



Analysis Of Nursing Care in Post Laparotomy TAH-BSO Patient Using Finger Grip Relaxation Therapy

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ABSTRACT

Handling of chocolate cysts can be done by laparotomy surgery. The surgical procedure has an effect or problem that often arises, namely acute pain in the area of the former operation. One of the therapies that can be given to patient with post-laparotomy surgery is finger grip relaxation techniques. This technique is considered capable of reducing the intensity of pain in postoperative patient, in addition to that finger-held relaxation therapy is an effective, comfortable, easy to use, and inexpensive therapy so that all patient can obtain and perform this therapy. This work aims to determine the effectiveness of applying finger-held relaxation techniques to patient with post-laparotomy surgery for indications of chocolate cysts. The method used in this research is a case study on patient in the Dahlia room, dr. Soebandi General Hospital with a diagnosis of acute pain. The results after being given the intervention of finger-held relaxation techniques for 3 consecutive days with 2 sessions per day for 15 minutes with 3-minute intervals changing the fingers held were a decrease in pain intensity from sharp pain that was felt continuously with a scale of 6 NRS to a recurring, intermittent pain with a pain scale of 3 NRS.

Keywords: Finger Grip Relaxation, Laparotomy, Nursing Care, TAH-BSO

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I. INTRODUCTION

Endometriosis, also known as a chocolate cyst, is a medical condition in which endometrial tissue, which normally grows in the uterus, grows outside the uterus into surrounding areas and even to

more distant parts of the body. A chocolate cyst is a non-cancerous, fluid-filled cyst that usually forms deep in the ovary. It is called a chocolate cyst because the symptoms are brown cysts that look like

melted chocolate (Ham & Saraswati, 2018).

In 2015, there were 23,400 cases of ovarian cysts in Indonesia, and the number of deaths due to this condition reached 13,900 people. It can be concluded that the death rate from ovarian cysts is very high. This is because cyst disease is asymptomatic or asymptomatic so that the majority of new patient go to health services after entering a more advanced stage (Fatkhayah, 2019).

Handling of chocolate cysts can be done through a laparotomy (Pramana, 2021). Laparotomy is a surgical procedure performed by making an incision in the abdominal cavity so that it is open, this surgical procedure has an effect or problem that often arises, namely acute pain in the area of the former operation. Pain is a condition where physical and behavioral discomfort occurs so that it can affect daily activities (Marlinda et al., 2018).

Pain management can involve pharmacological and non-pharmacological approaches. Pharmacological therapy includes the use of opiates/narcotics, non-steroidal anti-inflammatory drugs (NSAIDs), adjuvant drugs, and analgesics. Meanwhile, non-pharmacological therapies include the use of warm compresses, cold compresses, massage,

acupuncture, and relaxation (Rehatta et al., 2018).

One of the relaxation methods that can be used to reduce pain intensity after laparotomy is the finger hold relaxation technique. Finger grip relaxation techniques involve diaphragmatic breathing exercises, progressive relaxation techniques, guided imagery, and meditation. Several studies have shown that finger-held relaxation therapy is effective in reducing the intensity of postoperative patient pain. In addition, this therapy is considered effective, comfortable, easy to use, and affordable so that it can be accessed by patients (Fuji & Marlina, 2018).

Based on the explanation of the problems above, researchers are interested in knowing the effectiveness of the implementation of finger grip relaxation techniques on patient with post-laparotomy surgery for indications of chocolate cysts at dr. Soebandi general hospital Jember.

2. METHODS

This study is a case study conducted on post-endometriosis surgery patients on January 9 - January 11, 2023. The activity was carried out in the inpatient ward of a hospital in the Jember area, East Java. This study aims to analyze finger grip relaxation

therapy to reduce post-operative pain in endometriosis patients. This study uses primary data from observations when the researcher was on duty. In addition, it also uses secondary data in the form of hospital documents, such as patient medical records.

3. RESULTS

On January 09 - January 11 2023 the patient underwent TAH-BSO laparotomy surgery and the patient experienced acute postoperative pain, after being given finger grip relaxation therapy there was a significant change from a pain scale of 6 to a pain scale of 3 on the third day.

Table 1. Developmental Problem of Acute Pain

Pain Assessment	Day 1 (09 January 2023)	Day 2 (10 January 2023)	Day 3 (11 January 2023)
Provokes	TAH-BSO laparotomy surgery	TAH-BSO laparotomy surgery	TAH-BSO laparotomy surgery
Quality	Sharp	Blunt	Blunt
Radiates	Abdomen	Abdomen	Abdomen
Scale	6	4	3
Time	Continuously	Elapsed	Elapsed

The patient underwent the TAH-BSO laparotomy procedure on January 9 2023 with the type of anesthesia used, namely General Anesthesia (GA). Nursing problems on the first day were acute pain associated with post-laparotomy TAH-BSO abdominal incision, impaired tissue integrity associated with post-laparotomy TAH-BSO abdominal incision, impaired physical mobility associated with pain characterized by pain on movement and decreased ADL, anxiety associated with lack of information characterized by fear of moving because of fear of the surgical wound opening again, and sleep pattern disturbance associated with postoperative

pain characterized by difficulty sleeping and changing sleep patterns.

4. DISCUSSION

Analysis of Patient Characteristics

The patient is a 40 year old woman with ovarian cysts of the type of endometriosis which is experiencing severity and enlarges to a diameter of 13x14 cm. The patient said he had felt a lump in his stomach since 15 years ago and then went to the nearest hospital and was diagnosed with an ovarian cyst and was recommended for surgery, but the patient refused because he was afraid of side effects from the operation. About 2 months before the MRS the patient complained of pain

during menstruation and urination, the patient also complained of a decrease in appetite so the patient returned for examination at the nearest hospital. The results of the examination that has been carried out by the patient's cyst have enlarged and spread outside the ovary so that surgery is needed immediately. Finally, the patient agreed to do the operation at dr. Soebandi general hospital.

The patient's family also has the same disease, namely the patient's first sister with uterine myoma and the patient's second sister with ovarian cysts. The patient has a history of using birth control pills for 15 years, has a history of anemia with the last Hb of 9.9 mg/dL and a history of normal delivery at a traditional birth attendant.

Age is a risk factor for ovarian cysts. This is caused by a decrease in the performance of organs and immunity that occurs with age, making the body more susceptible to diseases, including ovarian cysts. This finding is in accordance with research conducted by Fatkhiyah in 2019 which stated that the age range of 20-45 years has a high risk of experiencing ovarian cysts. In addition, research conducted by Widaryani in 2020 also found a relationship between age and the incidence of ovarian cysts.

Apart from age, the use of oral contraceptives, especially those aimed at suppressing ovulation, is also a risk factor for cysts. The use of these contraception can cause irregular menstrual cycles which can trigger ovarian cysts. When a cyst occurs, the patient will usually experience bleeding due to the widening of the cyst wound and causing pain. This causes menstrual blood to come out little by little and feel painful and anemia occurs in sufferers as experienced by patient (Fatkhiyah, 2019).

So it can be concluded Patient affected by chocolate cysts or endometriosis is the prolonged use of oral contraceptives and entering an age that is susceptible to disease. In addition, a family history of reproductive disorders such as cysts and myomas causes a higher risk of developing chocolate cysts.

The treatment of the patient's chocolate cyst is a TAH-BSO laparotomy + adhesiolysis procedure. Laparoscopic surgery performed to remove the uterus and surrounding organs that are affected or affected by chocolate cysts makes it impossible for the patient to get pregnant. As a result of this, the patient says he feels inferior. Patient are also afraid of the assumptions of people around or neighbors regarding the conditions they face. The patient also asks about her menstrual cycle

whether it still occurs or not. So that it can be interpreted that the patient still feels denial regarding the situation he just faced and happened. In addition, the patient also feels postoperative pain with a pain scale of 6 or moderate pain which causes the patient to have difficulty doing activities and the patient's ADL becomes dependent. The patient is also afraid to move because he is worried that the scar will reopen. Patient also have difficulty sleeping and feel stressed due to the pain they feel

Hysterectomy is a surgical procedure to remove the uterus. The result of having a hysterectomy is having postoperative pain, menopausal symptoms such as vaginal dryness, night sweats, insomnia, decreased sex drive, feeling pain during intercourse. Apart from that, it is related to the psychological impact experienced by the patient which requires that the patient cannot get pregnant again (Oktavelani, 2019).

Analysis of Main Nursing Problems

Based on the data that appears on the patient, signs of symptoms are found in the form of the patient complaining of pain like being stabbed in the area of the previous laparotomy surgery which appears continuously when moving on the 6 NRS pain scale, the patient looks grimacing when he feels pain, the patient is protective

when making movements, the patient looks restless, and has difficulty sleeping. These data refer to the characteristic limitations of acute pain nursing problems. Acute pain is a sensory or emotional experience associated with actual or functional tissue damage, with sudden or slow onset and intensity to severe lasting less than 3 months (PPNI, 2017).

Patient who undergo laparotomy for indications of chocolate cysts may experience nursing problems in the form of acute pain due to surgical procedures that cause physical injury. Pain is closely related to receptors and stimuli in the body. When pain receptors in the skin and mucosa are stimulated, chemicals such as histamine, bradykinin, prostaglandins, and acids are released in response to tissue damage. So that when it is done after a laparotomy surgery the patient will complain of pain due to the incision wound obtained (Apriyani et al., 2022).

Analysis of Nursing Intervention

Based on the symptom data that appears on the patient, it refers to the limitations of the characteristics of acute pain nursing problems, so to deal with this, nursing intervention is needed in the form of pain management to reduce the intensity of the patient's natural pain. Pain management is an intervention to identify

and manage sensory or emotional experiences related to actual or functional tissue damage, with sudden or slow onset and intensity to severe that lasts less than 3 months and is constant (PPNI, 2018). In this case the researcher chose the finger holding relaxation technique intervention to reduce the patient's pain intensity.

The finger grip relaxation method involves holding the five fingers one by one in sequence, starting from the thumb to the little finger, for about 2-3 minutes. The touch of the thumb is believed to help reduce anxiety and headaches. The index finger grip aims to relieve frustration, fear, and muscle pain, and is also associated with kidney health. The middle finger is associated with blood circulation and fatigue, so touching it can create a relaxing effect that helps overcome anger, lowers blood pressure, and relieves body fatigue. A touch of the ring finger can help reduce digestive and respiratory problems as well as overcome negative energy and feelings of sadness. The little finger has a direct connection to the heart and small intestine. By holding the little finger, it is believed to reduce feelings of nervousness and stress.

The hand-held finger relaxation technique is a relaxation method that is very easy to do, does not require special tools, and can be done anywhere. Patient, who experienced weakness after the

laparotomy surgery, was able to carry out the finger grip relaxation technique while lying down. Therefore, it can be concluded that the hand-held relaxation technique is very appropriate and needed by Patient to reduce pain intensity in addition to the use of analgesics as pharmacological therapy.

Analysis of Nursing Implementation

During the implementation, the patient is first given information related to finger grip relaxation techniques and the benefits that will be obtained when carrying out the intervention. After the patient agrees, the researcher gives an example regarding the steps to implement the finger grip relaxation technique, namely by holding one finger alternately while closing your eyes and taking a deep breath first. After the patient understands the steps explained by the researcher, the patient is asked to relax the finger grip for 15 minutes with 3 minute intervals changing the finger held.

In this case, the implementation of finger holding relaxation can be done for 3 consecutive days. One day, 2 relaxation sessions are carried out where one session is carried out for 15 minutes with 3 minute intervals changing the fingers held. Where each finger has its benefits, namely the thumb to relieve worry, the index finger to reduce fear, the middle finger to relieve

anger, the ring finger to relieve sadness, and the little finger to generate self-confidence.

On the first day of implementation, the patient's condition is still weak and afraid to make a move and even holds back to make a hand movement. So that patient need to be given education and motivation related to early postoperative mobilization. After the patient is motivated, the patient is assisted by the nurse to hold each patient's finger. After 15 minutes of implementation, the patient said the pain scale and pain intensity were still the same but the patient said he was more relaxed and calm and could sleep comfortably without any anxiety.

On the second day of implementation, the patient said he was fresher and excited to recover. The patient is also enthusiastic about the finger holding relaxation intervention that will be carried out. So that the results of the implementation show optimal results, namely the patient's pain scale drops to 4 NRS pain scale and the pain felt by the patient has been intermittent and appears when moving.

On the third day of implementation, the patient said he was allowed to go home so the patient was asked to do finger grip relaxation independently without being assisted by a nurse but still accompanied. The results of the implementation show

what is expected, namely the pain scale becomes a mild pain scale with a scale of 3 NRS and the pain felt by the patient also comes and goes when moving, plus does not appear to wince when moving.

Analysis of Nursing Outcome Evaluation

After intervention for 3 consecutive days there was a reduction in the intensity of pain felt by the patient. On the first day, before the intervention the patient complained of pain like being stabbed continuously with a pain scale of 6 NRS then after the intervention the patient still complained of pain with the same intensity but the patient already looked comfortable and the patient could sleep comfortably. On the second day there was a reduction in pain intensity which was characterized by pain that was felt in the form of a dull ache that appeared when moving and disappeared with a pain scale of 4 NRS. On the third day, there was also a reduction in pain intensity which was accompanied by symptoms of pain felt in the form of a dull ache that appeared when moving and disappeared with a pain scale of 3 NRS.

Based on the results of the presentation above, the results showed a decrease in pain intensity from a sharp pain that felt continuously with a scale of 6 NRS to a recurring, intermittent pain with a pain scale of 3 NRS. This finding is

consistent with research conducted by Ekawati, et al. In 2022 it is shown that finger-held relaxation therapy can reduce the post-laparotomy pain scale from moderate to mild. In addition, research conducted by Pinandita, et al. In 2012 it was also indicated that there was an effect of finger grip relaxation techniques on reducing pain intensity in post-laparotomy surgery patients.

Decreased pain intensity in Patient was not only caused by the intervention of finger-hold relaxation techniques but there were other factors such as administration of pharmacological therapy dexketoprofen 3 x 50 mg. It is very possible to find different results regarding the effectiveness of finger grip relaxation techniques because the conditions and administration of other therapies also affect the results of the implementation given to patient.

5. CONCLUSIONS

The finger grip relaxation technique involves grasping one by one of the five fingers, starting from the thumb to the little finger, with a duration of about 2-3 minutes. The relaxation technique is carried out to reduce the intensity of postoperative patient pain. Based on the results of the application of hand-held relaxation techniques to patient with TAH-BSO Laparotomy Post Surgery for

indications of Chocolate Cysts showed results, namely a decrease in pain intensity which was characterized by felt pain in the form of a dull ache that appeared when moving and disappeared, with a pain scale of 3 NRS. The intervention was carried out for 3 consecutive days with 2 sessions per day for 15 minutes with 3 minutes intervals changing the fingers held.

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AUTHOR CONTRIBUTIONS

Substantial contribution to conception, data collections, and analysis: Eka Afdi Septiyonol, Yuliana Eka Galuh Seniwati, Lantin Sulistyorini, and Eni Kisnawati. Writing Manuscript and revisions: Eka Afdi Septiyonol and Yuliana Eka Galuh Seniwati.

CONFLICT OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

DATA AVAILABILITY STATEMENT

The data are not publicly available due to privacy or ethical restrictions.

REFERENCES

- Astutik, P., & Kurlinawati, E. (2017). Pengaruh Relaksasi Genggam Jari Terhadap Penurunan Nyeri Pada Pasien Post Sectio Caesarea: Di Ruang Delima RSUD Kertosono. *STRADA Jurnal Ilmiah Kesehatan*, 6(2), 30–37. <https://doi.org/10.30994/sjik.v6i2.6>
- Damayanti, R., I., & Wiyono, J. (2019). Differences Pain Intensity Between Back Massage Therapy And Finger Hold Relaxation In Pasien Post Laparatomy. *Jurnal Keperawatan Terapan*, 5(1), 10 - 21. <https://doi.org/10.31290/jkt.v5i1.671>
- Ekawati, N. R., A. N. Wulandari, W. K. Priliana. (2022). Penerapan Relaksasi Genggam Jari untuk Menurunkan Nyeri Post Operasi Laparotomi pada Pasien Kista Coklat Bilateral. *Jurnal Nursing Update*. 14(4): 43-50. <https://doi.org/10.36089/nu.v13i4.882>
- Fatkhiyah, N. (2019). Faktor risiko kejadian kista ovarium pada wanita usia reproduksi di rskia kasih ibu kota tegal. *BHAMADA, JITK*. 10(1). <https://doi.org/10.36308/jik.v10i1.131>
- Fauji, A., & Marlina, L. (2018). Kompres Es Lebih Efektif untuk Mengurangi Nyeri pada saat Insersi Jarum Pada Pasien Hemodialisa: EBN. *Jurnal Keperawatan Dan Kesehatan MEDISINA AKPER YPIB Majalengka*, 4(7). <https://ejournal.akperypib.ac.id/>
- Ham, M., & Saraswati, M. (2018). *Buku Ajar Patologi Dasar Robbins (10th ed.)*. Singapore: Elsevier Singapore Pte Ltd.
- Herawati, A., L. Kusumawati, dan A. Hidayat. (2020). Hubungan Siklus Menstruasi Dengan Angka Kista Ovarium Pada Pasien RSUD “X” Banjarmasin. *Dinamika Kesehatan Jurnal Kebidanan Dan Keperawatan*. 10(1):48–53. <http://dx.doi.org/10.33859/dksm.v10i1.405>
- Jelita, O. N., Hakam, M., Rondhianto, & Umayanah. (2023). Nursing Care of Acute Pain in Rectal Cancer Patients Using Non-Pharmacological Approach with Benson Therapy: A Case Study. *Jurnal Kegawatdaruratan Medis Indonesia*,

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- 2(1), 90–101. Pusat Persatan Perawat Nasional
<https://doi.org/10.58545/jkmi.v2i1.63> Indonesia.
- Marlinda, M., Afiyati, Y., & Budiati, T. (2018). Asuhan Keperawatan Pada Klien Dengan Kista Endometriosis Menggunakan Pendekatan Teori Comfort dan Loss & Grief. *Jurnal Kesehatan Panca Bhakti Lampung*, 4(2), 118–130. <https://doi.org/10.47218/jkpbl.v6i2.48>
- Pinandita, I., Purwanti, E., & Utoyo, B. (2012). Efektifitas Relaksasi Napas Dalam Dan Distraksi Dengan Latihan 5 Jari Terhadap Nyeri Post Laparatomi. *Jurnal Ilmiah Kesehatan Keperawatan*, 8(1), 32–42.
- Pramana, C. (2021). *Praktis Klinis Ginekologi*. Bandung: CV. Media Sains Indonesia.
- Tim Pokja SDKI DPP PPNI. (2017). *Standar Diagnosis Keperawatan Indonesia*. Jakarta Selatan: Dewan Pengurus Pusat Persatan Perawat Nasional Indonesia.
- Tim Pokja SIKI DPP PPNI. (2018). *Standar Intervensi Keperawatan Indonesia*. Jakarta Selatan: Dewan Pengurus