

Evaluation of the Wise pattern technique in the surgical management of breast cancer cases in Egyptian females

Original Article

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ABSTRACT

Background: Breast cancer is a common malignancy among women worldwide. Various surgical techniques, including breast-conserving surgery and mastectomy, are used depending on the disease's characteristics and patient preferences. The Wise pattern technique is a widely used approach for oncoplastic surgery, especially in patients with large-sized ptotic breasts.

Objective: This study aimed to evaluate the use of the Wise pattern technique in Egyptian females with large ptotic breasts undergoing either breast-conserving surgery or mastectomy.

Patients and Methods: A prospective study was conducted on 100 Egyptian females with large-sized ptotic breasts (cup sizes C and D) and pathologically confirmed malignant breast lesions. Patients included were those admitted to the Surgical Oncology Unit at Alexandria Main University Hospital for either oncoplastic breast surgery or mastectomy. Exclusion criteria involved patients with metastatic Stage IV breast cancer, small-sized breasts (cup sizes A and B), inflammatory breast cancer requiring modified radical mastectomy, and cases with suspected skin involvement that would complicate the Wise pattern design.

Conclusion: The study provides insight into the effectiveness and safety of the Wise pattern technique in managing breast cancer in patients with large-sized ptotic breasts. The findings suggest that this approach may offer favorable cosmetic and oncological outcomes, contributing to improved patient satisfaction and quality of life.

Key Words: Inframammary fold, multidisciplinary teams, therapeutic breast reduction.

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INTRODUCTION

Breast cancer was the most commonly diagnosed cancer and the leading cause of cancer-related deaths in women worldwide, accounting for 23% of all cancer cases and 14% of cancer-related mortalities^[1]. In the United States, one in eight women in the general population developed breast cancer during her lifetime^[2]. The management of breast cancer varied depending on the physical and biological characteristics of the disease, as well as the patient's age, overall health, and personal preferences. Treatment approaches were generally classified into local therapies (surgery and radiotherapy) and systemic therapies, which included chemotherapy, hormonal therapy, immunotherapy, and targeted therapies^[3-5].

The optimal management of breast cancer required a multidisciplinary approach, involving specialists from various fields who collaborated through multidisciplinary teams. These teams allowed key professionals to jointly discuss individual cases and contribute independently to

treatment decisions^[6]. The surgical management of breast cancer evolved significantly, with breast-conserving surgery followed by radiation therapy validated as a safe alternative to radical mastectomy. This approach offered similar survival rates, improved cosmetic outcomes, and acceptable rates of local recurrence^[7]. In addition, breast-conserving surgery was extended to patients with locally advanced tumors following tumor downsizing with preoperative neoadjuvant therapy, showing acceptable rates of ipsilateral breast tumor recurrence^[8]. Achieving good surgical safety margins, confirmed by intraoperative pathological assessment, was crucial in breast-conserving surgery. The introduction of oncoplastic techniques allowed for more extensive resections of malignant breast masses without compromising cosmetic outcomes^[9].

The Wise pattern technique was first described by Wise in 1956 for breast reduction and mastopexy. This pattern allowed for the removal of skin in both vertical and horizontal dimensions, enabling breast lifting and reshaping into a less ptotic form^[10]. In recent years,

Wise pattern techniques were used in therapeutic breast reduction, skin-reducing mastectomies, and specific types of mastectomies such as +[11].

Aim

This study aimed to evaluate the use of the Wise pattern technique in Egyptian females with large ptotic breasts undergoing either breast-conserving surgery or mastectomy.

PATIENTS AND METHODS:

Study design

This prospective study was undertaken to evaluate the surgical oncological outcomes in 100 Egyptian women diagnosed with large sagging breasts (C and D cups) and with a confirmed pathological diagnosis of breast cancer. The study participants included patients who underwent conservative breast surgery or mastectomy for breast cancer and were admitted to the Surgical Oncology Unit of Alexandria Main Hospital.

Inclusion and exclusion criteria

Input criteria

- (a) Women aged 18 years and over with large, ptotic breasts (C and D cups).
- (b) Pathologically confirmed cancerous lesions of the breast.
- (c) Patients who are eligible for conservative breast surgery or mastectomy.

Exclusion criteria

- (a) Stage IV metastatic breast cancer.
- (b) Small breasts (A cup and B cup).
- (c) Inflammatory breast cancer designated for modified radical mastectomy.
- (d) Cases with suspected skin involvement that would complicate the Wise pattern design.

Roads

Data were collected prospectively to assess surgical oncological outcomes after appropriate clinical and regional staging. The following parameters were recorded for each patient:

- (i) Demographic data:
 - (a) Patient's age.
- (ii) Tumor and lymph node (LNs) status (TNM clinical description).

(iii) Clinical assessment:

- (a) Physical examination of both breasts.
- (b) Palpation of any palpable axillary LNs.

(iv) Radiological evaluation:

- (a) Ultrasound and mammography evaluations (tumor size, location).
- (b) MRI if necessary.
- (c) Ultrasound description of LNs (normal, suspicious, malignant).
- (d) Ultrasound-guided core needle biopsy of a breast mass.
- (e) Ultrasound-guided fine needle aspiration of suspicious LNs if performed.
- (f) Ultrasound localization of the breast tumor if neoadjuvant treatment is planned.

(v) Histopathological evaluation:

- (a) Tumor type.
- (b) Biological type of tumor (ER: Estrogen receptor, PR: Progesteron receptor, HER2: Human epidermal growth factor receptor 2, Ki67: City of Kiel).
- (vi) Investigation of metastases:

- (a) Plain chest radiography and ultrasound of the abdomen and pelvis with clinically and radiologically negative axilla.
- (b) IV contrast-enhanced computed tomography (CT) of the chest, abdomen, and pelvis with clinically and/or radiologically positive axilla.
- (c) PET: Positron Emission tomography, CT if performed.

Methods

Data were collected prospectively to assess oncological and surgical outcomes following appropriate clinical and axillary staging.

(I) All data were collected for every patient taking into consideration the following: Age.

(II) Tumor and nodal status (clinical TNM: Tumour nodes metastasis, description):

(a) Clinically: by examination of both breasts and palpation of any palpable axillary LNs.

(b) Radiologically:

- (i) Based on ultrasound of both breasts and mammogram

- (tumor size, location) and/or MRI if indicated.
- (ii) Ultrasound description of LNs (normal, suspicious, malignant).
 - (iii) US-guided core needle biopsy from breast mass.
 - (iv) US-guided FNAC from suspicious axillary LNs if done.
 - (v) US-guided clipping of breast tumor if planned for neoadjuvant treatment.
 - (vi) Histopathological type of tumor.
 - (vii) Biological subtype of the tumor (ER, PR, HER2, Ki67).
- (III) Metastatic workup:
- (a) Chest radiography and US of the abdomen with clinically and radiologically negative axilla.
 - (b) CT chest and abdomen with clinically and radiologically positive axilla.
 - (c) Bone scan and PET-CT if clinically indicated.
- (IV) Type of breast surgery (therapeutic breast reduction, skin-reducing mastectomy and Goldilocks mastectomy).
- (V) Multidisciplinary teams decision-making.
- (VI) Postoperative histopathological assessment including:
- (a) Pathologic (pTNM) description.
 - (b) Total number of excised LNs if done.
 - (c) Number of positive LNs with micrometastases and macrometastases.
 - (d) Extranodal invasion.
 - (e) Lymphovascular invasion.
- (VII) Postoperative complications: seroma, wound infection, wound dehiscence.
- (VIII) Follow-up for local recurrence or distal metastasis within 2 years.
- (IX) Cosmotic assessment.

Therapeutic reduction mammoplasty (TRM)

With the patient holding her back while standing, we measure the distance between the sternal notch and the nipple. Based on the size and site of the tumor and the size of the breast, we then choose the best course of action for the patient.

First, using a permanent marker, draw a straight line from the suprasternal notch to the umbilicus to identify the

midline. Next, draw a vertical line from the midclavicular point, passing by the nipple, to the inframammary fold (IMF), to determine the meridian.

Using the Pitanguy technique, the location of the future nipple is marked with the right hand while the left index finger creates the indentation.

A ruler is used to measure the distance between the suprasternal notch and the future nipple, as well as between the future nipples on either side and the midline.

The circle of the future nipple-areola complex (NAC) is drawn using key hole and centered on the previously determined future nipple by the Pitanguy technique.

The two vertical limbs, each ~10cm from the future nipple, maintain a changeable angle between them defined by the desired shape.

Finishing the drawing while lying down, we draw two horizontal lines that connect the anterior axillary line laterally and the parasternum medially, originating at the lower end of the two vertical limbs, and joining the inframammary fold on each side. (Fig. 1).

The inferior pedicle is based on the inframammary fold, which rises in a pyramidal pattern to ring the nipple-areola complex, and has a base of ~10cm that is centered on the meridian.

The future nipple is reshaped using a 42mm-radius cookie cutter.

As we deepithelize the inferior pedicle, we leave a small, non-deepithelized triangle at the base of the pedicle on the IMF, centered on the meridian, which aids in reducing suture tension and wound dehiscence.

Using diathermy we produce medial and lateral flaps starting with 2cm in thickness growing to 4cm in the base of the flap. Always maintain the pedicle, ensuring it is pyramidal in shape and then separate the pedicle from it. Then we start handling the axilla. (Fig. 2).

Intraoperative histopathological assessment to verify free safety margins and to evaluate sentinel LN biopsy if conducted with reshaping if necessary and completion of axillary clearance if recommended.

The inferior pedicle is secured with two sutures medially, followed by the closure of the previously marked upper and lower ends of the vertical limbs. The upper two marks are taken with the dermis 1cm below the nipple using a three-in-one suture, while the lower two marks are sutured with the tip of the triangle based on IMF. Lastly, we make multiple subcutaneous simple inverted sutures. It should be noted that the subcutaneous sutures surrounding the nipple are spaced approximately 1cm apart from the NAC to prevent nipple shrinking or tear drop.

Next, we use monocryl 4/0 to seal the skin around the nipple and 3/0 to seal the remainder of the breast.

The superior medial pedicle is a septum-based, pyramidal pedicle that has a broad base that extends from 12 o'clock to 3 o'clock and getting thinner to encircle the nipple areola complex.

After deepithelization of the pedicle and opening the skin we start separation of the lower pole of the breast starting from IMF. Then we raise the lateral flap after that we start attacking the medial flap and the pedicle with caution.

To enable the pedicle's rotational movement, the dermis and only the dermis is cut by the cutting mode of the diathermy at the pedicle's attachment to the medial flap.

For safety margins, intraoperative histological evaluation is carried out. Axillary management and optimal hemostasis are done and a negative suction drain is installed.

The first suture is placed to rotate the pedicle tip to take the position of the future nipple at the 12 O'clock mark, after which we start the layer-by-layer closure. (Fig. 3).

Skin-reducing mastectomy (SRM)

After drawing the Wise pattern, we inject an intumescent into the subcutaneous tissue. Next, we use blade number 15 to incise the skin, following the Wise pattern. Next, we deepithelize the skin over the lower pole of the breast, which will serve as the future lipodermal flap. Finally, we use blade number 24 to begin dissecting and raising the medial and lateral flaps. For the flaps to maintain their blood supply and viability, they need to be thicker toward the base. During the careful dissection, hemostasis is achieved step-by-step. Once the breast tissue has been evacuated and the envelope is obtained, we can use an LD flap, silicone implants, or tissue expanders for reconstruction.

Thin skin flaps and well-documented wound healing issues are associated with Skin-reducing mastectomy (SRM), especially skin necrosis at the T junction. This increases the risk of prosthesis exposure and failure, which limits the usefulness of the prosthesis. However, when using LD, these healing issues are not significant because they can always be resolved with frequent dressing or bedside debridement, which is followed by frequent dressing and short-term wound care.

Sparing of a lower dermal flap sculpted down to the inframammary fold that sutured to the lower border of LD has the advantages of preventing stepping at this point and also increases breast fullness to overcome the relative smaller size of LD for reconstruction. (Fig. 4).

Nipple-sparing skin-reducing mastectomy (NSSRM)

After injection of the intumescent, make an incision in accordance with the Wise pattern, deepithelize the skin surrounding the NAC and the lower pole of the breast, and open the dermis only on one side of the nipple leaving the other side and the upper and lower dermis intact. Use blade No. 24 to create the breast envelope by sharp dissection. (Fig. 5).

Goldilocks mastectomy

Use the Wise pattern to remove the breast tissue, create a skin and subcutaneous tissue envelope, and then rebuild the breast using a lower lipodermal flap instead of an implant or LD flap.

We can elongate the lower lipodermal flap to include the NAC so we can get the nipple-sparing Goldilocks mastectomy. (Fig. 6).



Fig. 1: Wise pattern design for a case of left breast cancer.



Fig. 2: Inferior pedicle therapeutic reduction mammoplasty for a case of left breast cancer.



Fig. 3: Wise pattern design for superior medial pedicle therapeutic reduction mammoplasty.

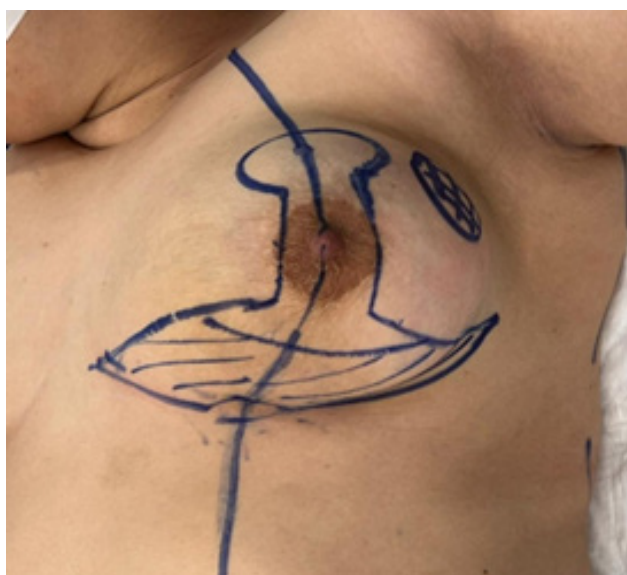


Fig. 4: A case of left breast cancer, who underwent skin-reducing mastectomy and reconstruction by LD flap.



Fig. 5: Tripedicle NSSRM and reconstruction by LD flap for right breast cancer.



Fig. 6: Nipple-sparing Goldilocks for right breast cancer.

Statistical considerations

Once data were collected, a code sheet was developed. Organization, tabulation, presentation, and analysis of data were performed using SPSS (Statistical Package for the Social Sciences) V25 of IBM, USA.

RESULTS:

Shown in (Table 1):

The age range for all patients is between 30 and 80 years, with a mean age of 52.19 years (SD=10.28). Among the three groups:

(a) Therapeutic reduction mammoplasty (TRM) patients show a slightly younger profile with an age range of 34–74 years, and a mean age of 50.80 years (SD=8.69).

(b) SRM patients tend to be younger, with an age range from 30 to 60 years and a lower mean of 47.78 years (SD=6.58).

(c) Goldilocks mastectomy patients are notably older, ranging from 65 to 80 years, with a higher mean age of 70.42 years (SD=4.74).

(d) The median age is similar in the TRM and SRM groups, with slight variations (52.0, 51.5, and 48.0 years, respectively), while the Goldilocks group has a significantly higher median age of 70 years.

(e) Across all groups, the mean follow-up time was 2.41 years (SD=1.60). The TRM group shows similar follow-up patterns, with a mean of 2.40 years (SD=1.43).

(f) SRM patients have a slightly shorter follow-up mean of 2.33 years (SD=1.71), while Goldilocks mastectomy patients exhibit a longer follow-up mean of 2.72 years (SD=2.17).

(g) The median follow-up time across the groups is quite consistent, hovering around 2.0 to 2.25 years.

(h) The BMI for all patients ranges between 26.0 and 35.0, with a mean BMI of 30.05 (SD=1.58). TRM patients have a slightly higher mean BMI of 30.36 (SD=1.54), while SRM patients have a similar mean of 29.97 (SD=1.51).

(i) The Goldilocks mastectomy group shows a lower BMI range of 26.0–31.0, with a lower mean BMI of 28.83 (SD=1.40).

(j) Medians across groups are consistent around 30.0, except for Goldilocks mastectomy patients who have a slightly lower median BMI of 29.0.

Shown in (Table 2):

(i) Among the total population, 74% have a breast cup size C, while 26% have size D.

a. In the TRM group, 69.6% have a C cup and 30.4% have a D cup, which shows a fairly balanced distribution between C and D.

b. In the SRM group, a larger proportion (75%) have a C cup, while only 25% have a D cup.

c. The Goldilocks mastectomy group has the highest percentage of patients with a C cup at 91.7%, while only 8.3% have a D cup.

d. This indicates that the Goldilocks mastectomy group tends to have smaller breast sizes compared with the other groups, with a predominant C cup size distribution.

Distance between the suprasternal notch and the nipple (cm)

(1) The distance between the suprasternal notch and the nipple varies across the total population from 28.0 to 39.0cm, with a mean distance of 33.09cm (SD=2.67).

a. In the TRM group, the distance ranges from 28.0 to 39.0cm, with a mean of 32.75cm (SD=2.82), slightly lower than the overall mean.

b. The SRM group shows a somewhat larger mean distance of 33.62cm (SD=2.54), with a range of 28.0–38.0cm.

c. The Goldilocks mastectomy group has a mean distance of 33.25cm (SD=2.22), with a slightly smaller range (28.0–36.0cm) compared with the other groups.

d. Median values are fairly consistent across all groups, with most medians falling around 32.5–33.0cm, indicating that the majority of patients share a similar distance.

Shown in (Table 3):

This table summarizes the distribution of the studied cases regarding complications, cancer recurrence, and mortality rates.

Complications

(i) Of the patients, 70% experienced complications, with notable differences across groups:

a. Of the TRM patients, 62.5% had complications, while 84.4% of SRM patients experienced complications, indicating a significantly higher rate.

b. In the Goldilocks mastectomy group, 66.7% had complications.

(ii) The most common complication was seroma, affecting 48% of all patients, with 33.9% in the TRM group, 68.8% in the SRM group, and 58.3% in the Goldilocks group.

(iii) Other notable complications included:

a. Flap necrosis (9%) and wound dehiscence (19%) were also present, with varying rates among groups.

Cancer recurrence

(i) Overall, 90% of the total cases reported no recurrence, highlighting a generally favorable outcome:

a. In the TRM group, 91.1% had no recurrence, while 84.4% of SRM patients reported no recurrence. Notably, 100% of Goldilocks mastectomy patients experienced no recurrence.

(ii) Local recurrence occurred in 4% of cases, with a similar distribution across groups.

(iii) Distal metastasis also affected 4%, indicating a critical area for monitoring in-patient follow-ups.

Mortality

(i) Of the patients, 97% survived, with very low mortality rates across groups:

a. Of the TRM patients, 98.2% survived, while 96.9% of SRM patients and 91.7% of Goldilocks mastectomy patients survived.

(ii) Only 3% of patients experienced mortality, emphasizing the effectiveness of the treatments applied.

Table 1: Distribution of the studied cases according to demographic data

	Total (n=100)	TRM (n=56)	SRM (n=32)	Goldilocks mastectomy (n=12)
Age (years)				
Min–max.	30.0–80.0	34.0–74.0	30.0–60.0	65.0–80.0
Mean±SD	52.19±10.28	50.80±8.69	47.78±6.58	70.42±4.74
Median (IQR)	52.0 (44.0–58.0)	51.5 (44.0–57.0)	48.0 (44.0–52.0)	70.0 (66.5–74.0)
Follow-up time (years)				
Min–max	0.75–3.50	0.75–3.50	0.92–3.42	0.75–3.33
Mean±SD	2.06±0.69	2.11±0.69	2.02±0.67	1.94±0.700
Median (IQR)	2.0 (1.58–2.50)	2.08 (1.58–2.50)	1.83 (1.46–2.58)	1.88 (1.46–2.42)
BMI (kg/m ²)				
Min–max	26.0–35.0	27.0–35.0	28.0–35.0	26.0–31.0
Mean±SD	30.05±1.58	30.36±1.54	29.97±1.51	28.83±1.40
Median (IQR)	30.0 (29.0–31.0)	30.0 (29.0–31.0)	30.0 (29.0–31.0)	29.0 (28.0–29.5)

Table 2: Distribution of the studied cases according to different parameters

	Total (n=100) N (%)	TRM (n=56) N (%)	SRM (n=32) N (%)	Goldilocks mastectomy (n=12) N (%)
Breast cup				
C	74 (74.0)	39 (69.6)	24 (75.0)	11 (91.7)
D	26 (26.0)	17 (30.4)	8 (25.0)	1 (8.3)
Distance between suprasternal notch and nipple (cm)				
Min–max	28.0–39.0	28.0–39.0	28.0–38.0	28.0–36.0
Mean±SD	33.09±2.67	32.75±2.82	33.62±2.54	33.25±2.22
Median (IQR)	33.0 (31.0–35.0)	32.5 (30.0–35.0)	33.0 (32.0–35.5)	33.0 (32.0–35.0)

Table 3: Distribution of the studied cases according to complications, cancer recurrence, and mortality

	Total (n=100) N (%)	TRM (n=56) N (%)	SRM (n=32) N (%)	Goldilocks mastectomy (n=12) N (%)
Complications	70 (70.0)	35 (62.5)	27 (84.4)	8 (66.7)
Infection	4 (4.0)	2 (3.6)	2 (6.3)	0
Hematoma	3 (3.0)	3 (5.4)	0	0
Fat necrosis	7 (7.0)	6 (10.7)	1 (3.1)	0
Flap necrosis	9 (9.0)	6 (10.7)	2 (6.3)	1 (8.3)
Nipple necrosis	6 (6.0)	3 (5.4)	2 (6.3)	1 (8.3)
Seroma	48 (48.0)	19 (33.9)	22 (68.8)	7 (58.3)
Wound dehiscence	19 (19.0)	10 (17.9)	5 (15.6)	4 (33.3)
Cellulitis	1 (1.0)	1 (1.8)	0	0
Capsular contacture	0	0	0	0
Silicone exposure	1 (1.0)	1 (1.8)	0	0
Lymphedema	8 (8.0)	6 (10.7)	2 (6.3)	0
Keloid	3 (3.0)	2 (3.6)	1 (3.1)	0
DVT	0	0	0	0
Cancer recurrence				
No recurrence	90 (90.0)	51 (91.1)	27 (84.4)	12 (100.0)
Local recurrence	4 (4.0)	2 (3.6)	2 (6.3)	0
Distal metastasis	4 (4.0)	2 (3.6)	2 (6.3)	0
Local recurrence and distal metastasis	2 (2.0)	1 (1.8)	1 (3.1)	0
Mortality				
No	97 (97.0)	55 (98.2)	31 (96.9)	11 (91.7)
Yes	3 (3.0)	1 (1.8)	1 (3.1)	1 (8.3)

DISCUSSION

The distribution of surgical cases in this study showed that tTRM was the most common procedure, accounting for 56% of the cases. This finding was consistent with a previous research by Spear,^[12] which also highlighted the prevalence of TRM in similar patient populations, indicating its effectiveness in breast cancer treatment. SRM constituted 32% of the cases, reflecting a growing trend toward aesthetic considerations in surgical planning. This result corroborated the study by Payne^[13], which found that 35% of patients opted for SRM, demonstrating its acceptance as a viable option for preserving breast aesthetics. In terms of follow-up time, the average across all cases was 2.41 years. The TRM group had a mean follow-up of 2.40 years, while the Goldilocks mastectomy group showed a slightly longer follow-up period of 2.72 years. This aligned with research by Azevedo *et al.*^[14], who emphasized the necessity for extended follow-up in aesthetic surgeries to assess long-term outcomes and patient satisfaction.

Regarding BMI, the overall mean was 30.05 kg/m², with TRM patients averaging 30.36 kg/m², while SRM patients had a mean of 29.97 kg/m². Notably, the Goldilocks mastectomy group exhibited a lower average BMI of 28.83 kg/m². This finding was consistent with a systematic review by Panayi *et al.*^[15], which noted the impact of BMI on surgical outcomes and decision-making. In terms of comorbidity, 27% of the total participants reported at least one comorbid condition. The TRM group exhibited the highest prevalence of comorbidities at 30.4%, while 25.0% of the SRM group and 16.7% of the Goldilocks mastectomy group reported comorbidities. This distribution highlighted the potential impact of comorbid conditions on surgical decision-making and outcomes, as noted by Ahmed Dehal *et al.*^[16], who emphasized the importance of evaluating comorbidities in preoperative assessments. Hypertension was the most commonly reported comorbidity, affecting 26% of participants overall, with the TRM group showing a prevalence of 28.6%. Diabetes mellitus was reported by 8% of participants, with a slight variation across groups, indicating that metabolic conditions may also influence surgical risks^[17].

The distribution of cases according to different treatment parameters highlighted the varied approaches taken for neoadjuvant and adjuvant therapies. Notably, 40% of participants received neoadjuvant treatment, with a higher proportion in the TRM group (53.6%) compared with the SRM group (31.3%). This suggested a strategic preference for neoadjuvant therapy among patients undergoing TRM, which aligned with findings by Broecker *et al.*^[18], which indicated that the neoadjuvant treatment

could improve surgical outcomes and facilitate better tumor management. Among the participants, the TRM group exhibited an invasive ductal carcinoma (IDC) prevalence of 82.1%, slightly higher than the SRM group at 78.1%. This aligned with the findings of Biglia *et al.*^[19]. Furthermore, the Goldilocks mastectomy group showed an IDC prevalence of 83.3%, indicating a consistent trend across different surgical techniques. In contrast, invasive lobular carcinoma (ILC) represented 11% of the total cases, with the TRM group having 10.7% and the SRM group at 12.5%. These figures were comparable to those reported by Biglia *et al.*^[19], suggesting that while ILC is less common than IDC, it remains a significant subtype warranting attention in treatment planning. The distribution of ipsilateral axillary LN metastasis showed that 65.0% of the total participants experienced metastasis, which is significant. In the TRM group, 69.6% had positive LN involvement, indicating a higher rate of advanced disease compared with the Goldilocks mastectomy group, where only 25.0% showed LNs metastasis. This finding supported the work of Banys-Paluchowski *et al.*^[20], which suggested that the Goldilocks mastectomy group has a lower burden of the disease. Among participants, 100% of the SRM group underwent reconstruction. among those who did, autologous reconstruction was preferred (78.0%). This aligned with the observations of Garza III MD *et al.*^[21], which highlighted patient preferences for autologous options due to their natural feel and lower complication rates.

CONCLUSION

The study provides insight into the effectiveness and safety of the Wise pattern technique in managing breast cancer in patients with large-sized ptotic breasts. The findings suggest that this approach may offer favorable cosmetic and oncological outcomes, contributing to improved patient satisfaction and quality of life.

RECOMENDATIONS

The study emphasizes the need for tailored preoperative assessment and individualized treatment plans that influence patient outcomes and satisfaction levels. The study underscores the importance of comprehensive care approaches that address not only the medical but also the psychological and social needs of breast cancer patients. Future research should aim to explore the long-term impacts of these surgeries on quality of life and patient satisfaction.

CONFLICT OF INTEREST

There are no conflicts of interest.

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