



SKIN-REDUCING MASTECTOMY AND IMMEDIATE RECONSTRUCTION WITH LATISSIMUS DORSI FLAP: A COMBINATION TO ADJUST THE POCKET SIZE FOR THE FLAP



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Background & Aim

Large, ptotic breasts with multifocal or multicentric breast cancer present significant reconstructive challenges. This prospective study evaluates the feasibility, safety, and aesthetic outcomes of skin-reducing mastectomy using the Wise-pattern technique combined with immediate latissimus dorsi flap reconstruction

Materials And Methods

Study Design:

Prospective cohort study

Study Period:

January 2020 to March 2022

Study Site:

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

Patient Population:

- Total patients: 60 female patients
- Inclusion criteria: Multifocal or multicentric breast cancer indicated for mastectomy
- Age range: 27–60 years (median 48 years)
- BMI: Mean \pm SD = 28.5 ± 4.3 kg/m²

Surgical Technique:

- Skin-reducing mastectomy using Wise-pattern incision
- Immediate breast reconstruction with latissimus dorsi flap
- Dermal flap sutured to LD skin for smooth contour and lower pole support
- Sentinel lymph node biopsy or axillary dissection based on clinical staging
- Follow-up: Median 11 months (range 6–22 months)

Results

Operative Details (n=60)

Parameter	Value
Unilateral Mastectomy	42 (70.0%)
Contralateral Symetrization	18 (30.0%)
Median Operative Time (min)	180 (135–240)
Median Blood Loss (mL)	350 (200–650)
LD Flap Reconstruction (100%)	60 (100%)
Median Hospital Stay (days)	3 (2–5)

Aesthetic Outcomes (n=60)

Outcome	n (%)
Overall Assessment:	
Excellent	42 (70.0%)
Good	16 (26.7%)
Fair	2 (3.3%)
Aesthetic Satisfaction Rate	58 (96.7%)
Very Satisfied	48 (80.0%)
Satisfied	10 (16.7%)
Neutral	2 (3.3%)

Postoperative Complications (n=60)

Complication	n (%)
Seroma (managed by aspiration)	15 (25.0%)
Sensory Changes	8 (13.3%)
Infection (superficial)	1 (1.7%)
Threatened Wound (requiring revision)	1 (1.7%)
Animation Deformity (requiring neurectomy)	1 (1.7%)
Partial or Total Flap Loss	0 (0%)

Oncologic Safety & Follow-up (n=60)

Outcome	Value
Recurrence (Median FU: 11 months)	
Locoregional Recurrence & Distant Metastasis	0 (0%)
Disease-Free Survival at 12 mo	59 (98.3%)
Treatment Delays	
Chemotherapy Delay >2 weeks	1 (1.7%)

A Skin reducing mastectomy with LD reconstruction



Conclusions

- **Safe & Feasible:**
Zero flap loss with low major complication rates (3.3%)
- **Excellent Aesthetics:**
96.7% overall success, 80% patient very satisfied
- **Oncologically Sound:**
No recurrence, 98.3% disease-free at 12 months
- **Minimal Delays:**
Only 1.7% required chemotherapy delay
- **Cost-Effective:**
Eliminates implants and staged reconstruction
- **Natural Contour:**
Dermal-LD suturing provides optimal breast shape and lower pole support

Clinical Significance

- **Skin-reducing mastectomy with immediate LD flap reconstruction** provides a good alternative to implant-based reconstruction in patients with large, ptotic breasts, optimizing both **oncologic safety** and **aesthetic excellence** while serving as a **cost-effective solution** with high patient satisfaction.
- **Recommended as primary reconstructive option** for appropriate candidates with multifocal/multicentric breast cancer and large breasts requiring mastectomy.