

EFFECTS OF USE OF RED GINGER COMPRESS ON PAIN IN ELDERLY THAT SUFFER URIC ACID: CASE STUDY

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ABSTRACT

Arthritis gout is a disease that happen because of deposition crystals of sodium urate in joint that caused inflammation. This Inflammation cause pain that can make disturbing our activity. A warm red ginger compress is a one of method that can be done for reducing the pain that cause by arthritis gout. Because of red ginger contain of active components, the components consist of gingerol, ginger Dione and zingerones that has anti-inflammatory effect. The purpose of this research is to know painful of elderly who are sufferer of arthritis gout after got a warm red ginger compress. This research used case study method. To collect the data, the researcher used interview and observation. The research subject is 2 elderly who sufferer of arthritis gout. The result of the research is found that both of subject included in scale of mild pain and moderate pain. After got a warm red ginger compress, pain that felt by both subject turn into a good change. Both of them experienced a decrease in pain until pain scale 0 (no pain).

Key words: Painful, elderly, *arthritis gout*, a warm red ginger compress.

INTRODUCTION

Gout arthritis, is a metabolic disease characterized by the deposition of urate compounds in the joints resulting in joint inflammation (Kowalak, Welsh, & Mayer, 2011). In adults, gout tends to increase with increasing age, weight, body, blood pressure, and alcohol consumption (Herliana, 2013)

The number of joint disease sufferers was based on the highest diagnosis of health in Bali (19.3%), followed by Aceh (18.3%), West Java (17.5%) and Papua (15.4%). The prevalence of joint disease based on diagnosis of health or symptoms is highest in East Nusa Tenggara (33.1%), followed by West Java (32.1%), and Bali (30%) (Indonesian Agency for Health

Research and Development Ministry of Health, 2013)

With the main symptoms of swelling, redness, heat, and joint pain (Green, 2012). Some people feel mild pain which immediately disappears. There are also those who feel pain until they cannot move for several days. Some even can't walk. Pain intensity that is felt depends on the number of crystals MSU (Mono Sodium Uric) which settles in the joints, infection by pathogens in the open part of tofu, or due to severe inflammation due to increased serum uric acid (Lingga, 2012).

Pain itself can have a major impact on the quality of life of patients. The effects of pain can cause a decrease in activity, social

isolation, sleep disorders, and depression (Stanley & Beare, 2007).

Based on data taken in August-September 2017, it was found that around 91 elderly who suffer from gout in the Community Health Center of Pohjentrek area. After conducting interviews with 4 people with gout sufferers, both had the same symptoms, namely joint pain which ultimately disrupted client activity. Most clients go to health services and get Allopurinol drugs. In addition to the drugs given to the respondents, the researchers suggested that the 4 respondents apply complementary therapy. This complementary therapy utilizes easily found natural ingredients, namely red ginger. This red ginger is used as a warm compress to reduce the level of pain felt by respondents.

Treatment for reducing pain can be by pharmacology or non-pharmacology. Non-pharmacological treatment to reduce pain by using red ginger. Judging from the water content, large white ginger has 82% water, 50.2% small white ginger, and 81% red ginger. Meanwhile, if viewed from its essential oil content, large white ginger contains oil about 1.18-1.68%, small white ginger around 3.3% and red ginger around 2.58% -2.72% (Setyaningrum, 2013). Red ginger has a spicier flavor than ordinary ginger and ginger elephants. This is due to the presence of oleoresin in red ginger which reaches 3%. Oleoresin is a component that gives a bitter and spicy taste (Herliana, 2013).

Red ginger has an anti-inflammatory effect so it can be used to treat inflammation and reduce pain due to gout. This anti-inflammatory effect is caused by the active component of red ginger consisting of gingerol, ginger Dione and zingerones which functions to inhibit leukotrienes and prostaglandins which are inflammatory mediators (Herliana, 2013)

Based on the results of research conducted by Purnamasari & Listyarini (2015) it was found that in the sample of 31 control group respondents found 29 experienced decreased rankings after positive red ginger compresses and 2 ties with only drug intervention without therapy. compress. The researcher did a 20-minute compress / respondent therapy and so on for 14 days a day. Then the respondents were interviewed for the scale of pain after the compress application. So, giving red ginger compresses for 14 days has an effect on decreasing the scale of pain in the elderly with gout.

By doing compresses, warm red ginger in the elderly can relieve joint pain caused by high uric acid in the blood. In addition, by doing this warm ginger compress can reduce the use of drugs that can cause side effects in the elderly. And the ingredients to apply this therapy are very easy to obtain.

According to the description above, the authors or researchers are interested in knowing the pain of elderly people with gout after getting a warm red ginger compress in the Community Health Center of Pohjentrek area of Pasuruan Regency.

OVERVIEW OF CASE STUDY SUBJECTS

This case study has 2 research subjects, namely subject 1 (Mrs. S) and subject 2 (Mrs. M). Both subjects were given an explanation of the SOP of warm red ginger compresses and pain assessment using a scale. The case study subjects were willing to sign the consent sheet. With the researcher contracting for 2 weeks. Interventions are carried out every day for 2 weeks with the help of the subject family. Furthermore, the researchers conducted observations by measuring the level of pain with the scale of pain. The measurement of pain level was carried out before and after

the intervention with the help of the subject family.

General description of subject 1 (Mrs. S)

Subject 1 is Mrs. S with aged 61-year-old Javanese and she is a Muslim. The last education taken by Mrs. S is a high school. Mrs. S live with his children and grandchildren. Mrs. S is a widow. The work that Mrs. S is doing now is a catering businessman. Mrs. S has been suffering from gout. Mrs. S had done a lab examination about 2 months ago at the Community Health Centers. Symptoms often felt by Mrs. S is throbbing. Sometimes it feels like being pulled. The area of pain felt by Mrs. S is around the ring finger of the left hand and the sole of the foot. The most painful time when you wake up. Left and left hand 1 week ago has been reddish. Pain felt by Mrs. S very disturbing daily activities, especially when Mrs. S wants to wash clothes. Mrs. S's left hand cannot be bent. So that complicates Mrs. S for washing clothes. Pain scale felt by Mrs. S is 3 (mild pain). Mrs. S don't know about warm red ginger compresses. Mrs. S only sequences the painful area with wasp oil to reduce pain. Indeed, after sorting in the area of pain there is a decrease but not for long. After that the pain returns again. And for a long time, the effect of the wasp oil provided was not available.

General description of subject 2 (Mrs. M)

Subject 2 is Mrs. M with aged 62 years, various Islamic Javanese with the last education of high school (high school). Mrs. M lives with her husband. Work done by Mrs. M is accepting food orders. Mrs. M knows that he has gout. Symptoms often felt by Mrs. M is throbbing. The area of pain felt by Mrs. M is on the right knee. Mrs. M usually feels pain when you wake up or when you will stand up from a sitting position. Pain that is felt to disturb the

activity of Mrs. M such as when walking, standing for a long time and when from a sitting position to standing. Pain scale felt by Mrs. M is 4 (moderate pain). Mrs. M don't know about warm red ginger compresses. Mrs. M only rubs the affected area with wasp oil and takes medication. And it shows a decline but doesn't last long. After that the pain comes back.

OVERVIEW OF CASE STUDY FOCUS

Table 1. Overview of Case Study Focus

No.	Description of	Subject 1	Subject 2
1.	Name	Mrs. S	Mrs. M
2.	Gender	Feamle	Female
3.	Old	61	62
4.	Education	SMA	SMA
5.	Adress	Jalan Raya Pleret RT 02 RW 03 Pleret Village Pasuruan Regency	Jalan Raya Pleret Gang 04 Rt 01 Rw 02
6.	Have ever done a lab examination	Ever, at a Puskesmas but not routinely (the results of uric acid examination: 7.4 mg / dl)	Ever, at the Puskesmas. Routine follow-up (uric acid examination results: 7.3 mg / dl)
7.	Symptoms disturb activities	Yes, disturbing especially when washing	Yes, when walking is difficult

Presentation of the case study focus

In a study conducted on January 1-14 2018, the scale of pain was obtained before the compresses of warm red ginger for Mrs. S were 3 (mild pain) and Mrs. M is 4 (moderate pain). With both of them complaining about the throats. To Mrs. S pain that is felt is located in the left hand (ring finger) and Mrs. M feels pain in the right knee.

After both compresses for 14 days, both of them experienced a decrease in pain. To Mrs. S, which was initially compressed with a scale of 3 (mild pain) after entering the 9th day of observation had decreased to a scale of 0 (no pain).

Whereas Mrs. M before the compress is obtained the scale of pain 4 (mild pain) but after compressing the scale is 0 (no pain) after entering the 12th day of observation.

The following are the results of data retrieval based on the results of the observation interviews conducted on 2 respondents. In accordance with the interview that was made by the researcher:

1. Are you having trouble compressing warm red ginger?

"It's easy, bro, it's not really difficult. Just compress it. You can also get the ingredients from Mbak," said Mrs. M.

"Easy, mbak, it's not difficult. As long as I compress this. There are no difficulties," said Mrs. S.

From the interview results it can be concluded that the two respondents did not have difficulty in applying warm red ginger compresses. So that both respondents can do the therapy without any obstacles. And both respondents smoothly applied the therapy for 14 days.

2. After compressing warm red ginger, what do you feel?

"Now mbak, thank God there is a change. It tastes better, usually the bones are made sore. But now it's better. So, it doesn't hurt," said Mrs. S

"Yes mbak, now it feels more comfortable than before. Usually that makes the road sick, but now it's better."

Said Mrs. M

From the results of the interview it can be concluded that the two respondents experienced changes in pain. Previously both respondents

complained of pain which resulted in disruption of activity. After both of them were treated with warm red ginger compresses for 1-14 days, the pain changes were quite good. So that both can carry out activities without interference.

3. How does the warm red ginger compress affect the mother feel the pain that was felt before?

"If it doesn't even hurt now, Miss. Now it can be moved. Just wash it now, it can and doesn't hurt." said Mrs. S

"Already like Ms. It doesn't hurt like before. Make the road good." said Mrs. M

From the results of the interview it can be concluded that the two respondents felt the effects of warm red ginger compresses. Both respondents experienced a decrease in pain initially until the respondent no longer felt pain. The impact obtained by this therapy can reduce the pain of both respondents.

4. Does the mother still often feel pain after a warm red ginger compress is done?

"It's not like before mbak, it still feels. Now it's better. It's rare to feel sick like before," said Mrs. S

"Now it's not like before. In fact, it doesn't seem to hurt anymore now. It's good if it's made the way," said Mrs. M

From the results of the interview above it can be concluded that the two respondents no longer felt pain. Initially both respondents often felt pain. Previously both of them only gave rubbing medicine in the area of pain but the pain returned again. Whereas now after being given a warm red ginger compress the two respondents rarely felt pain.

5. What is the level of pain that you feel when you feel a warm red ginger compress?

"Now, Miss. Yes, I don't feel pain anymore," said Mrs. S

From the results of the interview above it can be concluded that the two respondents after a warm red ginger compress for 14 days reached a scale of pain 0 (no pain). Previously Mrs. S feels pain scale 3 (mild pain) while Ny. M has 4 scale pain (moderate pain). But after being given therapy for 14 days, both of them slowly experienced a decrease in the scale of pain.

DISCUSSION

Based on the results of the study, it was found that the two respondents had no difficulty in applying red ginger compress therapy. From the results above, it can be seen that the two respondents did this therapy routinely for 14 days and felt without any problems.

Within 14 days of applying this therapy, both respondents applied this therapy well. They both did with discipline and did not break up in applying it which eventually both experienced a decrease in pain in his fingers and knee joint. Both research subjects had high perseverance in doing therapy.

According to the researcher this is possible because the level of education of the two respondents is at the level of high school, where the higher the level of education of a person will influence his behavior, especially in his understanding and responsibility, then also because of the age of those who are old and female. where women are certainly more patient and diligent in doing something, which makes it possible to do many things regularly and discipline according to the schedule,

This agrees with the statement, because if in applying complementary

therapy a person is not accompanied by patience or perseverance in carrying out it, it will not get maximum results. In accordance with the opinion of (Paksi, 2010), the greater the perseverance, the greater the step towards success.

Materials and applications that are easy to obtain can make it easier to implement them so that people have an interest in continuing to apply them. Treatment using complementary therapies has benefits besides being able to improve health more thoroughly and also cheaper. Complementary therapies will especially be felt cheaper if clients with chronic diseases must routinely spend funds (Widiastuti, 2008).

The pain felt by the two respondents was quite disturbing in both doing daily activities. So that both are difficult to carry out daily activities. The two are still active at work. But after a warm red ginger compress is made both of them can go back to doing daily activities. Although the elderly experience a physical decline and have health problems, the elderly must still be able to play an active role in meeting the needs of daily activities. With the condition of the elderly who do not want to depend on their children. Elderly must be required to be able to fulfill their own needs. In accordance with Health Law No. 23 of 1992, article 19 paragraph 1 in (Nugroho, 2008) elderly people are someone who is due to his age experiencing biological, physical, psychological, and social changes.

This change will affect all aspects of life, including their health. Therefore, human health continues to need special attention by continuing to be maintained and improved so that as long as possible can live productively in accordance with their abilities so that they can participate actively in development.

Both respondents said that after a warm red ginger compress in the area where the pain was felt, the two felt more comfortable. The heat created by this red ginger can create a sense of comfort. Unlike liniment, red ginger has a longer heat effect which can reduce pain. This heat can relax the painful area. So that blood vessels undergo vasodilation which eventually increases blood flow. Increased blood flow can get rid of inflammatory products such as bradykinin, histamine, and prostaglandins that cause local pain (Samsudin, Kundra, & Onibala, 2016).

CONCLUSION

Based on the results of the study it can be concluded:

After a warm red ginger compress was made there was a change in the level of pain of both subjects (respondents). In the first subject, which was initially at the level of pain 3 (mild pain) after the red ginger compress was done, the level of pain was 0 (not painful). The left hand (ring finger) of the first subject can be used for activities without any pain. It's just that there is still a bit of stiffness. In subject 2 which was originally at the level of pain 4 (moderate pain), the level of pain 0 (no pain) was obtained. The right knee of the second subject can be used for activities.

SUGGESTION

1. For research subjects
Applying this therapy patiently and thoroughly to get satisfying results.
2. For nurses
Can be applied to warm red ginger compresses as a treatment besides using medical treatment.
3. For health care institutions
Can begin to be applied to the therapy of red ginger compresses as an alternative choice besides using medical treatment.

4. For educational institutions
Making new alternatives or making new breakthroughs in the use of warm red ginger compress therapy.

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