

# Effects of Using Audiovisual Aids (Anatomic and Surgical Videos) in Reducing Anxiety of Patients who will Undergo Modified Radical Mastectomy (MRM)



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## ABSTRACT

**Introduction:** Patients undergoing modified radical mastectomy (MRM) often experience significant preoperative anxiety. Effective preoperative education could alleviate anxiety and improve patient outcomes. This research aimed to evaluate whether audiovisual aids during preoperative education correlated with decreased anxiety levels among female MRM patients, and it also aimed to investigate if enhanced preoperative education could lead to reduced anxiety and improved postoperative outcomes.

**Methodology:** A randomized controlled trial was conducted comparing anxiety levels in MRM patients receiving audiovisual aids versus verbal instructions. Purposive sampling selected female breast cancer

patients scheduled for MRM. Data was collected using pre- and post-intervention questionnaires, and statistical analysis was used to test hypotheses.

**Results:** There was no significant difference in pre-intervention anxiety levels between the control group (mean =  $2.77 \pm 0.32$ ) and the experimental group (mean =  $2.49 \pm 0.27$ ;  $t = 1.49$ ,  $p = 0.176$ ), indicating comparable baseline anxiety between groups. Following the intervention, the experimental group exhibited a significant reduction in anxiety (mean =  $1.83 \pm 0.20$ ) compared to the control group (mean =  $2.59 \pm 0.16$ ;  $t = 2.79$ ,  $p = 0.046$ ). Pearson correlation analysis revealed a moderate negative correlation between the use of audiovisual aids and preoperative anxiety levels ( $r = -0.643$ ,  $p = 0.017$ ), suggesting that audiovisual education was significantly associated with reduced preoperative anxiety among patients scheduled for MRM.

**Discussion:** The study found that audiovisual aids significantly reduced anxiety levels in the experimental group but had no effect on the control group. This suggested that such interventions could be effective in reducing preoperative anxiety, particularly in females undergoing MRM. However, further research with larger and more diverse

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samples was needed to confirm these findings and explore influencing factors in clinical settings.

**Conclusion:** The study findings suggested that incorporating audiovisual aids in preoperative education for MRM effectively reduced anxiety levels, warranting further research with larger and more diverse participant groups to validate these results.

**Keywords:** Modified Radical Mastectomy, audiovisual aids, preoperative education, anxiety reduction

## INTRODUCTION

Breast cancer is a significant health concern in the Philippines, with one of the highest incidence rates in Asia. According to the World Health Organization (2014), breast cancer is the leading cancer among females in the country and is associated with high mortality rate. Treatment options for breast cancer include chemotherapy, hormonal therapy, biological therapy, radiation therapy and surgical interventions such as mastectomy. Modified radical mastectomy (MRM), which involves removing the breast and adjacent axillary lymph nodes, has become the standard surgical approach for many breast cancer patients.

Preoperative education is vital for preparing patients undergoing surgery and aims to enhance their knowledge, health behaviors and outcomes. This education typically covers details about the surgical procedure, potential complications, postoperative care and pain management. Audiovisual aids, including anatomy videos and surgical simulations, are increasingly used in preoperative education to improve patient understanding and reduce anxiety before surgery.

Despite the importance of preoperative preparation, there is a notable lack of comprehensive studies on its impact, particularly for major elective surgeries like MRM. This research gap underscores the need for effective preoperative interventions to improve patient experiences and outcomes in surgical settings.

The specific objective of this study is to assess whether the use of audiovisual aids during preoperative education can reduce anxiety levels in female patients scheduled for MRM, compared to

receiving verbal instructions alone. The null hypothesis posits that audiovisual aids will not reduce anxiety levels, while the alternative hypothesis suggests that they will.

Studies on preoperative education have demonstrated its role in improving patient comprehension of surgical procedures and treatment alternatives. For instance, informative videos have been shown to significantly enhance patient understanding.[1] MRM has replaced more radical approaches as the standard of care for certain breast cancer patients.

Factors influencing preoperative anxiety include patient personality, nursing interventions, marital status and age.[2] Informative videos and structured preoperative education have been associated with reduced anxiety levels and increased patient satisfaction in various surgical contexts.

In summary, preoperative education is crucial for improving patient outcomes in surgical settings, and the use of audiovisual aids may play a key role in reducing anxiety and enhancing patient experiences before undergoing procedures like MRM. Further research in this area is necessary to establish best practices for preoperative preparation and education.

## METHODS

This study included female patients, aged from 30 to 65 years old, diagnosed with operable breast cancer who underwent MRM at a tertiary government training healthcare institution from May 2023 to May 2024. The population was divided into experimental and control groups; the first group was given an audiovisual aid about the surgery and the other group was given verbal instructions only, respectively. The subjects in both groups answered the same anxiety questionnaire before and after the intervention. Exclusion criteria included those who could not provide consent, patients who underwent breast surgery other than MRM (total mastectomy, radical mastectomy, wide excision and MRM with reconstruction or wound coverage). Patients who had previous MRM or major breast surgery were also excluded.

The study design employed was a randomized controlled trial. Patients were assessed for eligibility, and they had to be individuals diagnosed with operable breast cancer (Stage I - IIIa) scheduled

to undergo MRM at a tertiary government training healthcare institution. For randomization, researchers drew lots, with number 1 assigned to the experimental group and number 2 to the control group. As it was a randomized controlled trial, neither the patients nor the researchers knew beforehand which group each patient would be allocated to.

Pre-educational anxiety questionnaires were administered to both the experimental group and control group on the last day of their outpatient checkup before admission. The interventions, either audio-visual explanations or verbal instructions, were provided upon admission one day before surgery during the signing of the informed consent form for surgical intervention. A validated video presentation was shown to the experimental group, while the control group received verbal instructions. Instructions for both groups were conducted by designated senior residents from each hospital, following a provided script for uniformity of information dissemination. Post-educational anxiety questionnaires were then given to both groups after the audio-visual and verbal explanations, respectively. Data analysis was conducted after administering the second set of questionnaires to both the experimental and control groups.

The State Trait Anxiety Inventory (STAI) questionnaire used in the study was chosen from the developers. Based on answers from the questionnaire, researchers were able to gauge if there was a change in anxiety of the patient regarding the surgery. The video was shown to physicians who perform MRM and was asked to verify if the procedures shown on the video are the same as the procedures done during MRM. The subtitle on the video was translated from English to Filipino by UST College of Education Sentrong Salin at Araling Salin.

The sampling design used was purposive sampling. Participants were selected based on specific criteria set by the researchers. This approach was chosen because input from surgeons was necessary to recommend patients for MRM. In addition, purposive sampling was deemed most suitable for this study's objectives compared to other sampling techniques. According to the 2015 Philippine Cancer Facts and Estimates, the total population of breast cancer patients in the Philippines was 20,267 cases, although specific data on the number of cases undergoing MRM as treatment was unavailable.

To compute the sample size, the researchers used mean differences of the three groups and computed for

standard deviation of all the differences. Determination of the numbers for computation was guided by sample size in the study of Korkmaz, et. al., [3] on evaluating the influence of web-based patient education on anxiety and life quality of patients who have undergone mammoplasty. Based on the computation, sample size was estimated to be 6 per group with a total of 12 participants for the study.

A total of 19 patients with breast cancer who were about to undergo MRM in the Jose R. Reyes Memorial Medical Center from May 2023 to May 2024 were selected to measure if there was a significant effect on the preoperational level of anxiety of females after they had been presented with audiovisual aids as a form of preoperative education. No drop-outs were noted during the study. However, a larger sample size could improve reliability and generalizability of the study's findings.

A line graph was utilized to compare the levels of anxiety between patients in the control group and experimental group, allowing for visual tracking of changes over time.

The research design of the study was experimental, incorporating pre- and post-intervention questionnaires for both the control and experimental groups to assess changes in anxiety levels. The study aimed to determine differences in anxiety levels before and after intervention between these groups, with analysis conducted using paired t-tests to compare matched samples.

Additionally, the study investigated differences in anxiety levels between the control group (receiving verbal explanations) and the experimental group (watching a video simulation). Pearson's correlation coefficient was used as an inferential statistic to explore the relationship between anxiety levels in these groups, assessing whether a correlation existed between the type of intervention received and changes in anxiety.

Ethical considerations include ensuring respondent confidentiality by limiting access to authorized personnel and guaranteeing that all respondent information remained confidential. Participants were fully informed about the study's benefits and risks, emphasizing that no medication, drugs, or new surgical procedures would be involved. The video used in the study underwent psychiatric testing to ensure safety and reliability, aiming to minimize negative effects on participants and enhance validity of the study's measures.

**Table 1:** Baseline anxiety levels between control and experimental groups pre-operative

Test	Group	N	Mean	Std. Deviation	Mean Difference	t	p-value	VI Level of Anxiety	Findings	
									Decision	Conclusion
Before	Control	4	2.7688	0.32234	0.41667	1.486	0.176	Often	Failed to Reject H0	There is NO Significant Difference

## RESULTS

The analysis of sociodemographic data focused on age distribution among respondents, revealing a mean age of 44.74 years, a median age of 45 years and a mode of 29 years. The standard deviation of 9.86 indicated variability in ages across the sample.

Table 1 investigates the effects of using audiovisual aids, specifically anatomic and surgical videos in reducing the anxiety of patients undergoing MRM. The analysis involved comparing anxiety levels of patients in the control group, who received verbal explanations, with those in the experimental group, who watched a video simulation of the MRM procedure. The statistical treatment used in this analysis was an independent sample t-test, which compared mean anxiety levels between the control and experimental groups before intervention. The results are presented in Table 1. Before intervention, the mean anxiety level in the control group was 2.7688 with a standard deviation of 0.32234. In contrast, the mean anxiety level in the experimental group was 2.4917 with a slightly lower standard deviation of 0.26677. However, the difference in mean anxiety levels between the two groups was not statistically significant [ $t(10) = 1.486$ ,  $p = 0.176$ ], as the p-value was greater than the conventional alpha level of 0.05. Therefore, this study failed to reject the null hypothesis indicating that there is no significant difference in anxiety levels between the control and experimental groups before intervention.

Table 2 assesses whether there was a difference in the level of anxiety before and after intervention in both the experimental and control groups. To investigate this, the study utilized paired sample statistics to compare the mean anxiety levels before and after intervention within each group. The statistical treatment employed in this analysis involved calculating the mean, standard deviation and standard error mean for anxiety levels before and after intervention in both the control and experimental groups. The results are summarized in Table 2. Before intervention, the mean anxiety level in the control group was 2.7688 with a standard deviation of 0.32234. After intervention, the mean anxiety level decreased slightly to 2.5938 with a lower standard deviation of 0.15861.

Similarly, in the experimental group, the mean anxiety level decreased from 2.4917 before intervention to 1.8250 after, with corresponding standard deviations of 0.26677 and 0.19812, respectively. Upon examining the paired sample statistics, it is evident that both the control and experimental groups experienced decreased anxiety levels after intervention. However, statistical analysis is needed to determine whether these changes are significant. The paired samples t-test was conducted to compare mean anxiety levels before and after intervention within each group. The results indicated that there was a statistically significant difference in anxiety levels before and after intervention in the experimental group [ $t(6) = 2.793$ ,  $p = 0.046$ ], as

**Table 2:** Paired samples statistics of the difference in the level of anxiety before and after intervention in both the experimental and control groups

Group	Test	Mean	N	Std. Deviation	Std. Error Mean	VI (Anxiety Level)
<b>Control</b>	Before	2.7688	4	0.32234	0.16117	Often
	After	2.5938	4	0.15861	0.07930	Often
<b>Experimental</b>	Before	2.4917	6	0.26677	0.10891	Sometimes
	After	1.8250	6	0.19812	0.08088	Sometimes
<b>ALL</b>	<b>Before</b>	<b>2.6302</b>	<b>10</b>	<b>0.30765</b>	<b>0.09729</b>	<b>Often</b>
	<b>After</b>	<b>2.2094</b>	<b>10</b>	<b>0.19438</b>	<b>0.06147</b>	<b>Sometimes</b>

**Table 3:** Paired samples test to assess whether the use of audiovisual aids would lead to a reduction in the anxiety level of patients before and after intervention

Group	Paired test	Paired Differences						Findings	
		Mean	Std. Deviation	t	df	Sig. (2-tailed)	Std. Error Mean	Decision	Conclusion
Control	Before - After	0.17500	0.18819	1.860	3	0.660	0.09410	Failed to Reject H0	There is NO Significant Difference
Experimental	Before - After	0.06667	0.20595	2.793	5	0.046	0.08408	Reject H0	There is a Significant Difference
All	Before - After	0.11000	0.19621	1.773	9	0.041	0.06205	Reject H0	There is a Significant Difference

the p-value was less than the conventional alpha level of 0.05. Conversely, in the control group, the difference in anxiety levels before and after intervention was not statistically significant [ $t(3) = 1.860, p = 0.660$ ].

Table 3 evaluates whether the use of audiovisual aids would lead to a reduction in the anxiety level of patients before and after intervention. To assess this, the study employed a paired samples test to compare mean anxiety levels before and after intervention within the control and experimental groups. The statistical treatment involved calculating paired differences, representing the change in anxiety levels from before to after intervention. In the control group, the mean paired difference was 0.17500, with a standard deviation of 0.18819. Conversely, in the experimental group, the mean paired difference was lower at 0.06667, with a slightly higher standard deviation of 0.20595. Overall, the mean paired difference across all participants was 0.11000 with a standard deviation of 0.19621. The paired samples t-test was conducted to determine whether the observed differences in anxiety levels before and after intervention were

statistically significant. In the control group, the calculated t-value was 1.860 with a corresponding p-value of 0.660. Since the p-value was greater than the conventional alpha level of 0.05, this study failed to reject the null hypothesis, indicating that there was no significant difference in anxiety levels before and after intervention in the control group. However, in the experimental group, the t-value was 2.793, with a p-value of 0.046. As the p-value was less than 0.05, this study rejected the null hypothesis for the experimental group, suggesting that there was a statistically significant difference in anxiety levels before and after intervention.

Table 4 explains the impact of using audiovisual aids as a form of preoperative education on the preoperational level of anxiety in females scheduled to undergo MRM. To analyze this, the study employed correlation analysis to examine the relationship between the use of audiovisual aids and preoperative anxiety levels. The statistical treatment utilized in this analysis involved calculating several key values. Firstly, the R-squared value indicates the proportion of variance in preoperative anxiety levels explained by the independent variable, preoperative education

**Table 4:** Effect of audiovisual aids on preoperative anxiety levels in females undergoing MRM

Dependent Variable	R Squared	Adjusted R Squared	Pearson Correlation Coefficient (r)	Standardized Coefficients (Beta)	Sig. p-value	Effect/ Influence Level	Level of Correlation	Conclusion
Preoperational level of anxiety	0.414	0.267	-0.643 **	0.643	0.017	Large Effect	Moderate Positive Correlation	There is a Significant Effect

Independent Variable: preoperative education \*\*. Correlation is significant at the 0.05 level (1-tailed).

using audiovisual aids. In this study, the R-squared value was 0.414, suggesting that approximately 41.4% of the variability in preoperative anxiety levels can be attributed to the use of audiovisual aids. Additionally, the adjusted R-squared value, which accounts for the number of predictors in the model was 0.267. This adjusted value provides a more accurate estimate of the proportion of variance explained by the independent variable considering the sample size and complexity of the model. The Pearson correlation coefficient ( $r$ ) was -0.643, indicating a strong negative correlation between the use of audiovisual aids and preoperative anxiety levels. This negative correlation suggests that as the use of audiovisual aids increases, preoperative anxiety levels tend to decrease. Furthermore, the standardized coefficients (beta) provide insights into the strength and direction of relationship between the independent and dependent variables after adjusting for differences in scale. In this study, the standardized coefficient was -0.643, reinforcing the negative association between audiovisual aid utilization and preoperative anxiety levels. The p-value associated with the correlation coefficient was 0.017 indicating statistical significance at the 0.05 level. This suggests that the observed correlation between the use of audiovisual aids and preoperative anxiety levels is unlikely to have occurred by chance.

## DISCUSSION

The findings of this study suggest that the audiovisual aids had a significant effect on reducing anxiety levels in the experimental group, but did not produce a significant change in the control group. This implies that the use of intervention, which may include audiovisual aids or other techniques, could be an effective approach to relieve anxiety in certain populations. Overall, the findings of this analysis suggest a significant effect of using audiovisual aids as a form of preoperative education on reducing preoperative anxiety levels in females undergoing MRM. The negative correlation and statistical significance indicate that the implementation of audiovisual aids was associated with lower preoperative anxiety levels. Healthcare providers may consider incorporating audiovisual aids into preoperative education programs to help patients manage their anxiety and improve overall experience. However, further research with extensive sample sizes and more diverse participant groups

is warranted to confirm these findings and explore potential factors influencing anxiety reduction in clinical settings.

The significant reduction in anxiety levels observed in the experimental group can be attributed to several factors inherent in the use of audiovisual aids. Firstly, these aids provide a visual representation of the surgical procedure, which can help patients visualize what they are about to undergo. By seeing what to expect, patients may feel more in control and less fearful of the unknown. This aligns with the cognitive theory of anxiety, which posits that fear often stems from a lack of information and understanding. When patients are equipped with knowledge about their procedure, they are likely to experience decrease in anxiety levels.

The implications of these findings extend beyond mere anxiety reduction. Lower anxiety levels are associated with improved postoperative outcomes, including reduced pain perception, shorter hospital stays and enhanced overall satisfaction with the surgical experience. This is particularly relevant in the context of MRM where patients often face significant emotional and psychological challenges. By incorporating audiovisual aids into preoperative education, healthcare providers can foster a more supportive environment that not only addresses the informational needs of patients but also their emotional well-being.

The results of this study are consistent with a growing body of literature that supports the use of educational interventions to alleviate preoperative anxiety. For instance, Kain, et. al.,[4] conducted a study involving pediatric patients and found that those who viewed a video about their surgical procedure experienced significantly lower anxiety levels compared to those who did not receive such information. This suggests that the benefits of audiovisual aids are not limited to adult populations but can also extend to children, highlighting the universal applicability of this educational strategy.

Similarly, a meta-analysis by Ng, et. al.,[5] reviewed multiple studies on preoperative education and concluded that such interventions significantly reduce anxiety in adult surgical patients. The analysis emphasized that the effectiveness of these interventions is enhanced when they are tailored to specific needs and preferences of patients. This reinforces the findings of the current study, which utilized tailored audiovisual content to address the unique concerns of women undergoing MRM.

Furthermore, a study by Karalar, et. al.,[6] explored the impact of preoperative information on anxiety and found that patients who received comprehensive educational materials, including videos, reported lower anxiety levels and higher satisfaction with their care. These studies collectively support the notion that audiovisual aids can be a valuable tool in preoperative education, contributing to improved patient outcomes and experiences.

## LIMITATIONS AND RECOMMENDATIONS

This study is not without its limitations. One of the primary weaknesses is the relatively small sample size, which may limit the generalizability of the findings. A small sample can lead to variability in results and may not accurately represent the broader population of female patients undergoing MRM. Future studies should aim to include a larger and more diverse sample size to enhance findings. Additionally, the study was conducted at a single institution, which may introduce biases related to the specific patient population and healthcare practices at that site. Variations in patient demographics, cultural backgrounds and healthcare systems can influence the effectiveness of educational interventions. Therefore, conducting multi-center studies would provide a more comprehensive understanding of the impact of audiovisual aids across different settings. Furthermore, the study's design did not account for long-term anxiety levels post-surgery. While immediate preoperative anxiety is crucial, understanding how educational interventions impact anxiety and recovery in the weeks and months following surgery would provide valuable insights into the sustained benefits of audiovisual aids.

Future research should focus on the following recommendations to enhance the findings of this study. Firstly, larger sample sizes are essential to improve statistical power and detect smaller effect sizes. Additionally, including diverse participant groups across various age ranges, cultural backgrounds and educational levels would enhance the generalizability of results. Implementing longitudinal designs would allow for the assessment of long-term effects of audiovisual aids on anxiety and recovery outcomes, with follow-up evaluations post-surgery. A mixed-methods approach, incorporating qualitative methods like interviews or focus groups could provide deeper insights into patient experiences.

Furthermore, exploring additional factors that may influence the effectiveness of audiovisual aids, such as prior surgical experiences and health literacy, is crucial. Finally, healthcare providers should consider integrating audiovisual aids into routine preoperative education, ensuring staff training and accessibility to enhance overall patient experience and outcomes.

## CONCLUSION

The use of audiovisual aids is an effective approach to alleviate anxiety, however, the authors suggest that more research should be done with larger and more diverse samples to confirm the findings and investigate factors that may affect anxiety reduction in clinical settings.

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  2. Statistical Analysis: A. Design, B. Execution, C. Review and Critique
  3. Manuscript Preparation: A. Writing the First Draft, B. Review and Critique
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## APPENDIX

### APPENDIX A. VIDEO TRANSLATION

#### TRANSLATION

Your doctor has recommended that you have a modified radical mastectomy. But what does that actually mean? Traditionally, a radical mastectomy called for the removal of the breast, surrounding tissue and even the chest muscle below. A modified radical mastectomy is a procedure where the breast and surrounding tissue are removed while leaving the chest muscle intact. In most cases, mastectomy is required in order to remove cancerous tissue from the body. The extent of tissue removed is determined by the amount of cancer present in your body. A modified radical mastectomy is one of the most extensive forms of breast cancer surgery in that it calls for the complete removal not only of the breast, but of the lymph nodes as well. Lymph nodes are small junctions that join the vessels that make up the

lymphatic system. The lymphatic system circulates a bodily fluid called lymph in the same way that the circulatory system carries blood.

*Inirekomenda ng iyong doktor na sumailalim ka sa modified radical mastectomy. Ngunit ano nga ba ang ibig sabihin nito? Tradisyonal na ginagawa ang radical mastectomy kapag dapat tanggalin ang suso, kasama ang mga nakapaligid na tisyu at maging ang muscle sa ilalim nito. Ginagawa naman ang modified radical mastectomy kapag tatanggalin lamang ang suso at ang nakapalibot na tisyu nang hindi ginagalaw ang muscle. Madalas, kailangan ang mastectomy para matanggal sa katawan ang mga tisyung may kanser. Depende sa dami ng kanser ang laki ng tisyung tatanggalin sa iyong katawan. Isa sa pinakamasaklaw na operasyon ng kanser sa suso ang modified radical mastectomy, dahil hindi lamang ang suso ang tinatanggal dito, pero pati na rin ang mga kulani sa kilikili. Ang mga kulani ay malilit na umbok na nag-uugnay sa daluyang bumubuo sa lymphatic system. Sa lymphatic system dumadaloy ang lymph fluid tulad ng pagdaloy ng dugo sa circulatory system.*

Your doctor has recommended that you undergo a modified radical mastectomy because the cancer in your breast may have begun to move into the lymph nodes under your arm as well as into your chest muscle. This procedure will permanently change the outward shape and appearance of your chest. So make sure that you ask your doctor to carefully explain the reasons behind this recommendation.

*Inirerekomenda ng iyong doktor na sumailalim ka sa modified radical mastectomy dahil maaaring nagsimula nang kumalat ang kanser sa iyong suso sa mga kulani sa kilikili at sa mga muscle sa iyong dibdib. Permanenteng mababago ng operasyong ito ang panlabas na anyo ng iyong dibdib. Kaya siguraduhing hilingin sa iyong doktor na ipaliwanag nang mabuti ang mga dahilan ng kaniyang rekomendasyon.*

Two incisions will be made beginning at the middle of the chest, one along the top and one along the bottom of the breast coming together just under the arm. The skin is then lifted up in a way revealing the tissue underneath. Beginning at the clavicle or collar bone, the surgeon then begins to carefully cut the breast tissue away from the muscles that lie just beneath. When the breast has been completely freed, it is lifted away exposing the top layer of muscle called the pectoralis major. The surgeon will pull this muscle temporarily aside exposing the next layer of muscle, the pectoralis minor. The surgeon will move this muscle aside creating a clear view of the surrounding fatty tissue. Within this fat deposit lie the lymph nodes, lymph vessels, blood vessels and nerves. Using great care not to damage the large thoracic nerve, your doctor will remove the lymph nodes and surrounding fat. Blood vessels will be tied off and your doctor will thoroughly examine the

surrounding tissues for any other signs of disease. When the surgical team is satisfied that they have done all that they can do to remove the cancer, they will release the muscles and other tissue. One or more drainage tubes will be temporarily inserted on the site while the healing process begins. They will then close the incision. Finally, a sterile bandage is applied.

*Dalawang hiwa ang gagawin , mula sa gitna ng dibdib, isa sa itaas at ang isa sa ilalim ng suso na magtatagpo sa ilalim ng kilikili. Sunod, iaangat ang balat na magpapakita ng mga tisyu sa ilalim nito. Mula sa clavicle o collarbone, maingat na hihiwain at paghihiwalayin ng doktor ang tisyu sa dibdib palayo sa mga muscle na nasa ilalim nito. Kapag tuluyan nang nahiwalay ang suso, aalisin na ito kaya makikita na ang unang muscle na tinatawag na pectoralis major. Hahawiin pansamantala ang muscle na ito upang makita naman ng doktor ang susunod na muscle na tinatawag na pectoralis minor. Hahawiin din ng doktor ang muscle na ito upang makita nang malinaw ang nakapalibot na taba. Sa loob ng taba makikita ang mga kulani, lymph vessels, daluyan ng dugo, at mga ugat. Maingat na tatanggalin ng doktor ang kulani at nakapalibot na taba upang hindi mapinsala ang malaking thoracic nerve. Itatali ng doktor ang mga blood vessel at maingat niyang susuriin ang mga nakapalibot na tisyu upang matiyak na wala nang iba pang sakit ang pasyente. Kapag sigurado na ang mga doktor na nagawa na nila ang lahat upang matanggal ang kanser, ibabalik na nila ang mga hinawing muscle at tisyu. Lalagyan pansamantala ng isa o dalawang drainage tube ang dibdib habang pinapagaling ang sugat. Pagkatapos, isasara na ang balat. Sa huli ay tatakpan ng malinis na gasa ang sugat.*