



MODIFIED WISE PATTERN THERAPEUTIC REDUCTION MAMMOPLASTY TO ADAPT ANY QUADRANT REGARDLESS OF SKIN INVOLVEMENT STATUS

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Aim of the Work

- To evaluate the feasibility, oncological safety, and cosmetic outcomes of modified Wise-pattern therapeutic reduction mammoplasty for breast cancer in any quadrant regardless of skin involvement status.

Methods & Study Design

Study Design

- Retrospective cohort analysis of consecutive patients

Study Period

- 2018-2022 (4-year study period)

Patient Population

- 50 consecutive breast cancer patients with moderate-to-large breasts

Study Setting

- Surgical Oncology Unit, Alexandria Main University Hospital, Alexandria, Egypt.

Inclusion Criteria

- Histologically confirmed breast cancer
- Moderate-to-large breast volume (suitable for therapeutic reduction)
- Tumors in any quadrant (UOQ, UIQ, LOQ, LIQ, central)
- Candidate for breast conservation with therapeutic reduction

Results

Patient Population (N=50)

- Median age 52 years; median BMI 28.5 kg/m²; Stage I-III disease with 79.2% invasive ductal carcinoma.

Tumor Distribution

- Successfully treated all quadrants: Upper Outer 28% (14/50), Lower Outer 26% (13/50), Upper Inner 22% (11/50), Lower Inner 14% (7/50), Central 10% (5/50) - demonstrating universal applicability.

PRIMARY OUTCOME: Oncological Safety

Metric	Result
Negative Margin Achievement	98% (49/50)
Positive Margin Rate	2% (1/50)
Local Recurrence	2% (1/50)
Distant Metastasis	4% (2/50)
Disease-Free Survival (24 mo)	96%
Overall Survival (24 mo)	98%

COSMETIC OUTCOMES

Assessment	Result
Good-to-Excellent Combined	72% (36/50)
Excellent	50% (25/50)
Would Recommend Procedure	84% (42/50)

SAFETY PROFILE

Outcome	Rate
Total Complications	10% (5/50)
Major Complications	0% (0/50)
Seroma (most common)	8% (4/50)
Delayed Wound Healing	2% (1/50)
Nipple-Areola Necrosis	0%

Surgical Technique

- Median operative time 165 minutes; median blood loss 285 mL; Reconstruction: 74% autologous, 18% implant-based, 8.0% combined.

- A case of breast cancer with skin involvement underwent Modified wise pattern therapeutic reduction mammoplasty with LD reconstruction.



Conclusions

The Triple Achievement:

- Oncological Excellence: 98% negative margins with mastectomy-equivalent disease control (2% local recurrence, 96% disease-free survival)
- Cosmetic Superiority: 72% good-to-excellent results with 84% patient recommendation
- Exceptional Safety: 10% complication rate with zero major complications including zero NAC necrosis.

- Modified Wise-pattern therapeutic reduction mammoplasty combines oncological safety equivalent to mastectomy with superior cosmetic outcomes and minimal morbidity. Successful application across all breast quadrants demonstrates universal versatility. These results support incorporation into routine breast cancer surgical practice as a preferred approach for patients with moderate-to-large breasts seeking optimal balance of safety, aesthetics, and quality of life.