Data collection is a process of approaching the subject and the process of collecting the characteristics of the subject needed in a study. The data collection steps depend on the research design and the instrument techniques used (Andri, Panzilion, & Sutrisno, 2019). Interview, Observation and physical examination and. Test the validity of the data in qualitative research this qualitative research uses 3 types including trust, dependence and certainty.

## 3. RESULTS

The real picture obtained about the implementation of nursing care studies in 2 postoperative pain patients with femoral fractures, the authors present a case observed by the authors at the Jombang Regional General Hospital, Jl. KH. Wahid Hasyim No. 52, Kepanjen, Kec. Jombang, Jombang Regency, East Java, the Regional General Hospital of Jombang Regency is a hospital belonging to the Jombang Regency area.

This case study research was carried out in the Bima Room, specifically the fracture room. In this room there are 23 beds which are divided into 3 rooms, in class one there are six rooms consisting of one bed, in class two there are seven rooms, and in class three there are rooms in one room consisting of one bed, the HCU room consists of beds which is equipped with monitors, and there are also action rooms, educational rooms, head of the room, doctor's room, nurse station, meeting room, place for medicines, place for tools, kitchen, warehouse and patient waiting room in the room. And the study of patient one in the classroom and

two patients two in class 1 with clean Bima room conditions.

## 4. DISCUSSION

This study discusses the differences in theory and applied facts/facts. The data presented in nursing diagnoses is in the form of tables. The researcher discussed the results of research conducted on client 1 on July 12, 2022 Client 1 and Client 2 on July 14, 2022 in the Bima room at Jombang District Hospital, starting from data collection, determining nursing diagnoses, interventions, implementation, and evaluation.

At the time of the study, both clients were male aged 28 and 31 years. In theory, femoral fractures are more common in men because men tend to do more high-speed driving activities that cause traffic accidents. This can increase the risk of accidents and result in broken bones (Platini, Chaidir, & Rahayu, 2020).

The author agrees with the theory that more femoral fractures occur due to road accidents, because men have an attitude of driving fast which results in serious accidents compared to women.

Both clients complained after left thigh surgery and were weak, unable to carry out daily activities as usual. In theory, In the case of surgical resection, pain impulses are released by sensor-mediated nerves. There are several stages in the pain process, including receptors that transmit pain perception to the central nervous system in the form of stimuli, stimulus detectors, amplifiers, and the presence of conductors. Typical symptoms that can be felt immediately from a fracture condition are pain that occurs due to muscle spasm, pressure from broken bones and because of damage to the tissue around the bone (Parahita & Kurniyanta, 2021).

There are similarities between real cases and theory, namely that both clients complained of pain after femoral fracture surgery which affected daily activities because pain included the experience of a person causing tissue damage.

Based on the results of observations on client 1 with weak results, composmetis, GCS: 456, BP: 120/80 mmHg, pulse 100 x/min, temperature 36.0 ° C, and respiration 23 x/min, P = postoperative pain of femur fracture Q = like throbbing R = left femur S = 4 (moderate) T = heavy when moved by muscle force

$$\begin{array}{c|c} 5 & 5 \\ \hline 5 & 3 \end{array}$$

client 2 with weak results, composmetis, GCS: 456, BP: 110/80 mmHg, pulse 100 x/minute, temperature 36.8 ° C, and respiration 22 x/minute, P = postoperative pain fracture of the femur Q = like throbbing R = left thigh S = 5 (moderate) T = heavy when moved by muscle force

$$\begin{array}{c|c} 5 & 5 \\ \hline 5 & 2 \end{array}$$

In theory, weakness is due to the limb not being moved in a way that counteracts the interruption of the supply of food to the muscles, resulting in loss of muscle mass. This condition results in muscle weakness (Nurfadilah, Cahyawati, & Panghiyangani, 2021)

Based on the results of a physical examination of the upper and lower extremities, the muscle strength of the two clients showed a decrease due to postoperative femoral fracture injuries . In theory, with real cases, there is a decrease in muscle strength and weakness in both clients, resulting in weakness of the injured leg muscles after femoral fracture surgery .

Based on the assessment data of the two clients, the same priority diagnosis was found , namely acute pain . Both clients experience the same complaint, namely pain caused by femoral fracture surgery so that a nursing diagnosis of acute pain can be appointed. Another diagnosis that can be raised from both clients is activity intolerance , the client complains of experiencing limited movement due to postoperative fracture of the femur so that he

cannot carry out activities as usual (Bahrudin, 2017).

This intervention addresses both clients with the main nursing diagnosis problem, namely acute pain related to physical injury agents. Surgical procedures are carried out in the form of nursing care that is adjusted to the Indonesian Nursing Outcome Standards and Indonesian Nursing Intervention Standards with the client's condition. after nursing actions are expected to decrease acute pain, grimace decreases, difficulty sleeping decreases. The interventions used are identifying the characteristic location of the pain scale, providing cold compress therapy, controlling the environment that aggravates the pain, explaining pain relief strategies, recommending the appropriate use of analgesics.

Based on the implementation carried out by researchers to reduce pain by using cold compress non-pharmacological therapy so that postoperative pain is partially resolved. The results were obtained for three days, namely complaints of pain had subsided and reduced when cold compress therapy was applied

The author's opinion about the final outcome of nursing care that has been found from data on acute pain problems is that the problem is partially resolved and continued by the family , because the patient has been able to achieve what was implemented by the author who was monitored from the previous implementation. Based on the evaluation of the results that both clients' acute pain has been partially resolved , by showing changes in pain decreased after being given nursing interventions to both clients.

## 5. CONCLUSION

The conclusion of the study was to carry out assessments, determine planning diagnoses, implement and evaluate nursing care for the two postoperative femur fracture clients in the Bima room at Jombang Hospital. So the conclusion is as follows:

- a. The study of clients with postoperative fractures of the femur had something in common, namely they both complained of postoperative pain.
- b. Diagnoses taken in the IDHS, SLKI and SIKI Acute pain is related to physical injury agents during surgical procedures, activity intolerance is related to immobility.
- c. Intervention On both clients the researchers planned a postoperative diagnosis of a femoral fracture with the main problem being acute pain which had to be addressed first. Planning carried out by researchers is not much different from planning contained in theory. One way is to use non - pharmacological methods by doing cold compresses.
- d. The implementation or implementation of nursing that has been carried out in accordance with the interventions that have been prepared has been partially achieved and the comparison of these interventions is according to the client's condition.
- e. The results of the evaluation carried out by the researchers during the three days of treatment on both clients with postoperative problems with femur fractures found that the diagnosis of acute pain was resolved .

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