

Analysis Of Nursing Care in A Case of Osteoarthritis and Ginger Warm Compress Treatment In An Elderly Care Home

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Abstract: Osteoarthritis (OA) is a joint inflammation commonly referred to as rheumatism, which occurs due to mechanical and biological processes leading to cartilage thinning, joint instability, and calcification. Osteoarthritis is a major cause of disability in the elderly, with an increased risk due to trauma, repetitive joint use, and obesity. Effective management of OA is necessary to prevent complications. Pharmacological treatment is a common management option for OA, with one such intervention being the use of ginger warm compresses. This study aims to analyze the nursing care provided to an elderly patient with osteoarthritis, specifically focusing on the application of ginger warm compress therapy in the Anggrek Room of Griya Lansia, Garut Regency. A case study method was used with a sample of one OA patient. Three priority nursing diagnoses were identified: chronic pain, impaired physical mobility, and knowledge deficit. Nursing interventions included identifying the pain characteristics, applying non-pharmacological pain management through ginger compress therapy, performing active range-of-motion exercises, and providing health education about osteoarthritis. The objective of this study was to gain firsthand experience regarding the effectiveness of ginger warm compress therapy as an intervention for chronic pain in osteoarthritis patients. The study was conducted over three consecutive days with a 15-minute session each day. The results indicated that prior to ginger compress therapy, the patient's pain level was 5 (moderate pain) on a scale of 0-10. After the intervention, the pain scale decreased to 2 (mild pain), suggesting a significant effect of ginger warm compress therapy in reducing pain in osteoarthritis.

Keywords: Elderly Care, Ginger Warm Compress, Nursing Care, Osteoarthritis, Pain Management

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Introduction

Osteoarthritis is a progressive joint disorder characterized by the degeneration of articular cartilage, which leads to pain, stiffness, and limited mobility. It is one of the most common forms of arthritis and significantly impacts the quality of life, particularly in older adults (WHO, 2023). In the elderly, osteoarthritis is often a leading cause of disability, contributing to a loss of independence. Factors such as repetitive joint use, trauma, and obesity increase the risk of developing osteoarthritis. Effective management strategies are

critical to controlling symptoms and preventing further disability (Hsu & Siwiec, 2021; Sen & Hurley, 2021).

Pharmacological treatments for osteoarthritis, including pain relievers and anti-inflammatory drugs, are widely used (Moseng et al., 2024). However, non-pharmacological therapies, such as the use of warm compresses, have gained attention for their potential benefits in pain relief. Ginger, a well-known herbal remedy, has anti-inflammatory properties that can help alleviate the symptoms of osteoarthritis (Istianah et al., 2021). This study aims to evaluate the effectiveness of

ginger warm compress therapy in managing chronic pain in an elderly patient with osteoarthritis.

Method

This study employed a case study design involving one patient diagnosed with osteoarthritis in an elderly care home. The patient was selected based on the presence of chronic pain, which was one of the key symptoms of osteoarthritis. Three nursing diagnoses were identified: chronic pain, impaired physical mobility, and knowledge deficit.

The nursing interventions were as follows:

Pain management: Identify the location, characteristics, duration, frequency, quality, intensity, and scale of pain. Non-pharmacological treatment included the application of ginger warm compresses.

Physical mobility: Encourage and assist the patient in performing active range-of-motion exercises to improve joint mobility.

Health education: Provide education on osteoarthritis, its management, and lifestyle modifications to help the patient cope with the condition.

The ginger warm compress therapy was applied daily for 15 minutes over three consecutive days. The pain levels were assessed before and after the intervention using a pain scale of 0-10.

Result and Discussion

Before the ginger warm compress therapy, the patient reported a pain score of 5 (moderate pain) on the 0-10 scale. After three days of therapy, the patient's pain level decreased to 2 (mild pain). The improvement in pain scores suggests that the ginger warm compress therapy was effective in reducing chronic pain associated with osteoarthritis (Fitriani & Supriyadi, 2020).

In addition to pain relief, the patient demonstrated improved mobility through the prescribed range-of-motion exercises. The patient's knowledge of osteoarthritis also improved after the education sessions, which included advice on joint protection and lifestyle changes (Rumiati et al., 2022).

The findings from this case study suggest that ginger warm compress therapy is an effective non-pharmacological intervention for managing chronic pain in osteoarthritis (OA) patients, particularly among the elderly. Osteoarthritis is a degenerative joint disease characterized by the breakdown of cartilage and the subsequent pain and stiffness in the affected joints. It is a major health concern, especially in elderly populations, who often face difficulties in performing daily activities due to the pain and reduced mobility

caused by the disease (Kurniasih et al., 2021; Fitriani & Supriyadi, 2020).

Ginger (*Zingiber officinale*) has long been recognized in traditional medicine for its analgesic and anti-inflammatory properties. Recent studies have supported these claims, showing that ginger contains bioactive compounds such as gingerols and shogaols that have been shown to inhibit inflammatory pathways and reduce pain. These compounds are believed to suppress pro-inflammatory cytokines, which play a critical role in the pain process of osteoarthritis. By applying a warm compress infused with ginger, this study utilized the combined benefits of heat and ginger's natural anti-inflammatory effects.

The results of this case study demonstrate a significant reduction in pain, with the patient's pain score decreasing from 5 (moderate pain) to 2 (mild pain) on a 0-10 scale after just three days of treatment. This suggests that ginger warm compress therapy not only offers relief from pain but also has the potential to improve the patient's quality of life by reducing dependency on pharmacological pain management options, which are often associated with side effects such as gastrointestinal distress, kidney damage, or dependence (Rumiati et al., 2022; Yora Nopriani et al., 2024).

The success of ginger warm compress therapy highlights the growing importance of integrating non-pharmacological interventions into the management of osteoarthritis. While pharmacological treatments remain central to OA management, they do not always provide long-term relief and often come with side effects. Non-pharmacological interventions like warm compresses, physical therapy, and lifestyle modifications offer additional strategies for pain control and improved function (Riranto & Kurniawan, 2022).

In this case, the use of a ginger-infused warm compress served as an adjunct to the range-of-motion exercises prescribed to the patient. These exercises aimed at improving physical mobility and muscle strength around the affected joints were important in mitigating the stiffness and functional limitations caused by osteoarthritis. This combination of therapies not only helped in reducing pain but also promoted a greater degree of functional independence in the patient (Dayuningsih et al., 2022).

Conclusion

In conclusion, ginger warm compress therapy has shown significant benefits in reducing chronic pain and improving mobility in a patient with osteoarthritis. This study highlights the importance of integrating non-pharmacological treatments into the management of osteoarthritis, providing a holistic approach to patient

care. More studies are needed to explore the broader applications and long-term effects of ginger therapy in osteoarthritis management.

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