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Application of Olive Oil Administration in Overcoming Skin Integrity Disorders in Mrs. V with CKD ON HD on the 6th Floor of the Darmawan Pavilion, RSPAD Gatot Soebroto

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Abstract

Chronic Kidney Failure is a decrease in kidney function on a small scale, chronic kidney failure can occur abnormalities where the decline in kidney function occurs progressively causing various complaints from mild to severe. The purpose of this case study describes the application of olive oil administration in overcoming skin integrity disorders in Mrs. V with CKD ON HD using the nursing process. Method This case study uses a descriptive method in the form of a single case study conducted on one patient with a diagnosis of CKD ON HD on the VI Floor of the Darmawan Pavilion, RSPAD Gatot Soebroto using data collection techniques, namely observation, interviews, and documentation studies. The results of the case study obtained after applying the action of administering olive oil to overcome skin integrity disorders to clients for 5x24 hours obtained the results of the evaluation of clinical signs of itching decreased, the scale of pruritus decreased, some dry skin decreased. The conclusion of this case study after conducting a case study, the results showed that the application of olive oil administration to CKD ON HD patients had an effect on overcoming skin integrity disorders in Mrs. V.

Keywords: CKD ON HD; Skin Integrity Disorders; Olive Oil Administration; Clinical Signs of Itching

Introduction

Kidney Failure Disease can be divided into two types, namely Acute Kidney Failure (ARF) and Chronic Kidney Failure (GCK), Acute Kidney Failure usually occurs suddenly. In this case, kidney function decreases suddenly. Chronic Kidney Failure is a decrease in kidney function on a small scale. This is a normal process for every human being as they age.

However, this does not cause abnormalities or symptoms because it is still within reasonable limits that can be tolerated by the kidneys and body. However, due to various reasons, Chronic Kidney Failure (CFR) can occur, an abnormality in which kidney function

decreases progressively, causing various complaints from mild to severe (Hidayat Silvia, 2021).

Hemodialysis is the process of cleaning the blood by collecting waste. Hemodialysis is used for patients with end-stage kidney failure or acutely ill patients who require short-term dialysis. Hemodialysis cannot cure or restore kidney disease, nor can it compensate for the loss of kidney metabolism or endocrine activity, but hemodialysis can prevent death.

Chronic Kidney Failure according to the World Health Organization (WHO) in the journal (Rahmawati et al., 2023) in 2020 became a problem with an increasing incidence rate and prevalence every year,

chronic kidney failure as the 13th cause of death in the world to 10th, where deaths increased from 813,000 people in 2000 to 1.3 million people in 2020, this disease is a serious problem worldwide. WHO noted that Chronic Kidney Disease (CKD) shows a progressive condition that affects > 10% of the general population worldwide or more than 800 million people.

CKD disease as one of the causes of death worldwide, there has been an increase in deaths due to CKD over the past 2 years projected to increase by 41.5% in 2045 (Kovesdy, 2022). According to data from the Centers For Diseases Control and Prevention / CDC in 2021, in the United States 1 in 7 adults, which means 15% or 37 million adults are estimated to have kidney failure, 9 out of 10 adult kidney failure sufferers do not know the cause of their kidney failure.

According to the 7th Report of the Indonesian Renal Registry in the journal, every year Indonesia experiences an increase in patients undergoing hemodialysis, an estimated 17,193 new patients and 11,689 active patients with a death rate reaching 2,221 in 2019. The results of the 2019 Rikesdas, the population aged over 15 years who were diagnosed with chronic kidney failure were 0.2%. This figure is lower than the prevalence of chronic kidney disease in other countries.

The Indonesian Nephrology Association (Pernefri) in 2019 also obtained the results of the prevalence of Chronic Kidney Disease of 12.5%. Rikesdas states that prevalence increases with age, with a sharp increase in the 35-44 age group compared to the 25-34 age group. The prevalence in men (0.3%) is higher than in women (0.2%). Based on data from the Report of the Indonesian Renal Registry, the order of causes of kidney failure in patients receiving hemodialysis based on 2019 data, due to hypertension (37%), diabetes mellitus or diabetic nephropathy (27% congenital disorders or primary glomerulopathy (10%), urinary tract obstruction disorders or obstructive nephropathy (7%), due to gout

(1%), lupus disease (1%) and other causes (18%).

Most studies state that increased serum uric acid levels independently predict the development of Chronic Kidney Disease (CKD). Unhealthy lifestyles such as consuming supplement drinks are thought to be triggers for increased incidence of chronic kidney failure, the effect of chronic kidney failure is anemia. According to Albanqi's research, chronic kidney failure is a condition that affects and has occurred in relation to many other chronic conditions, such as hypertension and diabetes.

In Indonesia, hemodialysis has reached 2,754,409. Hemodialysis can affect the patient's clinical condition and the complications that occur are itching. Uremic pruritus is a common complication in hemodialysis patients who complain of itching and discomfort and can interfere with rest and sleep. Priuritus occurs in 15-49% of patients before dialysis and in 50-90% of patients undergoing dialysis.

Itching in hemodialysis patients may be caused by dry skin due to fluid disorders during hemodialysis, and accumulation of beta-2-microglobulin content in the blood and retention of vitamin A. If left untreated, itching and dry skin will get worse. Therefore, treatment using olive oil should be done to reduce the symptoms. Other studies have shown that olive oil is effective in treating dry skin and can accelerate wound healing.

The application of olive oil as the main basis for intervention is because olive oil can make the skin of patients undergoing hemodialysis more moist and smooth and reduce the scale of pruritus, olive oil can fill the keratin layer in the skin so that it causes a moist effect, reduces itching, and treats wounds and existing infections.

Method

This case study uses a descriptive method in the form of a single case study conducted on one patient with a diagnosis of CKD ON HD on the 6th Floor of the Darmawan Pavilion, RSPAD Gatot

Soebroto using data collection techniques, namely observation, interviews, and documentation studies.

Results and Discussion

Focus Data

Subjective Data

The client said her skin was itchy, the client said the pruritus scale was 4, the client said her skin was dry, the client said her skin was getting drier after hemodialysis, the client said she was only allowed to drink 600-700 ml/24 hours, the client said she had not been able to urinate for 2 months.

The client said she had difficulty breathing, the client said she was short of breath P: the client said it hurt when moving a lot Q: the client complained of twisting pain R: the client complained of pain in the waist area spreading to the stomach, S: the client said the pain scale was 5 T: the client complained of continuous pain. The client said she had no appetite, the client complained of bloating in her stomach.

Objective Data

The client's skin felt dry, the skin was not elastic, the skin looked scaly, the client was seen scratching her skin in the lower back area often, there were abrasions and scratch wounds in the lower back area, there were decubitus sores on the left buttock, the client's upper back area looked peeled due to the effects of radiation, the client experienced fluid restrictions, only allowed 600-700 ml/24 hours.

Fluid intake of 650 ml/24 hours (600 ml water, 50 ml drug therapy), output 530 ml/24 hours (urine 0 ml, bowel movements 50 ml, IWL, 480), Fluid Balance +120, there is edema in the right leg CRT 3 seconds. Anemic conjunctiva, the client looks short of breath, the client is fitted with a 5L nasal cannula. The client appears to be wincing in pain, the client is being protective. The client experienced a decrease in weight before the illness of 53 kg when sick 48 kg. TTV results, BP: 125/87 mmHg, N: 82 x / minute, S: 36.7oC, RR: 23 x / minute, SPO2: 94%.

Laboratory examination results on May

8, 2024 were Hemoglobin 8.6 * g / dL, Hematocrit 25 * %, Erythrocytes 2.9 * jula / μ L, Platelets 16000 * / μ L, Albumin 2.7 * g / dL, Urea 161 * mg / dL, Creatinine 10.27 * mg / dL, Sodium 132 * mmol / L, Chloride 114 * mmol / L. Radiological examination results showed that the patient had a CLD installed with a distal tip in the cavoatrial junction projection. The client received drug therapy omeprazole inj 2x40 mg iv, ketorolac 30 mg inj 3x1 ampoule, ranitidine inj 2x1 ampoule, amiten 200 ml infusion (intra HD), dexamethasone inj, extra (PRC transfusion premedication), The client received a 150cc 2kolf transfusion.

Nursing Diagnosis

The nursing diagnosis established in this case study that is in accordance with the data obtained is:

- ✓ Impaired skin integrity related to excess fluid volume and side effects of radiation therapy (D.0129)
- ✓ Hypervolemia related to impaired regulatory mechanisms (D.0022)
- ✓ Ineffective peripheral perfusion related to decreased hemoglobin concentration (D.0009)
- ✓ Acute pain related to physiological injury agents (D.0077)
- ✓ Nutritional deficit related to inability to absorb nutrients (D.0019)

The author determined this diagnosis because the data found in the client supported the author to be able to establish a diagnosis.

Nursing Intervention

In the case study, the author focused on the interventions to be carried out, namely skin integrity care and the application of olive oil 3x1 to overcome pruritus and dry skin after hemodialysis. In the journal entitled Application of Olive Oil Administration in Impaired Skin Integrity of Chronic Kidney Failure Patients Post Hemodialysis, it only focuses on the intervention of applying olive oil, while according to (Harmilah, 2020) in the theory of nursing care only focuses on skin integrity care. It can be concluded that in the case study and the two theories are interrelated. So the author of the case study intervenes from

both theories.

Nursing Implementation

The implementation that the author focuses on and has been carried out in the nursing diagnosis of Impaired skin integrity related to Excess fluid volume and side effects of radiation therapy is to carry out skin integrity care which includes identifying the cause of impaired skin integrity, changing positions every 2, using petroleum or oil-based products, avoiding alcohol-based products, recommending the use of moisturizers, recommending increasing nutritional intake, recommending avoiding exposure to extreme temperatures and giving olive oil 3x1. This is done for 5x24 hours.

There is a gap between the case study and the journal Application of Olive Oil Administration to Impaired Skin Integrity in Chronic Kidney Failure Patients Post Hemodialysis, in the journal only olive oil administration is carried out and is carried out for 1 week.

Nursing Evaluation

Based on the evaluation data, it can be seen that the implementation that has been carried out for 5x24 hours, namely the objectives have been partially achieved so that the intervention is still being carried out by encouraging clients and their families to apply olive oil to the skin 3 times a day, morning, afternoon and evening and when intra and post HD.

This happens because the data obtained by the author in the case study shows that there are clinical changes experienced by the client, but these changes are not optimal so that it takes a lot of time for the results to be more optimal. Meanwhile, in the journal Application of Olive Oil Administration for Skin Integrity Disorders in Chronic Kidney Failure Patients Post Hemodialysis, it shows that the application of olive oil administration has been successful in the action.

This conclusion was obtained from the evaluation data that was carried out on May 11, 2021, namely that itching complaints decreased to a scale of 1 (mild), some of the skin that had been given olive oil became

moist, dry skin decreased, redness decreased, but nursing that had been carried out for 7x24 hours in overcoming skin integrity disorders.

Conclusion

The administration of olive oil has an effect on overcoming skin integrity disorders in CKD ON HD patients. There are still some areas of skin that feel dry, therefore the author recommends that clients continue to apply olive oil to the skin 3 times a day, especially during intra and post hemodialysis so that the effectiveness of the olive oil is maximized.

References

1. Andini, N dan Rahmadiyah D. (2022). Penerapan Kompres Hangat Jahe Untuk Menurunkan Nyeri Pada Sendi: Studi Kasus. JHCN Journal of Health and Cardiovascular Nursing. Vol2 No 2.
2. Aspiani, R.Y. (2014). *Buku Ajar Asuhan Keperawatan Gerontik*. Jakarta: Trans Info Media
3. Fabiana Meijon Fadul. (2019). Pengaruh Osteoarthritis Dengan Kompres Jahe. 1-5.
4. Farizal, J, Leli, M dan Susiwari. (2018). Kompres Jahe Merah Berpengaruh Terhadap Penurunan Skala Nyeri Osteoarthritis Pada Lanjut Usia di Wilayah Kerja Puskesmas Kampung Delima Tahun 2016. Jurnal Ilmu dan Teknologi Kesehatan, Vol 5 Nomor 2, hlm : 192-200.
5. Felson D.T. (2008). Osteothritis, Herrison Principiles of Internal Medicine (17 editor, ed.). Mc Graw Hill Companies Inc.,new York.
6. Gitleman, L. (2019). Osteoarthritis repository. Unimus. *Paper Knowledge*.
7. Hannan, M., Suprayitno, E dan Yuliyana, H. (2019). Pengaruh Terapi Kompres Hangat Terhadap Penurunan Nyeri Sendi Osteoarthritis Pada Lansia Di Posyandu Lansia Puskesmas Pandian Sumenep.
8. Haris, Sulistiyani, Nuraeni, A dkk. (2023). *Keperawatan Keluarga*:

- Pendekatan Komprehensif Dalam Perawatan Kesehatan Keluarga.* Padang: Get Press Indonesia.
9. Hidayat, Syaifurrahman dan Ivan, Dwi. (2015). Pengaruh Terapi Kompres Jahe Terhadap Tingkat Nyeri Osteoarthritis Pada Lansia Di UPT Puskesmas Guluk-Guluk. Prodi Ilmu Keperawatan FIK Universitas Wirajaya Sumenep. Dilihat tanggal 15 Juni 2024 Pukul 11.35 WIB Hal; 53 -59.
 10. Istianah, Hapipah, E. O. (2020). View metadata, citation and similar papers at core.ac.uk. Kompres Hangat Jahe Untuk Mengurangi Nyeri Rheumatoid Arthritis Pada Warga Dusun Bangor Desa Taman Ayu Kecamatan Gerung Kabupaten Lombok Barat, 15(1408), 274–282.
 11. Istianah, Lestari, K, W, Hapipah, Supriyadi, Hidayati, N dan Rusiana, H. (2020). Pengaruh Kompres Hangat Jahe Merah Terhadap Skala Nyeri Lansia Osteoarthritis di Balai Sosial Lanjut Usia Mandalika Mataram. Jurnal Ilmiah Stikes YARSI Mataram (JISYM) Vol 10 No 2, Month Juli 2020 P-ISSN: 1978-8940 Website: <http://Journal.stikesyarsimataram.ac.id>
 12. Kalim H dan Wahono, C. . (2019). *Penyakit Sendi Degeneratif Buku Ajar Ilmu Penyakit Dalam.* Jakarta: UB Press.
 13. Kalim H. (2014). *Diagnosis dan Penatalaksanaan Osteoarthritis.* Kemenkes RI. (2018). Riset Kesehatan Dasar, RISKESDAS. Jakarta: Balitbang Kemenkes
 14. Kosanke, R. M. (2019). Pendidikan Kesehatan Terhadap Pengetahuan Pasien Tentang Osteoarthritis.
 15. Kusyati, E., 2006. *Keterampilan dan Prosedur Laboratorium.* Jakarta: EGC.
 16. Muchlis, M. R dan Ernawati, E. (2021). Efektivitas Pemberian Terapi Kompres Hangat Jahe Merah Untuk Mengurangi Nyeri Sendi Pada Lansia. Ners Muda, 2(3), 165. <https://doi.org/10.26714/nm.v2i3.8418>.