

Case Study

Nursing Care of Post Hysterectomy Clients Dextra Salpingoovarectomy and Sincitra Salpingectomy for Multiple Uterine Myoma Indications: A Case Study

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A B S T R A C T

Myomas or uterine fibroids are benign tumors resulting from improper growth of uterine smooth muscle tissue. Large fibroids require surgical intervention. The purpose of writing this case study was to describe the results of case management in patients with post hysterectomy, left salpingectomy and right salpingoovarectomy a.i multiple uterine myoma. The research used is a case study with a nursing care approach. A case study was conducted on Mrs. T on 23-25 November 2022 in the Alamanda Room at Hasan Sadikin Hospital, Bandung, based on the results of the study, a diagnosis of acute pain and risk of infection was appointed. Nursing actions were carried out, namely pain management and infection prevention as well as non-pharmacological techniques, namely deep breathing techniques and dhikr. After intervention the diagnosis of pain and the risk of infection is partially resolved.

Keywords: Hysterectomy, Leiomyoma, Nursing care, Salpingoovarectomy

Introduction

Miomas or leiomyomas or uterine fibroids are benign tumors resulting from the abnormal growth of uterine smooth muscle tissue (National Library of Medicine, 2021). Risk factors for uterine myoma include age, race, endogenous and exogenous hormonal factors, obesity, uterine infection, and lifestyle (diet, caffeine and alcohol consumption, physical activity, stress, and smoking) (Pavone, Clemenza, Sorbi, Fambrini, & Petraglia, 2018). The prevalence of uterine myomas in various countries ranges from 4.5% - 68.6% of cases (Stewart, Cookson, Gandolfo, & Schulze-Rath, 2017). The incidence of uterine fibroids in 2019 has increased by 60% in the world and 58% in Southeast Asia. Globally, there is a 60.18% rate of disability caused by uterine myoma (Cheng et al., 2022)

Classification of uterine myomas based on location is divided into intramural, subserosal, submucosal and myomas that develop extra uteri (Suzanne, Smeltzer, Brenda, & G, 2019). Management of myoma uteri depends on the symptoms, age, desire to have children, location, severity and size

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of myoma. Management can be carried out by means of pharmacological therapy, surgical and radiological procedures (Giuliani, As-Sanie, & Marsh, 2020; National Library of Medicine, 2021).

Respondents in this case study underwent hysterectomy management, left salpingectomy and right salpingoovarectomy for indications of multiple uterine myomas. Globally, 40-60% of hysterectomies are performed for fibroid indications. Post-procedure pain may result from surgical stimulation and neural factors such as edema of the vascular tissue. Acute postoperative pain if uncontrolled is associated with increased morbidity, reduced function and quality of life, delayed recovery time, long duration of opioid use, and higher healthcare costs. In addition, the presence and intensity of acute pain during or after surgery is predictive of the development of chronic pain. So that the problem of pain is one of the priority treatment in postoperative patients. One way that can be done is to carry out pain management which is a collaboration of giving pharmacological therapy and non-pharmacological therapy (Gold et al., 1991).

Wounds caused by surgical procedures are also place of a risk of microbial contamination resulting in a risk of infection. Wound management and lack of prevention of infection can increase morbidity and increase treatment costs. Complications that can be associated with surgical wounds can occur locally or systemically such as delayed healing, further wound damage, cellulitis, abscess formation, osteomyelitis, and sepsis. Thus, it is necessary to have infection prevention and control measures that can be started from preparation for surgery, sterile procedures during surgery, to postoperative care such as wound care, improving nutritional status, collaborating on antibiotics and early mobilization (Zabaglo & Sharman, 2022). The purpose of writing this case study is to describe the results of case management in patients with post hysterectomy, left splingectomy and right salpingoovarectomy a.i multiply uterine myoma.

Research Method

The research method used is a case study with a nursing care approach. Case studies are research that explores nursing problems which are carried out in detail and indepth data collection from various sources of information (Heale & Twycross, 2018). The nursing process carried out is by selecting participants, obtaining informed consent, conducting assessments, analyzing data, determining diagnoses, preparing intervention plans, implementing and evaluating. The selected participants were Mrs. T with a diagnosis of post hysterectomy, left splingectomy and dextra salpingoovarectomy a.i multiple uterine myoma in the Alamanda Room Hasan Sadikin General Hospital, Bandung City on 23-25 November 2022 who has filled out the consent

form as a respondent. Data were collected by means of interviews, physical examinations, documentation, and medical records as research supporting data. Presentation of data is done descriptively, namely by elaboration or narration accompanied by verbal expressions from clients as supporting data in case study research.

Results and Discussions

Case Presentations

Mrs. T is 47 years old, comes from Simpang Karet Sukabumi Village, is Muslim, Sundanese, has an elementary school education level, does not work, married status entered the hospital on November 21 2022. The person in charge of the client, namely Mrs. D 23 years old with junior high school education. The client underwent nursing care since November 23, 2022 with a medical diagnosis of post hysterectomy, left salpingectomy and dextra salpingoovarectomy a.i multiple uterine myoma (1st day of post surgery).

The client is a referral from Sukabumi Hospital. Before entering the hospital the client did not complain of pain or bleeding, only the waist felt full, the stomach was enlarged and a lump was felt in the lower abdomen. The client says that no one in the family in three generations has the same symptoms and diseases. The client said he had no history of disease or used hormonal treatment before. Clients say they have a habit of consuming tea frequently and rarely doing physical activity.

The client's reproductive history says menarche is 13 years old, cycles are 5 days and intervals are 28 days. Complaints during menstruation before surgery, experiencing pain on the first and second day of menstruation. Pain can still be controlled and does not really interfere with activities. In addition, the client has one 24-year-old son with a normal birth weight of 2,500 grams and no history of illness that occurred during pregnancy, childbirth or the puerperium. The client has never used contraception. But the client says there is no pregnancy even though the client is actively having sex. However, with increasing age the client said that he had no desire to have children

Clinical Examination

The main complaint when the assessment was carried out was pain, pain caused by a surgical wound increases when active and decreases when resting. The quality of the pain is sharp or stinging like a cut. Pain is felt only in the operating area and there is no spread. Pain scale 4/10 Numeric Rating Scale (NRS), Clients avoid movement because they feel pain. Pain is felt continuously since 2 hours after surgery. Semi-fowler's position, infusion with Ringer's lactate and urinary catheter with clear yellow urine output.

Examination results Weight (BB): 64 Kg, Height (TB): 155 cm,

Body Mass Index (BMI): 26.6 (grade 1 obesity), awareness: compos mentis (E4V5M6), appearance looks neat, clients can be oriented OK, no memory issues. Blood pressure (BP): 130/80 mmHg, pulse: 103x/minute, warm acral, temperature: 37°C, oxygen saturation: 95%, respiration rate: 19x/minute. On abdominal examination the results of the inspection found that there was a 15 cm long vertical wound in the middle abdomen, the wound looked dry and there was redness in the wound area, there was tenderness, there was no foul-smelling liquid, there was tenderness in the area of the surgical wound.

The results of an ultrasound examination on November 18 2022 showed the impression of another 26x16 cm uterine myoma and 14x8 cm intramural uterine myoma. In the operation report, the fibroid mass I on the ligament board has a solid rubbery consistency and adhesions with the right adnexa of the ileum and mass II in the interior cavity, the consistency is solid and rubbery and there are no adhesions with organs. The results of the postoperative complete blood count on November 23, 2022 are presented in the following table.

Table I.Laboratory results Mrs. T (November 23, 2022)

Inspection	Results	Unit	Reference
Hemoglobin	11,4*	g/dL	12,3-15,3
Hematocrit	34,5*	%	36-45
Leukocytes	15.750*	/uL	4.400- 11.300
Erythrocyte	5,63*	juta/uL	4,5-5,1
Platelets	503.000*	/uL	150.000- 450.000
MCV	61,3*	fL	80-96
МСН	20,2*	Pg	27,5-33,2
мснс	33*	%	33,4-35,5
Basophils	0	%	0-1
Eosinophils	0	%	0-4
Stem neutrophils	1*	%	3-5
Segment neutrophils	87*	%	45-73
Monocytes	6	%	3-8
Lymphocytes	6*	%	18-44
Total neutrophils	13.860*	/uL	2.100-8.890

Total Lymphocytes	950*	/uL	1.260-3.350
Total monocytes	950	/uL	290-950
Total eosinophils	0*	/uL	10-400
Total basophils	0*	/uL	10-90

Description: *abnormal

The pharmacological therapy that the client gets is Ketoprofen 2x100 mg which is given through a suppository to treat moderate pain and relieve inflammation. This drug has side effects, namely diarrhea or conversely constipation, dizziness, drowsiness and loss of appetite. Other pharmacology given, namely cefriaxone 2x1 gram given intravenously, is an antibiotic class of drugs which is used to treat and prevent bacterial infections, headaches, dizziness, nausea, vomiting, body weakness, rashes, diarrhea, abdominal pain.

Results of Case Study

The nursing diagnosis in this case refers to the Indonesian Nursing Diagnostics Standard (IDHS) book (DPP SDKI Pokja Team, 2017). There are 3 diagnoses made in this case. The first diagnosis is acute pain related to physical injury agents (surgical procedures) d.d. The client says pain in the area of the surgical wound, namely the lower abdomen, pain increases with activity and decreases when resting and taking painkillers. Pain scale 4/10 (NRS), pain feels like being sliced and sore. Clients avoid movement because they feel pain. Abdomen: there is a 15 cm long vertical wound in the middle of the abdomen, BP: 130/80 mmHg, Pulse: 103x/ minute. The second diagnosis raised was Risk of Infection d.d inspection of the abdomen: there was a 15 cm long vertical wound in the middle abdomen, BP: 130/80 mmHg, Pulse: 103x/minute, warm extremities, temperature: 37°C, Leukocytes: 15,750.

The aim of the intervention for 3x24 hours refers to the Indonesian Nursing Outcome Standard book (Team Pokja SLKI DPP PPNI, 2017) in the diagnosis of pain it is expected that the pain level will decrease with the outcome criteria: reduced pain complaints, reduced pain scale from 4 to 2 (NRS), can perform activity independently pulse rate improved within the normal range, grimace decreased, blood pressure improved within the normal range, showed no side effects of analgesics, increased ability to use nonpharmacological techniques, increased mobilization ability. The intervention plan that will be carried out refers to the Indonesian Nursing Intervention Standard book (SIKI PPNI, 2017), namely pain management, the actions taken include: collaboration in providing analgesics, facilitating sleep breaks, explaining the mechanism of pain, teaching nonpharmacological techniques to reduce pain and doing and monitor vital signs. The non-pharmacological techniques taught are deep breathing relaxation techniques. Deep breathing relaxation techniques by breathing with a deep breathing frequency below 10 times per minute with long exhalation phases (Jafari et al., 2020). and dhikr mediation, the dhikr procedure is performed in a comfortable sitting or lying position, with eyes closed for 20 to 30 minutes (Soliman, 2022).

The second nursing problem is the risk of infection. The intervention was carried out for 3x24 hours with the aim of reducing the risk of infection with the following criteria: body temperature within the normal range (36.5-37.2), no redness around the wound, decreased swelling in the wound, no foul-smelling discharge around wound, no chills, improved hand and body hygiene, increased appetite, white blood cell levels within the normal range (4,400-11,300/ μL). The intervention plan carried out referring to SIKI is infection prevention which consists of doing five moments of hand washing, treating wounds with sterile technique, providing education about: hand washing techniques, keeping nails clean, signs of infection, increasing fluid and nutrition intake (diet to accelerate wound healing), as well as how to treat wounds at home at the nearest health facility. the next action is to collaborate with the doctor for the administration of cefriaxone antibiotics. In addition, recommending early ambulance gradually to accelerate wound healing (Taksande, Mahakalkar, & Taksande, 2021). The last intervention is to monitor the condition of the wound and signs of infection.

The implementation was carried out on November 23, 2022, namely explaining the mechanism of pain, educating deep breathing techniques, dhikr, recommending early ambulances gradually starting from the right and left side, sitting on the bed, moving from bed to chair and walking. monitor pain and signs of systemic infection and facilitate bed rest. Implementation of the second day on November 24 2022 collaboration provides pharmacological therapy, namely katoprofen and cefriaxone, teaches how to wash hands, teaches the mechanism of infection, recommends increasing fluid and nutritional intake and monitoring pain and infection. The last implementation was on November 25, 2022, washing hands, monitoring wound conditions and characteristics, treating wounds using aseptic techniques, facilitating obtaining needed information, teaching wound care at home by health workers, teaching wound monitoring and signs of infection and conducting pharmacological collaboration and involving families to increase support.

The final evaluation was carried out on November 25, 2022 after carrying out the final implementation because the patient was able to go home. The evaluation was carried out using the SOAP technique. In the diagnosis of acute pain, the subjective data that appears is: pain

complaints are reduced to a scale of 2/10, pain feels like being sliced, increases in weight when moved but can still be tolerated and decreases when drugs are given and the techniques taught are carried out. Pain is felt only in the wound in the stomach, the client says he understands the non-pharmacological techniques given to reduce pain and will try to do it at home. The client says that he is able to fulfill his own needs independently. objective data: BP: 120/80 mmHg, Pulse: 70x/minute, RR: 18x/minute, no grimacing. Analysis: problem partially resolved,. Planning: the intervention is continued by the patient independently.

Evaluation of infection risk nursing diagnoses, namely subjective data: Clients say there are no chills and understand about wound care at home. the client said he would try to apply a diet that could accelerate wound healing with materials around the house. objective data: The wound looks dry and there is slight redness in the wound area, there is tenderness, there is no foul-smelling discharge, temperature: 36.8, normal acral, leukocytes: 14,950/µL. Analysis: problem partially resolved. Planning: wound care, diet and infection prevention interventions are continued by the client and family at home.

Discussion

Uterine myomas are benign tumors that occur in the smooth muscle of the uterus or female genital tract (Lewis, Dirksen, Heitkemper, & Bucher, 2014). Risk factors for uterine myoma include age, race, endogenous and exogenous hormonal factors, obesity, uterine infection, and lifestyle (diet, consumption of caffeine and alcohol, physical activity, stress, and smoking). In this case the risk factors for uterine myoma were age, obesity and lifestyle, namely consumption of caffeine (tea) and lack of physical activity. The majority of small myomas do not have any symptoms. Symptoms can be affected by the location, size and number of fibroids (Lemone et al., 2017). However, the most common symptoms are abnormal uterine bleeding, pain, increased pressure on the pelvis, rectum, bladder and lower abdomen causing discomfort, pain, constipation and problems urinating. As well as sexual dysfunction, or can be associated with infertility and poor obstetric outcomes (Giuliani et al., 2020; Lemone et al., 2017). In this case, the client experienced symptoms of fullness in the waist, dysmenorrhea, increased bleeding on the second day of menstruation and infertility after the birth of the first child.

Management of uterine myomas can be carried out with medical management, radiological interventions and surgical management (Giuliani et al., 2020). Respondents in this case study underwent surgical management of hysterectomy, left salpingectomy and right salpingoovarectomy. Hysterectomy is a hysterectomy is a surgical procedure to remove the uterus. While salpingectomy is the removal of the fallopian tubes and salpingoovarectomy is the removal of the fallopian tubes and ovaries (National Health Service (NHS), 2022) this procedure is carried out because the client is 47 years old, does not want to have children, large fibroids, intramural and other types of uterine myoma. ligament board which has adhesions with the right adnexa of the ileum.

Surgical procedures will form trauma to the tissue which will result in cell damage, this stimulates the release of pain mediators to be delivered to the brain, then the brain responds as pain reception so that postoperative patients feel pain (Bahrudin, 2017). Interventions that can be carried out to reduce pain levels are pain management, namely actions to identify and manage sensory or emotional experiences related to tissue or functional damage with acute or chronic onset and mild to severe intensity (SIKI PPNI, 2017). The action in this intervention is to monitor pain. Determine the location, time, intensity of pain, characteristics, and factors that aggravate or alleviate the pain to determine the cause of pain and the effectiveness of treatment (Ackley, Lawdig, & Makic, 2017). Other interventions, namely, providing an environment that reduces pain stimulus, collaborative administration of analgesics, facilitation of sleep breaks.

Non-pharmacological technical interventions carried out in this case consisted of deep breathing relaxation techniques and dhikr. Deep breathing relaxation techniques can increase lung ventilation and increase blood oxygenation. Besides that, it can also reduce muscle tension and increase blood vessel vasodilation so that blood flows on the tense or ischemic side thereby reducing pain (Jafari et al., 2020). According to research (Tamrin, Rosa, & Subagyo, 2020) there is a significant effect before and after Slow Deep Breathing (SDB) on the pain scale in postoperative patients. This is also supported by research which says there is a decrease in the intensity of postoperative pain after deep breathing technique interventions (Listiana, Pawiliyah, & Hidayah, 2020).

The next pharmacological technique is Physiologically, dhikr can cause a balance of serotonin and norepinephrine levels in the body. This is a natural morphine that can make the heart and mind feel calm. so that it then suppresses the work of the sympathetic nervous system and activates the work of the parasympathetic nervous system which has the effect of reducing pain (Jannah, Riyadi, Global, & Yogyakarta, 2021). In addition, the relaxing effect of dhikr therapy can reduce anxiety and pain by creating feelings of confidence and self-control and reducing negative feelings and restoring hope and giving patients the possibility to participate in their improvement and because it is an active coping strategy (Soliman, 2022). Based on research (Budiyanto & Susanti, 2015) there was a decrease in pain intensity in postoperative Ca mammae patients after being given dhikr therapy. In this case study, it showed similar results after deep breathing and dhikr intervention, the patient said he was more relaxed and complaints of pain were reduced to a scale of 3 from the initial 4.

The surgical process, in addition to causing pain, can also result in a risk of infection, namely conditions at increased risk of being attacked by pathogenic organisms (DPP SDKI Working Group Team, 2017). Microorganisms spread through dirty skin, or even from dirty air. After the germs have managed to enter through the wound, then an infection occurs which is characterized by pain, redness, heat in the wound area, and increased levels of leukocytes (Suzanne et al., 2019).

One of the interventions that can be carried out to overcome this problem is prevention of infection, namely the act of identifying and reducing the risk of being attacked by pathogenic organisms (SIKI PPNI, 2017). Actions taken to prevent infection are by practicing the 5 moments of hand washing and teaching how to wash hands. Practicing hand washing is a simple way to prevent the spread of microorganisms so as to avoid infection (Centers For Disease Control And Prevention, 2019). The next step is to treat the wound using sterile technique to prevent infection due to damage to the integrity of the skin due to surgery (Afiani, 2021).

Prevention of other infections can be done by increasing intake of healthy foods rich in nutrients such as protein, vitamins A, C, potassium and zinc which are the fuel needed to support tissue repair in the wound healing phase and increase immunity for infection prevention. Energy foods such as dark green leafy vegetables, as well as ginger, mushrooms, beets and yogurt will also help the body heal wounds faster (Taufik & Hasibuan, 2018). Apart from that, by advocating early mobilization because early ambulation is effective and helps with immediate recovery (Taksande et al., 2021).

Conclusion

Postoperative hysterectomy, left salpingectomy and right salpingoovariectomy patients have acute pain nursing problems and risk of infection. After the intervention, the problem of pain and the risk of infection was partially resolved so that the intervention was continued independently by the patient. so comprehensive nursing care is needed to reduce the side effects of surgery in uterine myoma patients which can be done using evidence-based interventions.

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Conflict of Interest: None

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