Case Study of Reducing Pain Scale in Patients Benign Prostate Hyperplasia Post TURP
Uses The Murrootal Distraction Relaxation Technique

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ABSTRACT

Introduction: Benign prostatic hyperplasia is a diagnosis that refers to the proliferation of epithelial tissue and smooth muscle in the prostatic transition zone (Reynardi 2021). One of the actions taken to overcome the problem of BPH is TURP (Transurethral Resection Of The Prostate). Methods: This study used the case study method with 1 patient and 1 case of nursing problems in postoperative TURP patients who experienced acute pain problems. Results: After nursing interventions with relaxation techniques and distraction techniques in Postoperative TURP patients showed that distraction relaxation techniques can reduce pain levels in patients from scale 5 to scale 2 and also the criteria for the results achieved. Conclusion: Distraction Relaxation Techniques with Murrootal can reduce pain scale in postoperative patients.

Keywords: BPH, TURP, Acute Pain, Distraction Techniques, Murrootal Therapy

INTRODUCTION

Benign prostatic hyperplasia is a diagnosis that refers to the proliferation of epithelial tissue and smooth muscle in the prostatic transition zone (Sutanto, 2020). The prevalence of BPH increases with age (> 40 years), which occurs in about 70% of men over the age of 60 and will increase to 90% in men over 80 years. Research on the incidence of BPH in Indonesia is still limited, the prevalence of BPH at RSCM Hospital from 1994-2013 found 3,804 cases with an average age of patients aged 66.61 years, while data obtained from Hasan Sadikin Hospital from 2012-2016 found 718 cases with an average age of 67.9 years (Satriawan et al., 2021). WHO in 2018 obtained data results that sufferers of BPH (Benign Prostate Hyperplasia) were > 30 million. Whereas in Indonesia in 2017 there were >6 million cases of BPH (Purnomo, 2019).

According to the 2018 Riskesdas data, BPH is the second disease in as many as 50% of men in Indonesia and ranges in age from 50 years and for cases in Indonesia, it varies from <24 - 30% of urological cases, especially BPH, which are treated in several hospitals.
Benign Prostate Hyperplasia (BPH) can cause accumulation so that if you experience BPH disease there are several actions that can be an option, namely Transurethral Prostate Resection (TURP) surgery (Wiwit arif hidayat 2022). The goal of therapy in BPH patients is to improve the patient's quality of life. Treatment options are: 1. Conservative (watchful waiting), 2. Medical, 3. Surgery, and 4. Other (special conditions). Implementation of therapy is discussed in advance with the patient and depends on the degree of complaint, the patient's condition, and the availability of local facilities.

Transurethral Resection of Prostate (TURP) is a minimum intervention operative method that is widely used (gold standard) to treat prostate enlargement and most hospitals perform TURP in patients with suspected BPH. (Satriawan et al., 2021).

Surgery can cause actual and potential tissue damage so that a person can experience pain that affects daily activities. According to the International Association for Study of Pain (IASP) (1996) in Potter Perry (2010), states that pain is an unpleasant sensory and emotional experience accompanied by potential and actual tissue damage. Therefore, physical pain can cause psychological pain. One of the basic human needs is comfort, where when comfort is disturbed after surgery, more effective treatment is needed. Postoperative pain management is a comprehensive management (Fitra Umara et al., 2020).

Broadly speaking, there are two management methods for dealing with pain, namely pharmacological management and non-pharmacological management. Pharmacological management that is commonly used is opioid analgesics, the purpose of giving opioids is to relieve pain. (Smeltzer & Bare, 2003). Non-pharmacological management for dealing with pain consists of various physical handling measures including skin stimulation, skin nerve electrical stimulation, acupuncture (Mayenti et al., 2020). Asmadi (2008), states that efforts to overcome the discomfort caused by pain are by massage, relaxation techniques, hypnosis, analgesic drugs and distraction, among others, by listening to music. (Fitrah Umara et al., 2020).

The increasing number of incidents of BPH with invasive TURP measures that have an impact on pain felt by patients, so there are efforts to increase comfort. Management of non-pharmacological measures in reducing pain, namely the distraction technique with the murrotal Qur’an. Distraction is an act of diverting attention to other things besides pain so that the patient does not focus too much on pain. Music distraction can distract from pain so that a person feels relaxed (Mayenti et al., 2020). Al-Qur’an murottal therapy can reduce the pain scale in post ORIF patients. Oktora & Purnawan (2018) also found that murottal therapy can affect the sleep quality of the elderly (Pristiadi et al., 2022).

In overcoming nursing problems in nursing diagnoses of Acute Pain is to provide relaxation and distraction therapy. According to Zen Zainul, with the relaxation process, refreshing the body's organs will occasionally experience a resting phase. Based on the above understanding, it can be concluded that relaxation techniques are a form of therapy in the form of giving instructions to someone in the form of systematically arranged movements to relax the mind and limbs such as muscles and restore conditions from a tense state to a relaxed state. normal and controlled, from hand movements to foot
movements (Zainul, Zen, 2007). Distraction is turning the patient's attention to something other than pain can be a very successful strategy and may be a mechanism against other effective cognitive techniques. Distraction is thought to reduce pain perception by stimulating the descending control system, which results in fewer painful stimuli being transmitted to the brain (Smeltzer and Bare, 2012).

Based on the statement above, the relaxation and distraction therapies used in this case study are deep breathing therapy and music listening therapy (Murotal). Deep breathing relaxation techniques are believed to be able to reduce pain intensity through a mechanism, namely by relaxing the spasmodic skeletal muscles caused by increased prostaglandins resulting in vasodilation of blood vessels and will increase blood flow to spasmodic and ischemic areas. The advantages of the deep breathing relaxation technique include that it can be done anytime anywhere and anytime, the method is very easy and can be done independently by the patient without any media. Distraction therapy listening to classical music with the correct rhythm can bring calm and minimize anxiety. % for those who hear it (Wahida, 2015). According to Potter & Perry (2012) said that the time needed in auditory therapy (hearing therapy) in order to provide a therapeutic effect is at least 10 minutes.

METHOD
The writing method used in this case study is a descriptive method that describes the nursing process by focusing on one of the important issues in the selected case, namely nursing care, namely a study to explore the problem of acute pain in BPH patients after TURP surgery. The research subjects used were 1 post TURP surgery patient who experienced acute pain with the following criteria: a conscious patient GCS E4V5M6, a patient with an age limit of >26 years and a postoperative diagnosis of TURP. This case study was carried out in the Irna B Bawah adult inpatient room at Syarifah Ambami Rato Ebu Bangkalan Hospital and this research was carried out in January - March 2022. The techniques were: Interview, Observation, Physical Examination, Document Study. Abdomen ultrasound results, Hematology Laboratory results, Thoracic Photo Results.

Nursing interventions that will be carried out are pain management consisting of observational actions, namely identification of location, characteristics, duration, frequency, quality, pain intensity, pain scale, non-verbal pain responses, factors that aggravate and relieve pain and monitor side effects of using analgesics. Non-pharmacological nursing actions to relieve pain are distraction techniques, namely by diverting attention, doing deep breathing, guided imagination, and auditory distraction.

Distraction technique is a process of transferring from one focus to another focus or attention to pain to another stimulus. Distraction is used to focus attention in order to forget the pain. Through distraction techniques we can overcome pain based on the theory that reticular activation inhibits painful stimuli. If a person receives a lot of sensory input it can cause inhibition of pain impulses to the brain (pain is reduced or not felt by the patient at all). Stimuli that are happy from outside can also stimulate the secretion of endorphins, so that the pain stimulus felt by the patient gradually decreases. Therefore,
stimulation of sight, hearing and touch will probably be more successful in reducing pain than stimulation of just one sense (Soeparmin, 2010). Auditory distractions such as listening to music, listening to the radio you like or the sounds of birds and other animals and the splashing of water.

Individuals are encouraged to choose music they like and quiet music such as classical music, recitation of holy verses, and are asked to concentrate on the lyrics and rhythm of the song. Patients are also allowed to move their bodies to the rhythm of the music, such as shaking their heads, moving their fingers or swinging their legs. One effective distraction is listening to music, this method can reduce physiological pain, stress, and anxiety by distracting a person from pain. Nurses can apply distraction techniques by listening to music in a variety of clinical situations.

Deep Breathing Relaxation Technique According to Potter & Perry (2012) relaxation is mental and physical freedom from tension and stress. Relaxation techniques can give individuals self-control when discomfort or pain occurs, physical and emotional stress in pain. This technique can be used in both healthy and diseased conditions. The deep breathing distraction technique is also a form of nursing care, in this case the nurse teaches the technique of deep breathing distraction, slow breathing and exhaling gradually, this can reduce pain, increase lung ventilation and increase blood oxygen (Smeltzer & Bare, 2002). Factors that influence deep breathing relaxation techniques to reduce pain and are believed to reduce pain intensity through mechanisms: By relaxing the skeletal muscles that experience spasm which results in increased prostaglandins and vasodilatation of blood vessels will flow into spasm and ischemia, Deep breathing relaxation techniques will stimulate the body to release endogenous opioids and is easy to do, does not require tools and can be done at any time. The main principle that underlies the reduction of pain by deep breathing distraction technique lies in the physiology of the autonomic nervous system which is the peripheral nervous system that maintains the individual's internal homeostasis. When the release of chemical mediators such as bradykinin which ultimately metabolizes the muscles and causes the sending of pain impulses from the spinal cord to the brain and is felt as pain.

One of the auditory distractions is murottal therapy, (listening to the recitation of the holy verses of the Qur'an) listening to murottal can provide very effective results in an effort to reduce client postoperative pain (Setiawan et al., 2023). Ar-Rahman murottal therapy 78 verses combined with deep breathing for 25 minutes to help reduce pain and cause a relaxing effect on respondents.

Murottal therapy works on the brain, where when stimulated by external stimuli (Al-Quran therapy), the brain produces a chemical called neuropeptide. These molecules carry their receptors in the body so that the body gives feedback in the form of a feeling of comfort. (Indrawati et al., 2019). Listening to the Qur'an has been shown to increase alpha waves, which are waves associated with individual internal peace or tranquility (Zulkurnaini et al, 2012). In addition, the Qur'an is a necessity for Muslims (Tumiran et al, 2013) not only for therapy but as remembrance. (Susanti et al., 2019)
Providing murrotal therapy interventions through various stages, namely pre-interaction, preparing murrotal therapy SOPs, checking patient status and checking equipment and rooms that are comfortable and quiet. The first stage or the orientation stage is greeting and introducing yourself, checking identity and time contract and continuing with explaining the purpose and procedure and the patient filling out informed consent. The working stage of reading bismillah, positioning the patient comfortably lying down. Instruct the patient to relax, use a headset and turn on murottal while guiding the patient to close their eyes, relax, focus on reciting verses from the Koran for 25 minutes while taking 3-4 deep breaths. The 25 minute time refers to research from (Mulyani et al., 2019) Differences in the Effect of Murottal Therapy for 15 Minutes and 25 Minutes on Reducing Pain Scale in Post-Surgery Cancer Patients. Differences in pain scale reduction in the 15 minute group and the 25 minute group. This study showed that there was no significant difference regarding pain scale reduction between the two groups. However, although there was no significant difference between the two groups, the average reduction in pain scale was greater in the 25 minute group.

Educational measures, namely explaining the causes of pain, strategies to relieve pain and Collaboration Actions is administering analgesics. Criteria The expected results are that the patient's complaints of pain decrease, no grimacing expressions, no anxiety, no difficulty sleeping and the pulse frequency and blood pressure improve. Measures for reduce pain by providing distraction relaxation using murotal therapy carried out for 3 days.

The evaluation stage is to encourage patients to do this therapy if they feel pain. The analysis technique is used by means of observation by researchers and documentation studies which produce data for further interpretation by researchers compared to existing theories as material for providing recommendations in these interventions (Tri, et al, 2015). The order in the analysis is: data collection, data presentation and conclusion. From the data presented, then the data is discussed and compared with the results of previous studies and theoretically with health behavior. Drawing conclusions is done by induction method. The data collected is related to assessment, diagnosis, planning, action, and evaluation data.

**FINDING AND DISCUSSION**

This research was conducted at Syarifah Ambami Rato Ebu Bangkalan Hospital. Data collection was carried out in the Lower Irna B Bedan Room on March 21, 2022 with one observation respondent, namely Patient A, 57 years old.
Table 1 Demographic data of Post TURP patients at Syarifah Ambami Rato Ebu Ebu Hospital, Bangkalan

<table>
<thead>
<tr>
<th>Information</th>
<th>Participant 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant Name</td>
<td>Tan. A</td>
</tr>
<tr>
<td>Gender</td>
<td>Man</td>
</tr>
<tr>
<td>Date of birth</td>
<td>07-08-1965</td>
</tr>
<tr>
<td>Age / Years</td>
<td>57</td>
</tr>
<tr>
<td>Last education</td>
<td>JUNIOR HIGH SCHOOL</td>
</tr>
<tr>
<td>Religion</td>
<td>Islam</td>
</tr>
<tr>
<td>Marital status</td>
<td>Marry</td>
</tr>
<tr>
<td>Work</td>
<td>-</td>
</tr>
<tr>
<td>Address</td>
<td>-</td>
</tr>
<tr>
<td>Medical diagnosis</td>
<td>BPH</td>
</tr>
</tbody>
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At the time of the assessment, Mr. A complained of pain or soreness in the genital area, BAK complaints were also felt since 1 month ago. Patient A came to the urology polyclinic to check his condition, which at the time the BAK was only dripping, then the nurse performed a catheter insertion. After the catheter was placed, the urologist suggested doing TURP surgery because the patient had BPH.

TURP is an operation to remove prostate tissue through the urethra using a resectoscope, where the resectoscope is an endoscope with a 10-3-F tube for urethral surgery equipped with a cutting tool and a counter connected to an electric current. Resectocopy scar trauma stimulates the surgical site so that it activates a nerve stimulation to the brain as a consequence of the emergence of pain sensations. Postoperatively the patient was placed in hospital, the condition was still in a catheter and there was hematuria. Urine production 1200 cc. During a pain assessment, the patient said that the pain was caused by post-surgery, pain like being cut by a sharp object, burning and a burning sensation. The patient is also very protective and afraid if the catheter is touched. This also causes the patient to experience complaints when sleeping and not soundly. Pain is felt in the pubic area. Pain scale 1 to 10 patient choose 5 to describe his pain. Pain scale 5 is a moderate pain scale. The patient said that he often felt pain when he wanted to urinate. Pharmacological therapy for the patient was given 0.9%/24 hour Nacl infusion, 2x1 gram Ceftriaxone injection, 3x4 mg/IV injection of Santagesic, 3x500 mg/IV injection of tranexamic acid.

The patient's main complaint is pain so that the patient's nursing diagnosis is acute pain. This pain complaint can be caused by the TURP surgical procedure which causes trauma to the resectocopy scar, causing afferent nerve stimulation so that the patient feels acute pain. The patient's nursing diagnosis, namely acute pain related to physical injury agents (surgical action) is evidenced by the patient complaining of pain, looking grimacing, blood pressure increasing 130/80 mmHg, pulse 80x/minute and being protective (avoiding pain). According to Ackley's theory (2011) which states that the
diagnosis of acute pain has outcome criteria in the form of reduced mild pain scale, vital signs within the normal range, can identify (scale, intensity, frequency and signs of pain) when it lasts, able to control pain (know the cause of pain, able to use non-pharmacological techniques such as distraction and relaxation techniques, warm compresses, guided imagery, and self-hypnosis to reduce pain, seek help). Reported that pain was reduced by using pain management, there was no disturbance of concentration, the patient was not awakened by pain, the face became refreshed and not wincing in pain, not afraid of injury.

On the first day of the distraction intervention, the patient still complained of pain, pain at the tip of the penis, pain during urination and movement. When the patient's pain scale is identified as 5 then the distraction technique is given. In evaluation, the client can practice the deep breathing distraction technique and listen to murolat, the patient's complaints are slightly reduced, the patient can be more calm and relaxed while sleeping. The second day of treatment made observations related to complaints of pain, the results of which were that the patient said the pain had decreased, when listening to murolat it could also help the patient to sleep but during urination the patient still complained of pain. When the pain assessment was carried out, the patient said that the pain had decreased, namely pain scale 3. Distraction measures with murolat were still being carried out and the results of the second day evaluation were that the client was able to relax, blood pressure decreased, namely 120/80 mmHg pulse 98x/minute and stable RR 20x /minute, the patient still feels pain so that pharmacological and non-pharmacological treatment interventions are still carried out. On the third day of observation, the patient said that the pain had decreased, the patient seemed relaxed, slept well last night and rarely felt pain. When identification was carried out, the patient's pain was on a scale of 2, on the third day he was still given injections of santagesic and injection of tranexamic acid and given non-pharmacological therapy, namely distraction techniques, on the third day an evaluation was carried out with the results that the patient rarely felt pain, pain scale 2, the client did not seem to wince in pain, the client looks relaxed and there are no sleep complaints. Intervention continues and is supplemented by health education about traction techniques and teaching families to be able to help patients apply them at home after being discharged from the hospital.
Table 2. Evaluation of pain scale before and after the distraction technique with murrottal Al Qur’an in post TURP patients at RSUD

<table>
<thead>
<tr>
<th>Respondent's initials</th>
<th>Day 1 pain scale</th>
<th>Day 2 Pain Scale</th>
<th>Day 3 Pain Scale</th>
<th>Average Drop</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Tn A</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

The non-pharmacological intervention that was carried out, namely murrottal therapy, was able to reduce the pain scale of post TURP patients. This happens because music can produce endorphins and work on the limbic system which is delivered to the nervous system and stimulates the body’s organs to produce cells damaged by surgery so that pain is reduced (Ariani P. & Mastari, 2020). Other research also explains that listening to the recitation of the holy verses of the Koran can affect a person’s emotional intelligence (EQ), intellectual intelligence (IQ), and spiritual intelligence (SQ). Listening to the chanting of the holy verses of the Koran can also cause a person to become calm and relaxed so that this will affect the reduction of blood pressure, anxiety levels, and pain intensity (Rejeki et al., 2020).

Factors that support changing the variables that have been made are sounds with moderate frequencies that tend to stimulate the heart, lungs, and emotions. The vibrating sound of music forms patterns and creates a resonant energy field and movement in the surrounding space. Energy will be absorbed by the human body and gradually change breathing, heart rate, blood pressure, muscle tension, skin temperature, and other internal rhythms. It also reveals that music is a unique stimulus that influences physical and psychological responses of listeners so that it becomes an effective intervention to increase physiological relaxation indicated by a decrease in pulse, respiration and blood pressure (Rilla E.V., Elwiyah R, Aat S., 2014).

Murrottal therapy is combined with deep breathing to reduce pain using the power of suggestion which will immediately relax the patient’s condition, so that he can become more comfortable, pain causes an autonomic response in the form of increased pulse, increased breathing, and blood pressure, acute pain will spur increased activity of the sympathetic nerves. Arterial blood pressure is maintained and regulated by vasomotor tone. Normally, vasomotor tone involves both neural and hormonal mechanisms. Neural regulation is regulated by the vasomotor center of the medulla oblongata, where this center consists of vasodepressor and depressor branches. et al, 2019)

CONCLUSION

Based on the research above, namely a case study of decreasing pain scale in patients Benign Prostate Hyperplasia Post TURP using the murrottal distraction relaxation technique, the result was a decrease in pain from a scale of 5 to a scale of 2 in Mr A. The evaluation results show that it has been successful because the client has no complaints and the outcome criteria have been achieved.
REFERENCES


