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EFFECTIVENESS OF OLIVE OIL IN PREVENTING DECUBITUS ULCERS IN BED REST PATIENTS WITH NURSING PROBLEMS RISK OF PRESSURE WOUNDS IN THE MICU ROOM: CASE STUDY

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Abstract

Decubitus ulcers or what can be called bed sores are wounds that occur due to the skin of certain parts of the body being pressed for a long period of time due to bed rest. As an effort to prevent decubitus ulcers, skin care is carried out using olive oil as a moisturizer. Methods: The research method used is a case study. The data analysis used in this case study is a nursing process approach model which consists of stages: nursing assessment, analysis of problem formulation and nursing diagnosis, intervention, implementation, evaluation and nursing documentation. The results of the case study after nursing action was carried out in the form of administering olive oil for 3 days as a moisturizer showed that the condition of the skin that was under pressure remained intact, there were no signs of decubitus wounds, and the skin's moisture was maintained.

Keywords: Decubitus ulcer, olive oil, pressure sores, bed rest

Abstrak

Ulkus dekubitus atau yang sering disebut luka tekan (bed sore) adalah luka yang terjadi akibat kulit pada bagian tubuh tertentu mengalami tekanan dalam waktu lama karena tirah baring. Sebagai upaya pencegahan ulkus dekubitus, perawatan kulit dilakukan dengan menggunakan minyak zaitun (olive oil) sebagai pelembap. Metode penelitian yang digunakan adalah studi kasus. Analisis data pada studi kasus ini menggunakan model pendekatan proses keperawatan yang terdiri dari tahapan: pengkajian keperawatan, analisis perumusan masalah dan diagnosis keperawatan, intervensi, implementasi, evaluasi, serta dokumentasi keperawatan. Hasil studi kasus setelah dilakukan tindakan keperawatan berupa pemberian minyak zaitun selama 3 hari sebagai pelembap menunjukkan bahwa kondisi kulit yang mengalami tekanan tetap utuh, tidak terdapat tanda-tanda luka dekubitus, dan kelembapan kulit tetap terjaga.

Kata kunci: *Ulkus dekubitus, minyak zaitun, luka tekan, tirah baring*

Introduction

Decubitus ulcers or what can be called bed sores are wounds that occur due to the skin of certain parts of the body being pressed for a long period due to bed rest (Ministry of Health, 2022). Bedrest or bed rest generally occurs in those who have limited movement due to medical conditions so they are at high risk of developing pressure ulcers (Alimansur & Santoso, 2021). Apart from causing physiological problems, pressure ulcers cause other problems, such as increasing the length of stay (LOS). This certainly increases the burden, especially inpatient costs according to the length of treatment time (Santiko & Faidah, 2020). The prevalence of decubitus ulcers in Indonesia was recorded at 33.3%, with this figure being interpreted as quite high when compared to the prevalence of decubitus ulcers in the Southeast Asia region which only ranges from 2.1-31.3%. (Ministry of Health, 2023). Based on the data obtained, the incidence of decubitus ulcers at Dr. Hasan Sadikin in the last 3 months totaled 5 cases.

Prolonged pressure on parts of the body is the main cause of decubitus ulcers, continuous lying in bed rest and sitting or resting on one part of the body surface for a long time, and also friction between the surface of the body and objects is the cause of decubitus. In this position, blood flow which delivers oxygen and nutrients to the tissues is hampered. As a result, the skin and surrounding tissue can suffer damage. Factors Age > 65 (possibly due to reduced subcutaneous fat, reduced capillary blood flow, and other age-related degenerative changes in the skin), decreased mobility (e.g., due to prolonged hospital stay, bed rest, coma, injury spinal cord injury, sedation, a weakness that reduces spontaneous movement, and/or cognitive impairment), exposure to skin irritants (e.g., due to urinary incontinence and/or fecal incontinence), impaired capacity for wound healing (e.g., due to malnutrition, diabetes, perfusion disorders tissue due to peripheral arterial disease; immobility; venous insufficiency), and impaired sensation (Mayo Clinic, 2023).

There are several signs of decubitus ulcers, including painful sensations in the area affected by the ulcer, changes in skin color or texture, blistered skin or open wounds, areas of skin that feel colder or warmer than other areas, infections, changes in skin color to become paler. , the skin feels harder or softer than the skin in the surrounding area (Mervis & Phillips, 2019). There are 4 stages of decubitus ulcers, the first is a change in skin color to become more reddish or purplish, usually accompanied by swelling and the skin feels warmer, the second is that the skin becomes sore and shows indications of dead tissue around the wound. There is an open wound that is reddish. The skin can also become blistered and filled with fluid, the third condition is that the wound becomes deeper, at this stage, the wound reaches the fat layer and looks deep like a depression and is usually accompanied by the discharge of pus, at the fourth stage the wound becomes deeper to the muscles and bones. Wounds that are not treated can cause infection (Nursing, 2017).

Proper management is certainly an important point in treating decubitus wounds. There are several methods for treating decubitus wounds, including reducing pressure, direct wound care, pain management, infection control, assessing nutritional needs, and additional therapy or surgery (Qaseem et al., 2015). Apart from proper management, preventing the occurrence of decubitus wounds requires special attention considering the high number of cases of decubitus wounds. According to Mervis & Phillips (2019), structured management can prevent decubitus ulcers, namely identification of high-risk patients, repositioning, careful skin care and hygiene, avoiding immobilization, and patient identification can be done using the Norton scale and Braden scale.

Proper skin care prevents patients from developing decubitus ulcers. In skin care, it is important to pay attention to the moisture level of the skin to prevent dry skin. In maintaining skin moisture, you can use olive oil as an effective moisturizer in preventing or reducing the risk of decubitus ulcers, this is supported by the results of research conducted by Petra S, (2020) which states that olive oil is effective in preventing decubitus ulcers in patients. bed rest.

One of the patients at high risk of developing decubitus ulcers is Mr. A is in the MICU room at Hasan Sadikin Hospital, unconscious and intubated. Mr. A is a patient on bed rest so he is susceptible to decubitus ulcers. Therefore, it is necessary to provide nursing care, starting from the assessment, intervention, implementation, to evaluation stages to prevent the occurrence of decubitus ulcers. Based on this description, researchers are interested in making this case a case study regarding the intervention of giving olive oil to bed rest patients to prevent decubitus ulcers.

Methods

The research method used is explained in the form of a case study. A case study is a research design that involves an in-depth study of a focused research unit such as a client, family, group, or community (Nursalam, 2016). This case study aims to provide an overview of the intervention of administering olive oil to bed rest patients. The subjects of this research were clients with health problems of meningitis, TB, SOL, HIV, and CAP which were then managed in detail and depth.

The data analysis used in this case study is a nursing process approach model which consists of stages: nursing assessment, analysis of problem formulation and nursing diagnosis, intervention, implementation, evaluation, and nursing documentation. Data collection was carried out through patient observation and continued with a physical examination of the patient. After obtaining the data, analysis is then carried out to determine the problem and establish a nursing diagnosis, as well as preparing a strategic plan and implementing and evaluating the nursing actions taken. Nursing actions given include changing positions every 2 hours, using mattresses to prevent decubitus, maintaining the cleanliness of the genital area covered with diapers so that it is not too damp, fulfilling adequate nutritional intake so that the skin is nourished and ulcers do not occur easily, and maintaining skin moisture by providing moisturizers in the form of olive oil. Nursing practice is carried out during service hours within 3 days of treatment.

The ethical principle that needs to be considered in this case study is informed consent. Informed consent is a form of family approval to undergo a procedure after receiving complete information from medical professionals, including the risks of the procedure and the realities that exist. Patients and their families should be told in advance what will be asked, how the data will be used, what actions will be taken, what the benefits are, what the risks are, and what might happen (Suprajitno, 2016). This research has also received permission from the nurse in charge of the room where the research was conducted. Participants in this research are named with codes/initials that cannot be used to identify participants.

Results

Based on the results of the study, the following data was obtained. The patient is named Mr. A, male gender, patient age 32 years. The patient was medically diagnosed with meningitis, TB, SOL, HIV, and CAP. The patient experienced decreased consciousness 3 days ago and was intubated with GCS E1M3V1. The results of the physical examination showed that the patient's general condition was neatly dressed and looked weak. The results of the vital signs examination were blood pressure 120/80 mmHg, RR 24x/minute, HR 74x/minute, SpO2 99% with a TC ventilator installed with PSV mode setting, RR 20x/minute, TV 423, MV: 97, PEEP 6, FiO2 50%, Peak 18.3, Pressure control: 10, and temperature 36.6°C.
The results of the physical examination focused on the condition of the skin integument, which looked brown, and moist, there were no wounds or lesions, there were no signs or symptoms of pressure ulcers and the results of the examination using the Norton scale showed a result of 9 (High risk of developing pressure ulcers). Data from the assessment were analyzed, so that a formulation of the patient's nursing problem was obtained, namely the risk of pressure ulcers. The data obtained to diagnose the risk of pressure ulcers include unconscious patients, bed rest patients, Norton scale 9 (High Risk)

The planned management to overcome the nursing problem of the risk of pressure ulcers is by changing positions every 2 hours, using mattresses to prevent decubitus, maintaining the cleanliness of the genital area covered with diapers so that it is not too damp, fulfilling adequate nutritional intake so that the skin is nourished and ulcers do not occur easily, and maintain skin moisture by providing moisturizer in the form of olive oil. Nursing implementation is carried out during office hours every day. Nursing actions taken include changing position every 2 hours, using a mattress to prevent decubitus, maintaining the cleanliness of the genital area by performing genital hygiene, providing adequate nutritional intake in the form of milk of 1500 Kcal/24 hours, and maintaining skin moisture by providing moisturizer in the form of oil. olive. The results of the case study after carrying out nursing action in the form of administering olive oil for 3 days as a moisturizer showed that the condition of the skin that was under pressure remained intact, there were no signs of decubitus wounds, and skin moisture was maintained

Discussions

Decubitus ulcers are a skin condition that occurs due to pressure or friction on the surface area of the skin for a long time. In this case, the patient experiences decreased consciousness is on bed rest, and is at high risk of developing decubitus ulcers. The results of the assessment show that there are areas of the skin surface that are likely to develop decubitus ulcers if appropriate intervention or nursing care is not provided. These areas include the back, waist, buttocks, and areas of the body that are in direct contact with the mattress and experience pressure.

Based on the signs and symptoms present in the patient, leads to a nursing diagnosis of pressure ulcer risk (PPNI, 2016). The nursing actions carried out include observation and therapeutic actions. Nurses carry out observations including monitoring the condition of areas of the body that are experiencing pressure or are at risk of decubitus ulcers and evaluating after nursing actions are carried out (PPNI, 2018). The therapeutic action that has been taken is changing the patient's position every 2 hours, where this change in position can reduce the duration of pressure on the body area and maintain smooth blood circulation (Alimansur et al., 2019). Another action taken is giving olive oil to areas of the body that are experiencing pressure to maintain moisture in the area so that the skin does not dry out (Aryani et al., 2022). Olive oil contains squalene and vitamin E. Squalene has the function of binding water in the skin and vitamin E plays a role in

increasing the ability to absorb water (Bilal et al., 2021). Olive oil also contains antioxidants that act as an anti-inflammatory which can prevent irritation (dry and peeling skin) (Elkhateeb et al., 2022).

In the application of olive oil, according to Aryani & Alam Putra, (2022), olive oil is given once a day at a dose of 15 ml which is applied to parts of the body that are susceptible to pressure ulcers. The implementation of nursing has been carried out for 3 days, and the results show that the consistency of the skin surface that is under pressure is maintained, remains moist, and there are no signs of decubitus ulcers. The Norton scale remains at a value of 9, namely a high risk of decubitus ulcers. Thus, analysis of nursing problems with the risk of pressure ulcers in resolved cases. The next plan is to maintain the intervention until the patient is conscious and can mobilize independently. The limitation of this research is that the patient's condition was only monitored by researchers during work time.

Conclusions

In this case study, the main nursing issue raised is the risk of pressure ulcers. The interventions and implementation carried out were using mattresses to prevent decubitus, maintaining the cleanliness of the genital area by carrying out genital hygiene, providing adequate nutritional intake in the form of milk of 1500 Kcal/24 hours, changing positions every 2 hours, and administering olive oil. Nursing care carried out for 3 days showed that the skin condition remained healthy, maintained its moisture, and showed no signs of decubitus ulcers.

The implications of this research can be used as a basic reference for nurses in carrying out nursing actions for bed rest patients with pressure ulcer risk problems.

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