



Olive Oil as Lubricant in Massage for Overcoming Decubitus in Patients with Intra Cerebral Hemorrhage

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ABSTRACT

Intra Cerebral hemorrhage is a complication of stroke disease. The typical symptoms in ICH patients are a loss of consciousness and getting long treatment at home. As a result, the patient will lack mobilization and experience muscle stiffness which can aggravate the patient's condition; it will also slow down the patient's healing process and increase the risk of decubitus. This study aimed to determine the effectiveness of giving a massage with olive oil to overcome. This study used a case report that described the case of ICH patients with skin and tissue integrity disorders problems given the intervention of massage with olive oil carried out for five days of treatment and carried out one time a day with a duration of 10-20 minutes. The Braden scale was used to measure the level of decubitus consisting of 6 question indicator items. This study found an increase in score on the first day with a score of 11 and on the fifth-day score of 14 with an increase from a severe risk of decubitus to a moderate risk of decubitus in patients. This procedure has proven useful for reducing decubitus in hospital patients with prolonged bed rest.

Keywords: Intra Cerebral Haemorrhagic, massage, olive oil, decubitus

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I.BACKGROUND

Intra Cerebral Hemorrhagic (ICH) is a neurological disorder caused by a sudden brain bleeding disorder that results in paralysis of the limbs, thought process disturbances, and other disabilities which result in brain function disorders. Found to

have to bleed in hyperdense brain tissue in the brain and if it gets worse, surgery will be carried out (yuyun, 2022)

Stroke patients who experience high severity are at risk of experiencing Intra Cerebral Hemorrhagic (ICH) or brain bleeding and usually tend to experience a

decrease in consciousness. This is supported by research (Sanjaya et al., 2019) which states that most patients with a diagnosis of Intra Cerebral Hemorrhagic (ICH) have an average GCS score of 9 and have a relatively high risk of death. Patients with a diagnosis of Intra Cerebral Hemorrhagic (ICH) who experience a decrease in consciousness will tend to make the patient unable to be productive and only lie in a hospital bed for a long time. Long bed rest in Intra Cerebral Hemorrhagic (ICH) patients puts them at risk for decubitus, which if not handled properly, can injure the skin integrity. Especially in stiff joints due to long bed rest, the most obvious and visible effect is decubitus in patients with Intra Cerebral Hemorrhagic (ICH).

The prevalence of decubitus in International Study in almost all over the world is up to 63.6%, while in Indonesia, it is 33.3%, which is quite high compared to ASEAN (Europe, America, England, and Singapore). The incidence of decubitus in bed rest patients in Indonesia is around 15.8% up to 38.18%. Patients with pressure sores are also dominated by people with an age range of 40-60 years, as much as 56%, with the most common causative factor being stroke (Juliani et al., 2022)

Decubitus that occurs in patients can be one of the factors that slow down the

patient's recovery because when the patient has decubitus, the patient will experience a change in the condition of the skin, which is thinner and more fragile, resulting in damage or death of the tissue under the skin, can even damage muscle tissue to the bone so that raises new diagnoses related to bleeding and risk (Mahmuda, 2019).

The incidence of decubitus varies in Asian countries such as Japan, Korea, and China, ranging from 2.1-18%, and in Indonesia, it is 33.3% (Tayyib, Coyer, & Lewis, 2013). Research conducted in the ICU Room of RSD Mangusada Bali found that decubitus events from 2018 to June 2019 reached 7% (Padmiasih, 2020).

Patients diagnosed with Intra Cerebral Hemorrhagic (ICH) usually require a longer treatment time in the hospital because they require regular observation. Patients with Intra Cerebral Hemorrhagic (ICH) with long bed rest in the hospital tend to experience damage to the integrity of the skin, which over time will cause decubitus ulcers. To be able to maintain the integrity of the skin of patients with long bed rest, nursing actions can be given to change the patient's position and also apply olive oil (Meliza, Ritarwa and Sitohang, 2020)

Other interventions that can be performed on decubitus patients include

giving massage as an alternative treatment for decubitus in Intra Cerebral Hemorrhagic (ICH) patients which is non-pharmacological. Massage in Intra Cerebral Hemorrhagic patients is useful for improving circulation, metabolism and improving blood circulation as an alternative to non-pharmacological therapy (Wardani and Nugroho, 2022). The two alternatives can collaborate to bring about good enough effectiveness to improve skin integrity in patients with Intra Cerebral Hemorrhage (ICH) who experience long bed rest. These interventions are very easy to perform and have minimal adverse side effects. Based on the phenomenon above, the researcher aims to determine the effectiveness of applying massage therapy using olive oil to reduce decubitus in critical patients in hospitals.

Based on data from a preliminary study at the Dental Clinic at the Puskesmas, most pregnant women with a history of using family planning experience gingivitis to varying degrees. Based on the description above and the facts in the field, examining the relationship between the history of family planning use and the incidence of gingivitis at the Ambulu Health Center, Jember Regency is necessary.

2. METHODS

This research method uses case studies that focus on identifying a problem or problem using various sources of information in collecting data. The data was taken directly from the condition and response of critical patients diagnosed with Intra Cerebral Hemorrhagic ICH + post craniotomy day 3 in the ICU room of Prof. IGNG Ngoerah Denpasar Bali.

This research was conducted in the ICU room of Prof. Hospital. I.G.N.G Ngoerah Denpasar Bali for 6 days of treatment. On the first day, the researchers conducted a focused assessment of the patient and continued data analysis and obtained several diagnoses, namely Decreased Intra-Cranial Adaptive Capacity, Airway Clearance, Self-Care Deficit, and Impaired Skin Integrity (SDKI POKJA Team, SLKI, SIKI DPP PPNI, 2018). Of all the diagnoses raised, researchers are interested in re-evaluating and giving special treatment to nursing diagnoses of skin integrity disorders by providing skin integrity care interventions. In this diagnosis, the researcher is interested in providing massage treatment and giving olive oil to patients who have experienced grade 1 decubitus and then being given treatment according to the implementation in accordance with the Evidence-Based taken, namely about the combination of

two EBNs that are collaborated about Giving Massage Using Olive Oil to reduce decubitus in patients.

The intervention is carried out by massage to areas of the lower body prone to decubitus, such as the back, lower thighs, top of the buttocks, and the heels of the lower legs. The message is done by slightly massaging, pressing the skin area, and smearing it with olive oil. The application of the implementation modification was carried out from the second day after the assessment. After giving the implementation of the modified massage by giving olive oil, the researcher evaluated it using the Braden scale which consisted of several question items and a score checklist.

The implementation was carried out for five days and immediately evaluated every day. One day the patient is given a massage for 1x a day when going to bathe the patient in the morning or the afternoon depending on the patient's need to bathe in a day. Researchers have also followed the scientific method in accordance with the rules of the nursing process which includes assessment, data analysis, nursing intervention, implementation and evaluation.

3. RESULTS

The results of the study on the patient were Mr. NR age 66 years, who had nursing problems with impaired skin and tissue integrity by obtaining redness of the skin accompanied by decubitus degree 1; the patient experienced a decrease in consciousness with the initial GCS coming to the ICU 1-x-1 and the GCS value finally when the researcher conducted the study it became 2-2-5. From the assessment results of all the client's vital signs, the average is unstable, with the patient having a history of high blood pressure (hypertension); the last blood pressure at the time of assessment was 145/85 mmHg with less stable breathing. The client is accompanied by decreased consciousness and a long stay in bed in the Intensive Care Unit at Prof. Hospital. Dr. I.G.N.G. Ngoerah Denpasar Bali.

The implementation for the patient is in accordance with the Nursing Intervention, namely giving a massage in collaboration with olive oil. After being given the intervention, the researchers immediately measured the Braden scale on the patient to see the effectiveness of massage with olive oil for critically ill patients with decreased consciousness.

The results of the patient's intervention on Tn NR will be measured

directly every day; on the 1st day of December 27, 2022, the intervention, after being measured using the Braden scale, obtained a score of 11; on the 2nd day of December 28, 2022, the intervention was given after being measured using the Braden scale a score of 11 was obtained, on the 3rd day of December 29, 2022, the

intervention after being measured using the Braden scale obtained a score of 12, on the 4th day of December 30, 2022, the intervention after being measured using the Braden scale obtained a score of 12, on the 5th day of the December 31, 2022, giving intervention after being measured using the Braden scale obtained a score of 14.

Table 1. Results of the Braden Scale Measurement Score Mr. NR

Indicator	1 st day	2 nd day	3 rd day	4 th day	5 th day
Sensory perception	1	1	2	2	3
Humidity	4	4	3	3	3
Activity	1	1	1	1	1
Mobility	1	1	2	2	2
Nutrition	3	3	3	3	3
Friction	1	1	1	1	2
Score	11	11	12	12	14

Braden Scale Score Description: 1. Mild risk if the score is 15-23; 2. Moderate risk if the score is 13-14; 3. Severe risk if the score is 10-12; 4. The risk is very serious if the score is less than 10

Evaluations carried out on managed patients focused on the level of integrity and existing tissue repair in patients so that after being given treatment or intervention, it can be seen from the results of measurements using the Braden scale to reduce and prevent decubitus in patients from the results of treatment in table 1 it was found that there was an increase in the scale Braden score in patients with improved quality of skin and tissue integrity. The Braden scale measurements in this study obtained results from those at severe risk to those at moderate risk.

This study showed that the Braden scale score in patients increased from decubitus status at severe risk to moderate decubitus. Research conducted by (Hernández-Vásquez et al., 2022) states that there is effectiveness in giving olive oil to treat pressure sores in patients on long bed rest because olive oil contains essential acids which have many benefits, such as helping blood microcirculation and increasing cell renewal epidermis, avoiding dry skin, increasing skin hydration and increasing transcutaneous oxygen tension.

Other research also states that giving massages to patients helps improve blood

flow and speed up pain recovery. If massage is done correctly, it can have a relaxing effect on patients. (Catur, Rahayu and Hidayah, 2022) The two interventions can be collaborated and implemented simultaneously to create maximum effect and results that align to reduce patient decubitus status.

The patient managed in this case is Mr. NR, a 66 age who is a native of the Balinese tribe. The patient was diagnosed with a stroke a long time and experienced severity when the researcher first assessed the patient, namely with a diagnosis of intra-cerebral hemorrhagic postoperative craniotomy on day three due to the discovery of a brain hemorrhage with hyperdense fluid around \pm 43 cc. Before the patient experienced hospitalization at the hospital, the patient had suffered from a stroke for a long time until the patient suddenly went into shock accompanied by a decrease in consciousness until he was admitted to Prof I.G.N, G Ngoerah Hospital and was hospitalized in the ICU due to bleeding in the cerebral blood vessels.

In the case of Mr. NR the researchers raised four nursing diagnoses that were given care, with one of them being given special treatment and measurements for research purposes. The diagnoses taken included Ineffective Intra-Cranial Pressure

(D.0017) related to Post Craniotomy Operation with sign and symptom Head Injury and congenital hypertension; ineffective airway clearance (D.0001) related to the presence of crackles and inability to cough due to decreased consciousness with sign and symptoms difficulty speaking, respiratory rate changes, self-care deficit (D.0109) related to weakness with sign and symptoms inability to perform Activity Daily Live ADL and congenital stroke disease, impaired skin/tissue integrity related to (D.0129) related to tissue/skin layer damage, decreased mobility, aging process with sign and symptoms redness pain. (Team of POKJA SDKI, SLKI, SIKI DPP PPNI, 2018).

All diagnoses that the researchers had established were given treatment. However, there was one specific diagnosis that was studied more deeply by the researchers, namely related to the diagnosis of skin/tissue integrity disorder b.d (D.0129) in connection with the patient Tn NR who experienced long bed rest accompanied by decubitus grade 1 which experienced by patients, researchers are interested in providing interventions in accordance with Evidence-Based Nursing which has been reviewed in the literature by researchers related to giving massage with olive oil to treat decubitus in patients.

The massage action is performed on the patient to improve blood flow and reduce the severity of decubitus. In this intervention, the researchers also collaborated with Evidence-based journals related to the benefits of olive oil to reduce damage to skin integrity in patients with long bed rest; the implementation of massage was carried out in several locations that have a risk of decubitus exposure, such as under the back, under the thighs and legs, as well as under the arms. This implementation was carried out for five days of treatment and was carried out every morning and evening when showering.

The researchers massaged areas prone to decubitus by giving a little massage in a circular motion and also combined it with olive oil to increase skin moisture and reduce skin redness. The implementation evaluation carried out daily is always documented and recorded using Braden scale calculations.

The results of measurements using the Braden scale obtained the first day of treatment getting a score of 11, the second day of treatment getting a score of 11, the third day of treatment getting a score of 12, the fourth day of treatment getting a score of 12, the fifth day of the treatment getting a score of 14. From the calculation score on Tn, NR patients obtained progress on the

Braden scale score, which measures the occurrence of long decubitus in patients with decreased consciousness in bed rest.

The results of measurements using the Braden scale of olive oil are quite effective in being used as an alternative for massage and increasing skin moisture in patients with long bed rest. Applying massage using olive oil can be the newest alternative in treating patients with decubitus, either at risk or that has already occurred; these patients can be given treatment with fairly minimal risk of adverse side effects; the content of essential acids in olive oil has a pretty good impact on the level of moisture of the patient's skin and also maintains the risk of friction and injury to the patient which reduces decubitus in the patient.

4. CONCLUSION

Patients with conditions that are quite critical and accompanied by decreased consciousness in the ICU room will be at high risk of developing decubitus with different severity or grades. Patients with long bed rest will be at risk for decubitus in the lower body area which can exacerbate the infection and slow down the patient's recovery. Light massage is a good alternative for patients with long bed rest to reduce pressure sores and improve

blood circulation. This implementation can also be combined with the provision of olive oil which is quite effective for moisturizing the skin surface and reducing friction and decubitus that occurs on the skin surface.

AUTHOR CONTRIBUTIONS

Substantial contributions to conception, data collection, and analysis: Akhmad Zainur Ridla, Nurul Izzah Regita Cahyani, Baskoro Setioputro, Agus Setyo Wahyudi. Writing: Akhmad Zainur Ridla, Nurul Izzah Regita Cahyani. Manuscript revisions: Akhmad Zainur Ridla, Nurul Izzah Regita.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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