



## Application of Finger Grasp Relaxation Therapy in Postoperative Hemorrhoidectomy Patients with Acute Pain in The Teratai Room of RSUD Prof. Dr. Margono Soekarjo Purwokerto

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### ABSTRACT

*Background: This study explores the use of finger grasp therapy to relieve pain in post-hemorrhoidectomy patients at RSUD Prof. dr. Margono Soekarjo Purwokerto. Objective: The purpose of this study was to determine the effect of finger grasping relaxation therapy on acute post-hemorrhoidectomy pain at Prof. Dr. Margono Soekarjo Purwokerto Hospital. Method: this research method uses a descriptive, paper-based approach, sampling using purposive sampling conducted on 1 patient. Data was collected through interviews, physical examination, and observation. Results: There is a decrease in pain from a scale of 6 (moderate) to 3 (mild) in the implementation for 3 days Conclusion: Finger grasping therapy as a non-pharmacological method in reducing post-hemorrhoidectomy pain.*

**Keywords:** Hemorrhoidectomy, Acute Pain

### 1. INTRODUCTION

Hemorrhoid is a situation where there is inflammation of the veins around the anus and enlargement originating from the hemorrhoidal plexus (Suprijono, 2017). Hemorrhoids produce quite annoying pain as well as swelling and bleeding, in the anal pad area (Pradiantini & Dinata, 2021). In Indonesia, the incidence rate of hemorrhoids is 6.1%, but only 1.2% are officially diagnosed. The incidence of hemorrhoids reaches 6.1%, but only 1.2% are officially diagnosed, the prevalence of hemorrhoids in Central Java Province reaches 1.7% (Kemenkes RI, 2018). Findings from preliminary research at Prof. Dr. Margono Soekarjo Purwokerto Hospital showed that there was one case of a patient with grade IV

hemorrhoids who underwent hemorrhoidectomy.

In cases of grade 3 and 4 hemorrhoids, the therapeutic approach is generally surgery, such as hemorrhoidectomy (Pradiantini & Dinata, 2021). The impact of hemorrhoidectomy surgery can result in intense pain after surgery (Shenoy & Anitha, 2014) Pain is a sensation felt in response to a stimulus that causes damage to the tissue (Potter & Perry, 2010). Emphasis on pain reduction is important because after surgery on the rectal area, spasm of the sphincter and perianal can cause pain. Therefore, pain management is the first priority (Smeltzer & Bare, 2002). Commonly used relaxation is the finger grip method. This approach is a simple type of relaxation that can be practiced easily (Larasati & Hidayati, 2022).

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When using finger grasping relaxation as an effort to reduce pain, the body stimulates the activity of the parasympathetic nervous system. This condition results in an increase in adrenaline hormones that regulate stress levels, assist in regulating breathing rhythms, and increase oxygen levels in the blood. This results in a feeling of calm as an effort to reduce pain sensations (Rosiska, 2021) The study conducted by (Yayutrisnawati et al., 2018) found that the relaxation of the finger grip muscles was quite effective in eliminating pain compared to breathing relaxation. The study conducted by (Nur & Khasanah, 2022) showed that the use of finger grip relaxation was able to reduce patients' feelings of pain after undergoing surgery. hemorrhoid.

## 2. METHODS

The approach applied to this case study is a quantitative descriptive approach of case studies including nursing assessment, diagnosis, planning, nursing implementation, and nursing evaluation. The case taken in this paper is located in the Lotus room of Prof. dr. Margono Soekarjo Purwokerto Hospital, with the implementation of a case study from January 31, 2024 to Friday, February 2, 2024. Sampling in this study used purposive sampling with 1 patient who experienced post-hemorrhoidectomy pain. In the preparation of nursing care, data were obtained through three main methods: Interview, physical evaluation, and observation. Interviewing involves using open-ended and closed-ended questions to obtain data subjectively. The instrument used in evaluating pain in this study is a numerical pain assessment scale (NRS) whose validity and reliability have been measured. The finger grip relaxation procedure begins with a gentle grip on all fingers of the hand and then attaches the thumb with the index finger, middle finger, ring finger and little finger which is done for 2-5 minutes each by inhaling.

## 3. RESULT AND DISCUSSION

### 3.1 Result

The results of the assessment & discussion show the treatment measures that have been applied to the client. This nursing process

involves stages starting from nursing assessment, nursing diagnosis & nursing planning as well as the nursing implementation/implementation process, to treatment evaluation (Potter & Perry, 2010).

### 3.1.1 Results of the nursing assessment

Wednesday 31-5-2024 at 12.00 The patient experienced discomfort around his anal area and was diagnosed with grade IV hemorrhoids and a hemorrhoidectomy was performed. After surgery, the patient complained of scale 6 pain, appeared grimacing and restless.

Physical examination found that the client's general condition was weak but his consciousness was good with a GCS score of 15. The results of monitoring vital signs showed blood pressure of 130/80 mmHg and pulse rate of 80 times per minute, and respiratory rate of 20 times per minute. During the physical examination, it was found that the anus was black and there was a gauze tampon installed.

Once comprehensive data is obtained, data is collected and analyzed to establish an appropriate nursing diagnosis (Potter & Perry, 2010). Analysis of the results of the evaluation of the client with subjective information that the patient experienced pain on a scale of 6 The patient looked restless, the patient looked grimacing TD / blood pressure 130/80 mmHg, N : 80x/min, RR : 20x/min. Based on the above data, the diagnosis that was established was acute pain related to physical injury agents (surgical procedures) (PPNI, 2017)

### 3.1.2 Nursing interventions

The intervention carried out for the diagnosis is pain management. The intervention plan includes observation of the pain scale. and monitoring the effectiveness of finger grip therapy that has been given. administration of ketorolac analgesic 3x30mg (PPNI, 2018)

### 3.1.3 Nursing implementation

The implementation will be carried out on Wednesday, January 31 – February 2, 2024. Nursing action on January 31, 2024 at 20.00 WIB. Identifying pain scales: subjective data obtained from patients reporting pain on a scale of 6 (moderate) patients showed grimacing

expressions. Giving exercises with non-drug methods of finger grip relaxation and ketorolac 30 mg.

The nursing action on Thursday, February 1, 2024 19.00 WIB is to provide exercises in deep breath relaxation and finger grip relaxation and ketorolac 30 mg.

Friday, February 2, 2024 at 11.00 WIB, nursing action was carried out by providing non-pharmacological techniques for finger grip relaxation and monitoring the success of the finger grip relaxation complementary therapy that had been given previously. The patient stated a pain level of scale 3 (mild pain).

### 3.1.4 Nursing evaluation

After implementing nursing practice as planned, the nurse evaluates the effects of the action according to the established standards (Debora, 2011) Evaluations should be carried out regularly and repeatedly, not just once, to detect changes or improvements in the client's condition (Potter & Perry, 2010). Friday, February 2 at 09.00 WIB, the evaluation results showed a pain level of scale 3 (moderate pain).

## 3.2 Discussion

The first step in the nursing process is to conduct an assessment. The aim is to collect basic information needed to evaluate the patient's health condition and identify existing or possible problems. (Debora, 2011). When assessing pain, the patient has grade IV hemorrhoids and hemorrhoidectomy is performed, after hemorrhoidectomy the patient complains of pain. There is a correspondence between the case and the theory which states that pain can be felt after undergoing hemorrhoidectomy surgery (Shenoy & Anitha, 2014) It is important to consider the impact of spasm resulting in pain in the sphincter and muscles around the anus (Smeltzer & Bare, 2002). The symptoms felt by Mr. Mr. K's symptoms are consistent with those of hemorrhoids causing pain and fresh red bleeding during bowel movements (Smeltzer & Bare, 2002). Hemorrhoids that increase in size can bulge out and prolapse. Partially prolapsed patients, if the hemorrhoid re-enters after defecation, indicate grade III hemorrhoids, if it needs to be re-inserted using assistance from a

finger indicates grade IV hemorrhoids (Shenoy & Anitha, 2014).

### 3.2.1 Nursing Diagnosis

Nursing Diagnosis involves a medical evaluation of a health condition by taking into account the response that arises from an individual, family, group, or community (PPNI, 2017). From the analysis of the data, patients complained of persistent pain, postoperative pain, pain with a score of 6 (moderate, intermittent). The patient looked agitated and appeared to be grimacing.

Based on this analysis, the diagnosis of acute pain is concluded to be related to surgical procedures as the cause (PPNI, 2017). In theory, patients who undergo post-operative hemorrhoidectomy are most likely to be found to have a primary diagnosis of pain (Smeltzer & Bare, 2002). Acute pain is an emotional sensation/response that arises after a sudden injury, surgical intervention, or a brief state of illness, i.e. less than six months, with severity that can vary from mild to severe (Wahyudi & Abdul, 2016). Variables that affect nursing problems related to acute pain include biological factors such as the presence of infection, physical factors such as burns or surgical procedures.

### 3.2.2 Nursing Implementation

Implementation in nursing is the action taken after the planning stage is completed and implemented for the client. Although the steps taken may be the same, the application for the client is tailored to the most relevant needs and the client's condition at the time (Debora, 2011). In accordance with the implementation nursing plan which lasts 3 times 24 hours with the aim of reducing pain, steps are taken including using a pain assessment scale. Non-pharmacological techniques such as deep breathing relaxation and finger-clenched relaxation are given to relax the muscles and inhibit the transmission of pain signals.

Patients were also given learning about non-drug methods to reduce pain, in addition, the administration of ketorolac 3x30 mg to relieve moderate to severe pain. This approach is in line with the theory that suggests the use of non-pharmacological therapies such as finger grip

relaxation as part of the management of acute postoperative pain (Larasati & Hidayati, 2022)

### 3.2.3 Nursing evaluation

Evaluation is the process of comparing the output of the steps that have been implemented by the outcome standards that have been set in the planning. In addition, Evaluation also involves assessing whether the problem has been fully resolved, partially, or still not (Debora, 2011). According to the nursing plan, the implementation is carried out 3 x 24 hours. Evaluation of the diagnosis of acute pain caused by physical injury agents has shown positive results with outcome criteria, where pain complaints from 6 to 3, indicating that the finger grip relaxation approach is effective in reducing pain in Mr. K's patients, in accordance with the findings in the study conducted (Larasati & Hidayati, 2022) showing that finger grip relaxation is able to reduce acute pain after surgery.

Finger grip relaxation therapy has been known to be effective in reducing pain with several mechanisms involved Reduction of muscle tension, when doing finger grip relaxation therapy, techniques applied such as slowly holding and releasing the fingers in sequence can help reduce muscle tension around the fingers and hands. Excessive muscle tension can cause pain and stiffness in the area.

By relaxing these muscles, pain caused by tension can be reduced (Astutik & Kurlinawati, 2017) Improved Blood Circulation, Finger grip therapy involves the expansion and contraction of the fingers, which can stimulate blood circulation to the finger and hand area. This increased blood flow is important because it brings more oxygen and nutrients to tissues that may experience tension or discomfort, as well as helping to eliminate chemicals that cause pain (Yayutrisnawati et al., 2018). Stimulation of the Autonomic Nervous System, doing finger grip relaxation therapy can stimulate the autonomic nervous system, especially the parasympathetic nervous system. The parasympathetic nervous system is known to stimulate the body's relaxation response, which can reduce the body's response to pain and stress. This can help in reducing sensitivity to pain and improving overall comfort (Rosiska,

2021). Psychological Effects, finger grip relaxation therapy also has a positive psychological effect. Doing relaxation exercises regularly can reduce anxiety, improve mood, and improve an individual's perception of pain. This can make individuals more able to manage and reduce the pain they feel (Indriyanti et al., 2022). Body Awareness Training, finger grip therapy often involves the practice of body awareness or mindfulness, where individuals are taught to be more aware of sensations and tensions in their bodies (Sari, 2016). By increasing this awareness, individuals can learn to identify and respond to pain more effectively, for example by changing positions or performing relaxation techniques when pain symptoms appear. By considering these mechanisms, finger grip relaxation therapy can be an effective tool in managing and reducing pain, especially in individuals experiencing muscle tension or discomfort.

## CONCLUSION

The final result of this case analysis is the provision of non-pharmacological techniques of finger grip relaxation for 3 days successfully reducing pain intensity from moderate to mild in Mr. K with a diagnosis of acute pain after hemorrhoidectomy surgery. K with a diagnosis of acute pain after hemorrhoidectomy surgery.

The limitations of this study are

1. The results of this case study only apply to specific cases and cannot be widely generalized to a wider population. This is because the data obtained only comes from one individual or one case.
2. The results of this study cannot represent the variations and complexities that may exist among other people due to the small number of respondents used.
3. There is no comparison group in this case study, which may limit the ability to evaluate how effective or significant the results of the intervention or events observed in this case study are.
4. In studies with a single respondent, there is great potential for selection bias. Respondents are selected because of their unique case & because they are

easily accessible, which could lead to unrepresentative results.

Diagnosis dan Penatalaksanaan Hemoroid. *Ganesha Medicine*, 1(1), 38. <https://doi.org/10.23887/gm.v1i1.31704>

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