

## Application of Cupping Therapy in TN "A" for Pain Problems in Gouty Arthritis Clients

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### Abstract

*Introduction: Gout arthritis is one of the diseases that often occurs in the elderly, gout is caused by people who consume a lot of food and drinks containing purines such as tea and coffee. High uric acid can cause a number of diseases, including rheumatoid arthritis, gout, muscle strophism, kidney failure and kidney stones, myocardial infarction, diabetes, and premature death. Cupping therapy or known as bekam is a treatment method by removing damaged blood from the body through the surface of the skin. Cupping functions to reduce swelling of sore joints, cupping removes prostaglandin substances from the sore spot so as to reduce pain, in addition, cupping triggers the secretion of endorphins and enkephalins in the body which function as natural pain relievers. Research method: The approach method used in this writing is a descriptive writing approach using a case study design. Research results: After being given nursing care and implementing nursing, it was found that cupping therapy had an effect on reducing the intensity of pain in patients with gout arthritis. Conclusion: conclude that the implementation of cupping therapy is very appropriate to reduce the intensity of pain in clients.*

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## 1. INTRODUCTION

Gouty arthritis is a disease that often occurs in the elderly *gout* caused by people who consume a lot of food and drinks containing purines such as tea and coffee, as well as other animal organs (tripe, spleen, intestines). Excessive consumption of foods containing purine will result in high levels of uric acid in the body. High uric acid can cause a number of diseases, including rheumatoid arthritis, gout, muscle strophism, kidney failure and kidney stones, myocardial infarction, diabetes, and premature death, and the incidence of these conditions increases every year (Afnuhazi, 2019). Gout is a very painful type of arthritis caused by a buildup of crystals in the joints, due to high levels of uric acid in the body. The joints attacked are mainly the toes, knees, heels, wrists, fingers and elbows. Apart from pain, gout can also make joints swollen, inflamed, hot and stiff so that sufferers cannot carry out activities as usual and sufferers cannot seek treatment due to poor economic conditions (Rafida, 2022).

Excess uric acid content in the body can cause gouty arthritis and hyperuricemia in the blood, resulting in high uric acid levels. When uric acid levels in the blood reach 7 mg/dl in men and 6.5 mg/dl in women, hyperuricemia occurs, the age factor also supports the increasing prevalence of gout (Probosari, 2019).

According to the World Health Organization (WHO), gouty arthritis affected 34.2 percent of people globally in 2017. In rich countries like the United States, gouty arthritis is widespread. Gouty arthritis affects 26.3% of the overall population in America. In contrast, a study from Taiwan found that the frequency of gout in senior women was 2.33% and the incidence of hyperuricemia in these women increased by 19.7%. Gouty arthritis is

becoming more common worldwide, not just in rich countries. However, developing countries like Indonesia are also experiencing growth. Three-quarters of Indonesians under the age of 34 suffer from gouty arthritis, which is common (Erman, 2021). Research from Riskesdas in 2018, there were 56,394 common diseases in the age group 65 and over, according to a medical assessment of the prevalence of common gouty arthritis in Indonesia. In Indonesia, the prevalence of gout sufferers is estimated at 11.1% at age 45-54 years, 15.5% at age 55-64 years, 18.6% at age 65-74 years based on diagnosis, and 18.9% at age 75 years and over (Panorama, 2019).

The prevalence in East Java is approximately 28% of elderly people who suffer from gout. Medical estimates show that the initial prevalence of gouty arthritis in East Java is 16.03% in the 75 and over age group, followed by 13.90% in the 65 and over and older age groups. Age group 55 to 64 years 13.69%. More specifically, 8.64% of the population in Probolinggo Regency, East Java suffers from gouty arthritis (Panorama, 2019).

Joint disease increases with age. Several (non-pharmacological) therapies are used to treat pain in the elderly. Because cupping therapy can improve blood circulation, reduce pain, soothe, and create a sense of comfort, research into its use as a non-medical treatment for aging has shown a reduction in the intensity of the pain scale. Use *Cupping therapy* or what is known as Cupping as a therapy can help those experiencing joint pain get better. *Cupping therapy* or what is known as cupping, used in non-medical treatment is very good for relieving discomfort that has been experienced (Sunarsih, 2022).

*Cupping therapy* or what is known as Cupping is a treatment method by removing damaged blood from the body through the surface of the skin. Damaged blood is blood cells that are damaged or old (more than 120 days) or contain metabolic waste which then results in the body's circulatory system not functioning optimally, causing disruption to both physical and mental health. Damaged blood, metabolic waste or static blood which causes impaired blood circulation, hereinafter referred to as *Causative Pathological Substances* (CPS). Through nitric oxide (NO), cupping functions to reduce swelling of painful joints, cupping removes prostaglandins from painful areas thereby reducing pain, in addition, cupping triggers the secretion of endorphins and enkephalins in the body which function as natural pain relievers. Cupping is a type of complementary therapy which consists of four processes, namely suction of the skin and subcutaneous tissue, leaving the glass in a negative pressure position, removing blood and precise points (Rafida, 2022).

## 2. RESEARCH METHOD

The approach method used in this writing is a descriptive writing approach using a case study design. Case studies are writing carried out using a descriptive approach (Notoatmodjo, 2012). This study uses nursing care with a case study research design, namely nursing care where the author collects data starting from assessment, determining a diagnosis, planning, carrying out actions and evaluating clients with cases of Gout Arthritis.

## 3. RESEARCH RESULTS AND DISCUSSION

### Results of Nursing Care Assessment Application of Cupping Therapy in Mr "A" on Pain Problems in Gout Arthritis Clients

Even though gouty arthritis does not cause death, it can interfere with the sufferer's activities. Because joint pain, stiffness and swelling often cause limited movement, this can impact the sufferer's independence in self-care and have a negative impact on their quality of life. (Santi Fatmala, 2021).

Based on the study data above, it shows that Mr. A, 54 years old, said his hands tingle when doing activities that were too strenuous and he often felt pain in his joints. Previously,

the client had been checked at the Pajarakan Kulon Community Health Center and the community health center nurse said his uric acid was high. At the time of the assessment on December 5 2023, the client was at home complaining of pain in the hand that had been going on for a long time. So clients find it difficult to carry out their daily activities. According to the PPNI DPP Working Group (2016), acute pain is a sensory or emotional experience related to actual or functional tissue damage, with sudden or slow onset and mild to severe intensity and constant, lasting more than 3 months. (SDKI, 2016).

According to the study data, it can be concluded that if a person with gouty arthritis experiences joint pain, then activities can cause physical problems that can cause stiffness in the joints or joint pain, making the pain persist or increase.

### **Analysis of Nursing Care Data on Application of Cupping Therapy to Mr "A" on Pain Problems in Gouty Arthritis Clients**

Acute pain is an unpleasant feeling that every individual feels, which can be caused by several conditions, including joint pain. Although pain occurs as a result of a decline in health conditions, it can have an impact on functional health pattern dysfunction. Pain that arises due to tissue damage in the joint area is a major musculoskeletal problem, especially for gouty arthritis patients.

One non-pharmacological therapy that can be used to treat pain in gouty arthritis sufferers is cupping therapy. Cupping therapy is a significant cleanser of serum triglycerides, total cholesterol, LDL cholesterol (*Low Density Lipoprotein*), ferritin, uric acid, autoantibodies, cytokinin receptors, and others. Cupping works by cleaning the blood from increased substances, for example iron or pathological substances, such as auto antibodies. So one of them is a decrease in uric acid levels.

(Suharto et al., 2020) in their research said that providing cupping therapy was effective in reducing the pain scale in gouty arthritis sufferers. In other research, it was explained that cupping therapy was effective in reducing pain and improving walking ability. (Tri Novana et al., 2021).

This has also been proven by several researchers who conducted research on cupping therapy, including according to (Hasanah et al., 2023) who said that cupping therapy can reduce the pain scale, reducing joint stiffness has an impact on reducing the pain scale.

It can be concluded that cupping therapy can provide benefits as a non-pharmacological therapy to reduce pain. The effect of cupping therapy on gout is that cupping can remove uric acid crystals from joints and surrounding tissue, so that the pain is reduced and there is no inflammation, red color, or swelling in joints and improvement also maintains body health.

### **Nursing Intervention Applying Cupping Therapy to Mr "A" for Pain Problems in Gouty Arthritis Clients**

Based on the data and results of nursing interventions, interventions will be given to clients with acute pain or chronic musculoskeletal conditions and complaints of pain. The expected goal after carrying out nursing care measures 1 x 24 hours with a duration of 10 minutes, is that the level of pain is expected to decrease with the criteria for the result being decreased pain complaints. One of the non-pharmacological therapies used is cupping therapy to reduce pain intensity.

After providing nursing care and carrying out nursing implementation, the results showed that cupping therapy had an effect on reducing the intensity of pain in patients suffering from gouty arthritis because cupping therapy functions to overcome complaints that arise in gouty arthritis patients. For example, stiffness in the joints, weakness and muscle tension.

This is in accordance with the opinion of Lauche (2011) that cupping therapy is a therapy that can be used to reduce pain in patients with chronic diseases which can be

caused by degenerative conditions, poor diet or stress (Hssanien *et al.* 2010; Lauche *et al.* 2011). In Damayanti's (2012) research, cupping therapy is effective for chronic diseases so that cupping therapy can improve sleep quality, eliminate fatigue, aches and reduce pain intensity.

Cupping therapy has a physiological mechanism for excreting excess unwanted substances in the blood and interstitial fluid that can disrupt blood chemistry and physiological homeostasis. The need for al-hijamah as a method of treatment is increasing more in modern society where the incidence of several diseases is increasing, such as metabolic diseases such as hyperlipidemia, gout and hypertension and others (Sayed, 2014). In Astuti's (2019) research, cupping therapy was effective in reducing uric acid levels. The effect of cupping therapy on gout is that cupping can remove uric acid crystals from the joints and surrounding tissue, so that pain is reduced and there is no inflammation, redness or swelling in the joints (Roidah, 2014).

Cupping through nitric oxide (NO) functions to reduce swelling of painful joints, cupping removes prostaglandin substances from painful areas thereby reducing pain, in addition, cupping triggers the secretion of endorphins and enkephalins in the body which function as natural pain relievers (Umar, 2014). Cupping therapy can reduce uric acid levels, because with cupping substances that are harmful to the body can be removed (Hastuti, 2013). If uric acid continues to increase, this will happen *Gout Arthritis* Chronic characterized by continuous attacks of pain. The emergence of uric acid in the kidneys will cause uric acid stones which are characterized by severe pain in the waist area and if it continues it can disrupt the function of the kidneys (Suroika, 2012).

Based on the therapeutic benefits of cupping, it is a significant cleanser of serum triglycerides, total cholesterol, LDL cholesterol, ferritin, uric acid, autoantibodies, cytokinin receptors, and others. Cupping works by cleaning the blood from increased substances, for example iron or pathological substances, such as auto antibodies. So one of them is a decrease in uric acid levels.

#### 4. CONCLUSION

Based on the assessment data above, the client's main complaint data was obtained with complaints of pain and frequent tingling in the hands. The author raises the nursing diagnosis Acute pain related to chronic musculoskeletal conditions d.d complaining of pain. (D.0078).

After carrying out cupping therapy on patients with acute pain problems, the problem is resolved. To reduce the pain scale, cupping therapy is carried out for 1 x 24 hours with a duration of 10 minutes. So it can be concluded that the implementation of cupping therapy is very appropriate to reduce the intensity of pain in clients.

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