Research Article

THE EFFECT OF WARM GINGER COMPRESS ON CHRONIC PAIN IN AWANG VILLAGE BANGKAL BARAT WORKING AREA OF KARANG INTAN 2 HEALTH CENTER

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ABSTRACT

Pain is a common public health problem often encountered in health facilities. Pain is one of the first health problems in the world and is the leading cause of individuals experiencing activity limitations. Based on the results of an assessment of the community in Awing West Bangkal village, 61 people (0.032%) complained of neck pain, and 46 people (0.024%) complained of joint pain. Warm ginger compress is a therapy that can be used to reduce the pain scale. This study aims to know the effect of a warm ginger compress on chronic pain in Mrs. M in Awang Bangkal Barat village, Karang Intan Community Health Center working area 2 method used in the form of a case report on one of the chronic pain sufferers. The client is given a warm ginger compress intervention. The results obtained after the intervention of providing warm ginger compresses for three days with the implementation time once a day, namely in the morning with a duration of 20 minutes, the problem can be resolved by reducing the pain scale from scale 6 to scale 2, this is because the warm ginger compress reduces pain. Pain through a warm sensation can inhibit the release of inflammatory mediators, reducing sensitivity and increasing the pain threshold to decrease pain. Therefore, warm ginger compress therapy reduces the pain scale.

Keywords: Warm Compress, Ginger, Chronic Pain, Pain Scale

INTRODUCTION

Pain is a common public health problem often encountered in healthcare facilities. Pain is one of the first-level health problems in the world and is the leading cause of individuals experiencing activity limitations (Fatoye, 2019). (The World Health Organization in Rizki & Saftrina (2022) states that around 50-80% of adults worldwide have experienced pain. Pain is a sensory experience and mental discomfort caused by tissue damage and is subjective, with sensory complaints expressed in the form of aches, pains, aches, etc., which can be considered a means of awareness of pain (Muttaqin in Wati et al., 2022).

About 20% of the world's population is estimated to experience pain every year, and half of this is chronic pain. The results of research in America in 2012 state that 86.6 million adults experience acute pain every day, and 25.5 million experience chronic pain. In Indonesia, no study has been conducted regarding the quality of all types of pain.

Based on the results of an assessment of the community in Awang West Bangkal village, it was found that 61 people complained of neck pain (0.032%), 46 people (0.024%), 46 people with joint pain, two people with back pain, one person with heel pain and one person with extremity pain. People say that they rarely go to health service facilities, be it community health centers or Posbindu, because they think they do not have illnesses with severe symptoms, so often their illnesses/complaints are uncontrolled. They do not receive treatment or care.

Based on research results (Igrisa 2019), it was found that 20% of the adult population was men experiencing pain, and 10% were diagnosed with chronic pains. According to the International Association for the Study of Pain (IASP), pain is sensory experiences and emotions. It is not fun that caused by actual or potential tissue damage or are described in terms of such damage. The pain and inexperience of every individual are very different and enough to influence circumstances mentally and physically.

Two treatments can be used to treat pain, namely pharmacological and non-pharmacological. Pharmacological treatment with pain management, while non-pharmacological includes skin stimulation, relaxation techniques, massage techniques, distraction, cold compresses, and hot compress therapy (Madoni, 2019; Oresye et al., 2020). Ginger compress is a non-pharmacological therapy that effectively reduces pain (Virgo, 2019).

Based on the results of phytochemical tests on total methanol extract from ginger rhizomes carried out by Kaban et al. (2016), ginger contains various groups of secondary metabolite compounds, including alkaloids, flavonoids, phenolics, triterpenoids, and saponins. The alkaloid content in ginger rhizomes is helpful as an analgesic (pain reliever), cough medicine, and migraine reliever. Apart from that, ginger also contains flavonoids, which are helpful as an analgesic, antitumor, antioxidant, anti-inflammatory, antibiotic, anti-allergic and diuretic. Saponin compounds are anticoagulants (blood clotting drugs), anticarcinogenic (cancer prevention drugs), hypoglycemic, antioxidants, and anti-inflammatory (inflammatory drugs) (Yuliningtyas et al., 2019). Apart from that, ginger also contains gingerol, which has potent anti-inflammatory and antioxidant properties (Kwang et al., 1998; Aryata, 2019). Gingerol is thought to cure nausea in pregnant women, reduce pain and muscle aches, treat osteoarthritis, lower blood sugar levels, reduce the risk of heart disease, prevent chronic digestive disorders, reduce pain during menstruation, and prevent cancer (especially cancer). Pancreas, breasts, and ovaries) improve brain function, and reduce the risk of attacks of various infectious diseases (Aryanta, 2019). Research conducted by Adriyan (2019) states that ginger compress is a procedure that is often used to relieve joint pain. The gingerol content and warm feeling found in ginger can cause blood vessels to open and improve blood circulation so that the supply of nutrients, oxygen, and pain improves and decreases. Izza and Wali (2019) stated that the gingerol content in ginger can inhibit the formation of prostaglandins as pain mediators so that it can reduce pain.

Based on this background, the author is interested in "The Effect of Warm Ginger Compress on Chronic Pain in Mrs M in Awang Village, West Bangkal, Working Area of Karang Intan 2 Health Center."

METHOD

The method used is a case report of a chronic pain sufferer in Awang Bangkal Barat Village, Karang Intan District. Clients are given warm ginger compress intervention for three days with implementation time once daily, namely in the morning for 20 minutes.

RESULTS

Case Illustrations

The assessment results dated November 9 28, 2023, show that Mrs. M is 72 years old in Awang Bangkal Barat Village, Karang Intan District. A client complained of back pain for five years due to being buried in the ground while working. The physical examination showed blood pressure 130/70 mmHg, respiratory frequency 20 times/minute, pulse 89 times/minute, body temperature 36.7OC, and saturation 99%. Pain assessment results in P: back pain, the pain felt during the excessive activity, Q: throbbing, R: back, S: 6 (moderate pain), T: comes and goes.

Patient Condition

Mrs. M complained of back pain five years ago. Mrs M said she felt the pain after a work accident, where a landslide buried her body. After the incident, Mrs M said she was not immediately taken to a health facility but was taken to a masseuse. Apart from that, Mrs M also said that she often eats kale, which is widely available in Awang Bangkal West village, such as kale and long beans. Mrs. M said that the pain she felt came and went and interfered with her activities. Mrs. M said he rarely goes to health service facilities. Mrs. M prefers to buy medicine at the shop and drink water that has been given a prayer. Therefore, Mrs. M needs to be given non-pharmacological pain management.

The nurse provides non-pharmacological therapy as a warm ginger compress once a day for 20 minutes (3 consecutive days) every morning. Pain level is measured using the Numerical Rating Scale (NRS) scale Mrs. evaluation results. After a warm ginger compress intervention,

M showed that Mrs. M's pain scale gradually decreased. From an initial pain scale of 6 before intervention was given (first day) to a scale of 2 after intervention was given for three days.

DISCUSSION

Pain can be caused by several factors, including decreased body function and cell function to regenerate. In the elderly, the musculoskeletal system will experience several changes, such as changes in connective tissue (collagen and elastin), reduced ability of cartilage to regenerate, reduced bone density, changes in muscle structure, and decreased joint elasticity. This is what causes most older people to experience musculoskeletal system disorders, which cause joint pain. Joint pain in the morning is caused by progressive loss of total bone mass. Some causes of this loss are hormonal changes and bone reabsorption (Izza, 2019).

Pain is the impact of decreased body function, especially in the musculoskeletal system. Older adults tend to ignore their diet and activity patterns, which can cause joint pain. One of the reasons why the West Bangkal Awang community experiences pain is due to their diet and heavy activity patterns. According to Made (2020), excessive physical activity can cause damage to muscles or connective tissue in muscles. If muscle tissue is damaged, the body will automatically respond by repairing the damage. This response causes pain in the muscles.

Eating habits are an essential factor influencing a person's health status and physical abilities. Consuming lots of high-purine foods will further increase the risk of joint pain. The risk of joint pain will increase if accompanied by an unbalanced diet. (Fajarina, 2011).

This decrease in the pain scale in Mrs. M is in line with research by Nabila et al. (2023), with the results obtained stating that warm ginger compresses can reduce the pain scale. The research results show that warm ginger compresses effectively reduce the pain scale.

Warm compresses cause dilation and improve blood vessel circulation. Physiologically, the body's response to heat causes blood vessels to reduce blood viscosity muscle tension, and increase body metabolism and tissue permeability (Kozier, 2009). Meanwhile, ginger contains gingerol, which gives a spicy and hot taste and works directly on the nerve center, where it causes the release of endorphins, which can result in vasodilation of blood vessels, thereby increasing blood flow to the joints and blocking the transmission of pain stimuli. Another way is to activate the larger and faster communication of the A-beta sensory nerve fibers, thereby reducing pain transmission through the small diameter C and A-delta fibers and closing the synapse gates to transmit pain impulses (Izza, 2014).

Radharani (2020) stated that ginger compresses using warm water could reduce pain intensity because ginger contains 6-gingerdione, 6-gingerol, and zingerol, which suppress inflammatory products such as histamine, bradykinin, and prostaglandins. Ginger also contains gingerol, limonene, a-linolenic acid, aspartic, β-sitosterol, starch, caprylic acid, capsaicin, chlorogenic acid, and farnesol. The pharmacological effects of ginger include stimulating inhibited erections, releasing the enzyme 5-lipooxygenase, and increasing the activity of the endocrine glands (Heriana, 2019).

At the physiological stage of pain, ginger compresses reduce joint pain at the transduction stage, where at this stage, ginger contains gingerol, which contains cyclooxygenase, which can inhibit the formation of prostaglandins as pain mediators, resulting in a reduction in joint pain so that ginger can be used as an alternative non-medication treatment. Pharmacological to reduce joint pain.

CONCLUSION

There is an effect of warm ginger compresses on chronic pain in Mrs M in Awang village, West Bangkal, Karang Intan Community Health Center Working Area 2

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