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ORIGINAL RESEARCH

Sitz bath for hemoroidectomy pain relief

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Abstract
Hemorrhoids are diseases affecting the rectum and anus caused by damage to the hemorrhoidal plexus or blood vessels around the rectum and anus. If hemorrhoids are large lumps, then one of the steps is hemorrhoid surgery. One of the effects of post-hemorrhoidectomy is pain felt in post-hemorrhoidectomy patients. This study aims to apply the application of sitz bath hydrotherapy to decrease pain intensity in post-hemorrhoidectomy patients. The method used for this application is a case study. The length of pain felt was measured using the VAS and NRS pain scales. The results of this study indicate that the application of sitz bath hydrotherapy with the main ingredient of warm water at a temperature of 40-45^{O}C can be applied to post-hemorrhoidectomy patients who experience moderate to severe pain.

Keywords: Nursing care; pain management; surgery; complementary therapy; nursing intervention

Introduction

Unhealthy lifestyle changes may cause various kinds of complaints and disease including hemorrhoids (Sun & Migaly, 2016). Hemorrhoid is an inflammatory condition in the anus with the criteria for a lump from outside or inside. The symptoms are bleeding along with acute pain when defecating (Rubbini & Ascanelli, 2019). WHO (World Health Organization) shows the number of hemorrhoids in Southeast Asia in 2019 reached 285 people and is estimated to increase to 350. Moreover, the prevalence of hemorrhoids is around 5.9% in 2030. Another study highlighted that the prevalence of hemorrhoids is 6.1%; however, only 1.2% are clearly diagnosed (Kibret, Oumer & Moges, 2021). Data from the Ministry of Health was obtained from hospitals in 33 provinces; there were 248 cases of hemorrhoids, while the prevalence of hemorrhoids in Central Java province was based on data from Basic Health Research in 2018. Hemorrhoids of various classifications are often treated with surgical therapy (hemorrhoidectomy) (Yeo & Tan, 2014). However, patient with post-hemorrhoidectomy commonly experience pain moderate to severe pain needing a comprehensive symptoms management. Pain management is a priority after hemorrhoidectomy surgery. When left untreated, it can affect the person's physiological, psychological, and disturbed behavior (Lohsiriwat & Jitmungngan, 2022). Furthermore, patients who suffers pain often led to faint. As a results, clinical approaches to reduce pain after surgery are important as that surgery will cause acute pain in the sphincter and perianal due to spasms mechanism processes (Damayanti, 2017).

Several studies from various healthcare professionals have been published in pain management after hemorrhoidectomy. For example, warm water therapy may help for reducing pain at the incision area. As widely acknowledged, pain after hemorrhoidectomy make anxiety, restless, and unable to concentrate; this warm water therapy principle of helping reduce anxiety levels (Ediyanto, 2018). Moreover, a study highlighted that warm water sitz bath may reduce the pain after having hemorrhoidectomy both men and women (Asmaa, 2018). Studies mentioned that the warm water may have positive impact on pain. The nurse's professional responsibility includes taking into account the patient's current state of health and weighing the potential drawbacks and advantages of the proposed treatment. In order to deliver the therapy in a competent manner, you need to have knowledge of the treatment's purpose, the treatment's action, and the treatment's predicted effects. However, the studies did not describe the case study in that more focused in particular effect of treatment. Theoretically, case studies are designed to increase one's comprehension of complicated occurrences by examining them in their native environments. In fact, the application of case studies in research allows for consideration of the holistic aspect of nursing care. In addition, when outlining the procedures required while utilizing a case study technique, it is

important to note that this style of research enables the researcher to take a complicated and extensive topic or phenomenon and limit it down into one or more manageable research questions. Therefore, the authors are interested in implementing the sitz bath hydrotherapy to reduce pain among patients with post hemorrhoidectomy. This study's finding is expected to help healthcare professionals combine medical treatment and adjunctive therapies.

Method

The case study method is chosen in this application, while the sampling technique or respondents used is purposive sampling. The respondent selected was a 49-year-old female patient who experienced acute post-hemorrhoidectomy pain with a pain scale 7. Data collection tools in the form of SOP (Standard Operational Procedure) sitz bath hydrotherapy application using warm water as the main ingredient, pain measurement using NRS (Numeric Rating Scale) and VAS (Visual Analog Scale). Data analysis was carried out after tabulating the data, and then the existing data were analyzed by domain analysis. The research data was collected using participatory observation, unstructured interviews, and documentation. This activity is carried out directly by providing nursing care to respondents, conducting interviews at the time of data collection, conducting physical examinations, and conducting interventions on patients. The application of sitz bath hydrotherapy using warm water according to the existing temperature. In addition, respondents obtained data that the pain sensation in hemorrhoid surgery is unbearable; so non-pharmacological techniques can be applied to acute pain management in patients with post-hemorrhoidectomy. In addition, data is collected through documentation in the form of health data during routine checks at health facilities or data from respondents with a previous history.

Results

The data collection conducted on June 11, 2021, showed that the respondent was Mrs. T, 49 years old. The respondent is a 49-year-old who has one daughter. The identity of the person in charge is her husband. Her husband works in the market. The study results obtained that the respondent's medical history data said the pain was unbearable in the hemorrhoid surgery suture wound. Respondents said the pain could be reduced apart from taking pain-reducing drugs, namely by draining the area of the hemorrhoid surgery and suturing the wound. Still, they do not know enough information on alternative ways to reduce or not yet get enough information to deal with acute pain with non-pharmacological therapy. If the pain is unbearable, respondents often shift to the prone position on the bed while shaking the area of the hemorrhoid surgery suturing wound with the respondent's hand. Respondents said that before surgery, the client did an examination at the polyclinic, so the doctor was advised to treat this with the aim of doing grade 3 hemorrhoid surgery.

During assessment, the author complained pain was unbearable when carrying out activities and defecating. The respondent said that activities were often limited; so that pain was not felt too heavy blood pressure 123/87 mmHg, pulse 102x/minute, temperature 36^{o}C, and respiration 20x/minute; the client is seen biting his lower lip because he is holding back pain, the client is sitting on a pillow in a chair, the client feels cold hands and feet, the client looks wincing in pain on his face with a pain scale of 7 severe categories, pain appears with a time of 12 to 17 minutes such as being stabbed during activity and defecating. Therefore, the authors establish nursing diagnoses with priority problems of acute pain problems related to physical injury agents (surgical incisions). The author planned to integrate the intervention of sitz bath for 5 times a frequency of meetings every 2 days. Another intervention is comprehensive pain observation, teaching non-pharmacological use of sitz bath hydrotherapy application as a pain reduction measure. The implementation is carried out first by entering assessment data focusing on acute pain problems P: provokes, palliative (cause), Q: quality (quality), R: Radiates (spread), S: severity (severity), T: time (time), the data from the first to the last implementation as well as focus on comprehensive pain observation, the results of the data from the first implementation of the respondents said that they were still afraid when the sitz bath hydrotherapy application was applied, and the respondents looked restless, cold, biting their lower lip, and seemed to be looking for a comfortable position. During the last fifth implementation, the respondent said he could position himself when applying the sitz bath hydrotherapy independently and with help from his family. The results of the last evaluation were respondents felt comfortable using the sitz bath hydrotherapy application with warm water at 40°C and felt that the pain was decreasing daily.

Discussion

The assessment was carried out in this case study using 13 NANDA domains and an assessment of the VAS and NRS pain scales. The assessment includes collecting subjective and objective information such as vital signs and patient or

family interviews. Physical examination, assessment of pain scales, and review of patient history provided by the patient or family to identify health promotion opportunities and risks to prevent potential problems. In the study, it was found that pain can be experienced by clients after hemorrhoidectomy due to spasms that cause pain in the sphincter and perianal muscles and need (Brown, 2017; Mott, Latimer & Edwards, 2018).

The nursing diagnosis of this study was determined from the priority problem such as pain sensations, expressive behavior of clients who are more careful in protecting hemorrhoidectomy wounds. The diagnosis of NANDA 2018 is prioritized from complaints of subjective data and objective data from clients by detailing the characteristics of distraction behavior, reports on pain behavior, complaints about intensity using a standard pain scale, the facial expression of pain, expressive behavior, and factors related to the problem. Acute pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described as damage (International Association for The Study of Pain); sudden or slow onset of mild to severe intensity, with an anticipated or predictable end, and a duration of less than months (Johnson, Borsheski & Reeves-Viets, 2013). This planning is carried out following the determination of the diagnosis, goals, and expected results according to nursing interventions that have been determined (Lohsiriwat, 2015). The author makes a nursing plan with the aim that after nursing actions are carried out within 10 days with a frequency of once every 2 days (5 meetings), it is hoped that nursing problems that arise can be resolved. Acute pain (pain stimulus from post-hemorrhoidectomy) is related to physical injury agents (surgical incision). Acute pain Nursing Outcomes Classification with pain control label (1605) the definition is personal action to control pain, acute pain can be resolved with the outcome criteria being able to use pain reduction measures without analgesics, pain reduced by using available resources, reduced pain episode length, pain expression The face can show the criteria for pain relief, an increase in the radial pulse to normal. Actions at this stage of the plan also include client observations, nurse actions with clients, how to provide clear information, and collaborative actions in nursing care (Kardiyudiani, Fathonah & Rahayu, 2018).

The author in nursing actions did not experience significant obstacles in carrying out pain reduction applications; Mrs. T's use for pain reduction was adequate, and the equipment used in home activities in applying applied applications was also available to achieve the goal optimally. So, implementation is a manifestation of the planning prepared at the previous planning stage (Semachew, 2018). Applying the sitz bath hydrotherapy application to clients can effectively reduce pain (Mooventhan & Nivethitha, 2014; Lohsiriwat, 2015; Ping et al., 2010). Patients experiencing post-hemorrhoidectomy grade 3 previously felt unbearable pain after obtaining an overall assessment with a pain scale of 7 severe categories. After applying the sitz bath hydrotherapy, the pain decreased significantly. A sitz bath is a bath of warm water in which the patient is instructed to sit in order to alleviate pain in the perineal region (Dodi et al., 1986). Warm water helps relax your anal sphincter, which in turn enhances blood flow through your anal tissues. Soaking this area in warm water helps (Shafik, 1993). This expedites the healing process and lessens the discomfort caused by a variety of health issues, including itching and irritation. Sitz baths are a non-invasive therapy option that may provide relief for the pain, itching, and discomfort that are associated with a variety of common health disorders. Sitz baths are also known as sitz tubs. The use of a sitz bath is associated with an exceptionally low risk (Lohsiriwat & Lohsiriwat, 2007; Lang, Tho & Ang, 2011). This is due to the fact that it is believed to be a treatment that is not invasive. An infection in the perineal area may develop on very rare occasions. Infection can arise if the patient does not pay close attention to the cleaning of the sitz bath before each use. In addition, the plastic sitz bath should not be shared with any other patients. Infection is another possibility for a patient who has just undergone surgery in the perineal region. Immediately discontinue using the sitz bath if the pain becomes more severe or if the perineum becomes red and swollen. Get in touch with a healthcare provider for further instructions.

Physiological research demonstrated that a warm sitz bath at 40 degrees Celsius for five to ten minutes resulted in a considerable reduction in anal resting pressure. After getting out of the bath, you may experience the relaxing benefits of the warm water on your IAS for up to seventy minutes. In spite of the fact that a warm sitz bath is frequently recommended to patients who are experiencing anorectal pain as well as those who are undergoing anorectal procedures, a number of systematic reviews could not discover any evidence that it was effective in lowering pain or enhancing wound healing in a variety of anal illnesses. A warm sitz bath did not improve pain relief for the post-hemorrhoidectomy pain that the patient was experiencing. However, a tiny randomized controlled trial (RCT) found that applying a surgical glove that had been filled with warm water four times a day to the perianal region helped minimize pain in the first few days after hemorrhoidectomy (Balta et al., 2015).

Conclusion

Sitz bath hydrotherapy reduces pain intensity in patients with hemorrhoidectomy. The anal region, the genital region, and the perineum can all be better cleaned and treated with the use of a sitz bath. In females, the region that lies between the anus and the vulva is known as the perineum. It is located in the middle of the anus and the scrotum in men. A sitz bath helps to improve circulation to these areas and relaxes the muscles, both of which are beneficial. These benefits can be achieved after the fifth intervention is carried out. It is necessary to add further independent measures in non-pharmacological pain management to free patients from pain sensations. Future studies must evaluate this therapy using a randomized control trial study design.

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