INNOVATIVE TECHNIQUES TO MINIMIZE SCARRING IN BREAST SURGERY

10 YEARS EXPERIENCE FROM DURBAN BREAST UNIT

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CONSPICUOUS SCARRING

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RECONSTRUCTION OF **NAC** with **IMAP** FLAP (” **NIPPLE NIRVANA** ”)

STANDARD NON-SKIN SPARING MASTECTOMY

„ SMILE " MASTECTOMY

„ SMILE " MASTECTOMY

„ SMILE " MASTECTOMY

TOTAL NUMBER OF PATIENTS : **151**

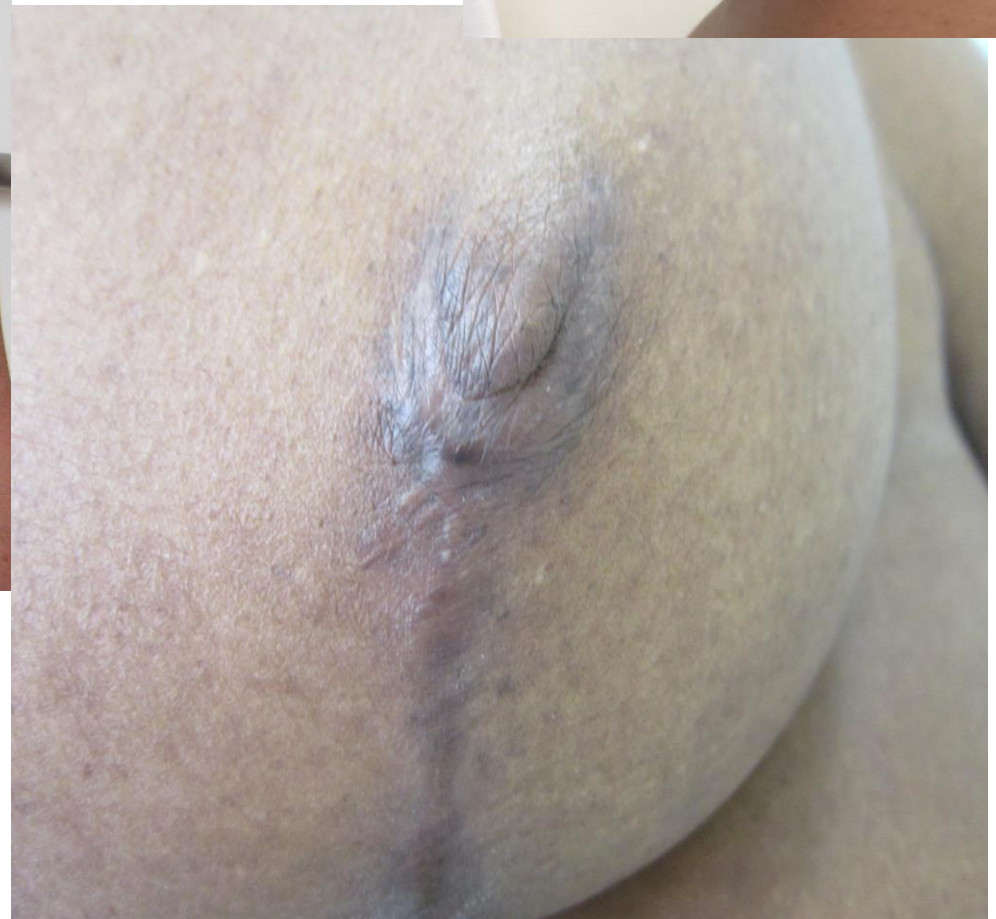
TOTAL NUMBER OF BREASTS : **167**

Excluded - Standard Pattern Mastectomy Patients.

„ SMILE " MASTECTOMY

- **DEGREE OF DIFFICULTY** : Slightly more difficult .
- **TIME** : Not extended
- **COMPLICATIONS**: Not increased
- **COMPARISON TO STANDARD METHOD**: Requires more effort in the transitional area (IMF / Axilla junction) Offers superior starting point for future reconstruction .
- **PATIENT SATISFACTION** : Very high.

„WISE PATTERN”
THERAPEUTIC MAMMOPLASTY



NO VERTICAL SCAR THERAPEUTIC MAMMOPLASTY

Breast Surgery

Breast Reduction Scars: A Prospective Survey of Patient Preferences

Aesthetic Surgery Journal
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SAGE

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Abstract

Background: Studies have shown that scarring is a primary reason for patient dissatisfaction with reduction mammaplasty.
Objectives: The authors prospectively evaluated patient preferences for the 3 most common breast reduction scar patterns: horizontal, vertical, and Wise.
Methods: Sixty-six patients were recruited for the study before receiving their reduction mammaplasty consultation. Each patient was shown line drawings and postoperative photographs of the 3 breast reduction techniques and scored the scars on a modified 10-point Likert scale (1 = unacceptable; 10 = acceptable). The survey responses had no impact on the patients' medical care. A nonparametric Friedman test was used to compare the mean scores, and univariate generalized linear regression analysis was performed to adjust for confounding factors. Post hoc analysis was performed using the Bonferroni method. Significance was set at $P < .001$.
Results: Sixty patients completed the study. The mean preference ranking was significantly higher for the horizontal scar pattern versus vertical and Wise ($P < .001$). The mean score difference between the horizontal and Wise patterns was 2.982. The mean difference between the horizontal and vertical patterns was 2.27. There was no significant difference in preference between the vertical and Wise patterns. Linear regression analysis showed that age,

NO VERTICAL SCAR THERAPEUTIC MAMMOPLASTY

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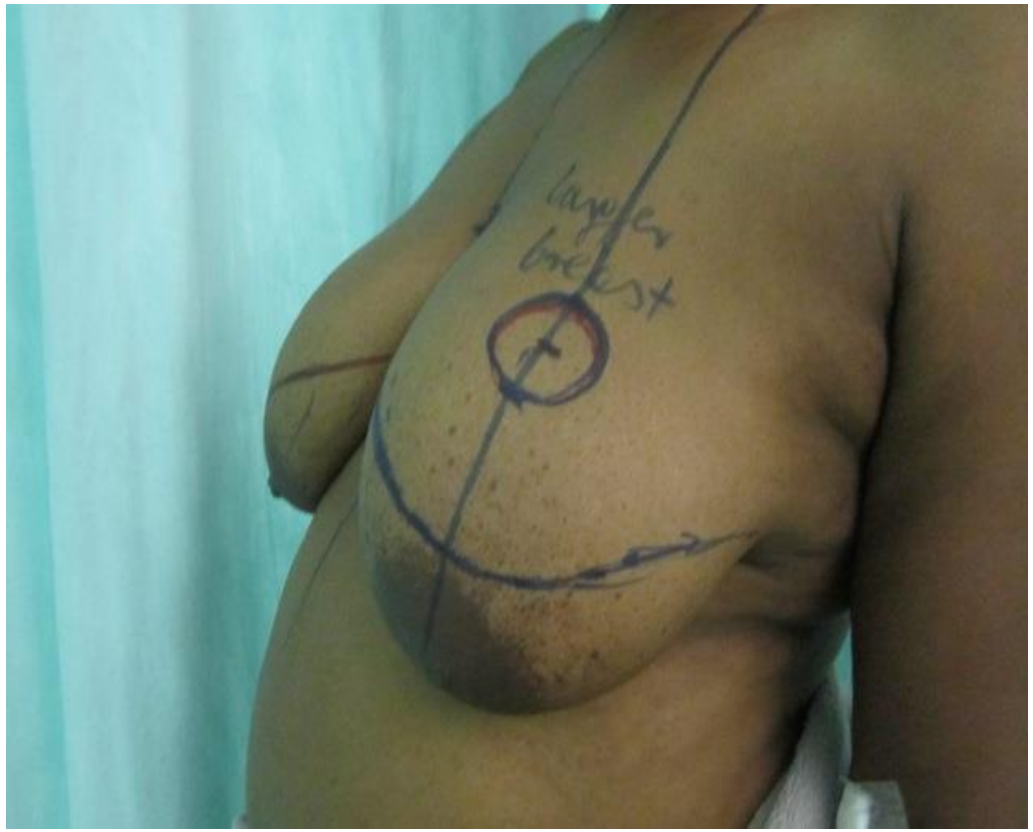

NO VERTICAL SCAR THERAPEUTIC MAMMOPLASTY

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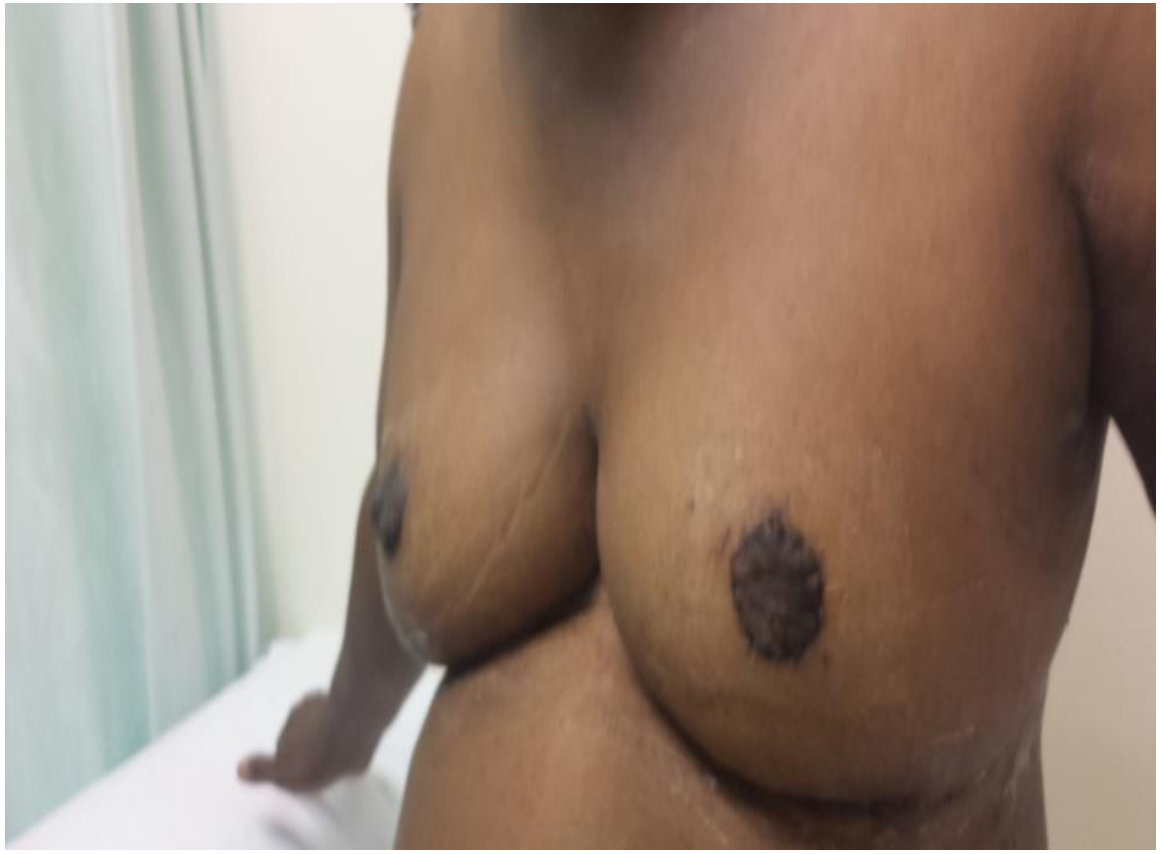

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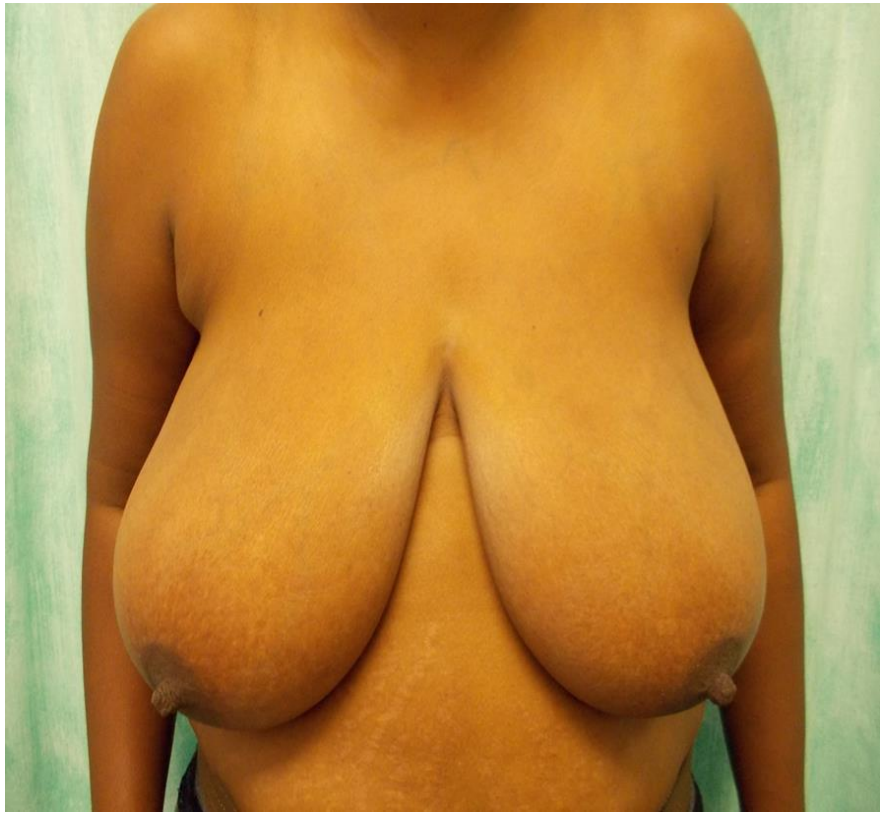


NO VERTICAL SCAR THERAPEUTIC MAMMOPLASTY

NO VERTICAL SCAR THERAPEUTIC MAMMOPLASTY

TOTAL NUMBER OF PATIENTS : **294**

TOTAL NUMBER OF BREASTS: **561**

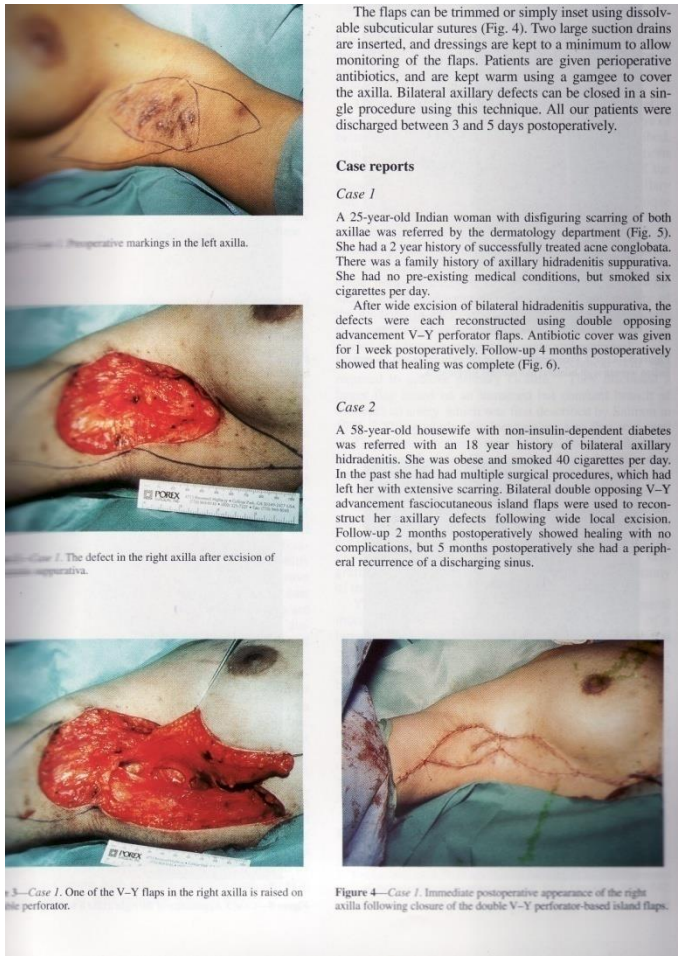
Excluded: Patients with tumours in zone I.

NO VERTICAL SCAR THERAPEUTIC MAMMOPLASTY

- **DEGREE OF DIFFICULTY :** Slightly more difficult
- **TIME :** Not increased . (Average 2,5 hrs for bilateral procedure)
- **COMPLICATIONS :** fewer - no „triangles of sorrow” problems .
- **COMPARISON TO STANDARD METHOD:** No visible scars on AP view.
- **PATIENT SATISFACTION :** High to very high.

TAIL OF SPENCE TUMOUR DEFECT CLOSURE

TAIL OF SPENCE TUMOUR DEFECT CLOSURE



preoperative markings in the left axilla.

Case 1. The defect in the right axilla after excision of suppurativa.

3—*Case 1*. One of the V–Y flaps in the right axilla is raised on perforator.

Figure 4—*Case 1*. Immediate postoperative appearance of the right axilla following closure of the double V–Y perforator-based island flaps.

The flaps can be trimmed or simply inset using dissolvable subcuticular sutures (Fig. 4). Two large suction drains are inserted, and dressings are kept to a minimum to allow monitoring of the flaps. Patients are given perioperative antibiotics, and are kept warm using a gamgee to cover the axilla. Bilateral axillary defects can be closed in a single procedure using this technique. All our patients were discharged between 3 and 5 days postoperatively.

Case reports

Case 1

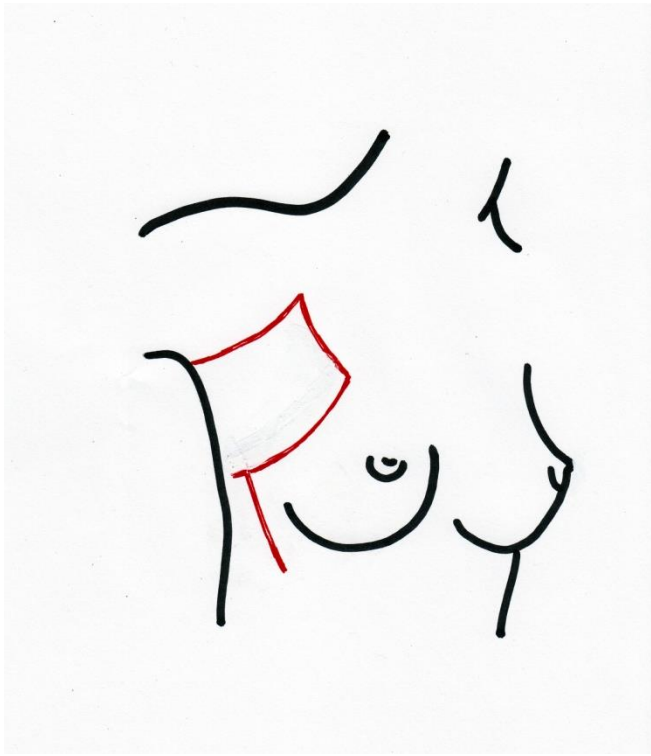
A 25-year-old Indian woman with disfiguring scarring of both axillae was referred by the dermatology department (Fig. 5). She had a 2 year history of successfully treated acne conglobata. There was a family history of axillary hidradenitis suppurativa. She had no pre-existing medical conditions, but smoked six cigarettes per day.

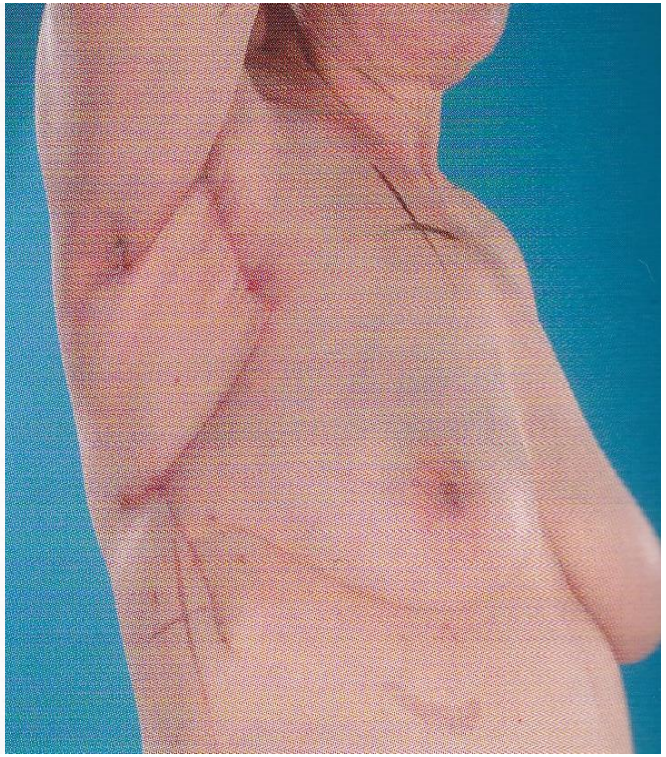
After wide excision of bilateral hidradenitis suppurativa, the defects were each reconstructed using double opposing advancement V–Y perforator flaps. Antibiotic cover was given for 1 week postoperatively. Follow-up 4 months postoperatively showed that healing was complete (Fig. 6).

Case 2

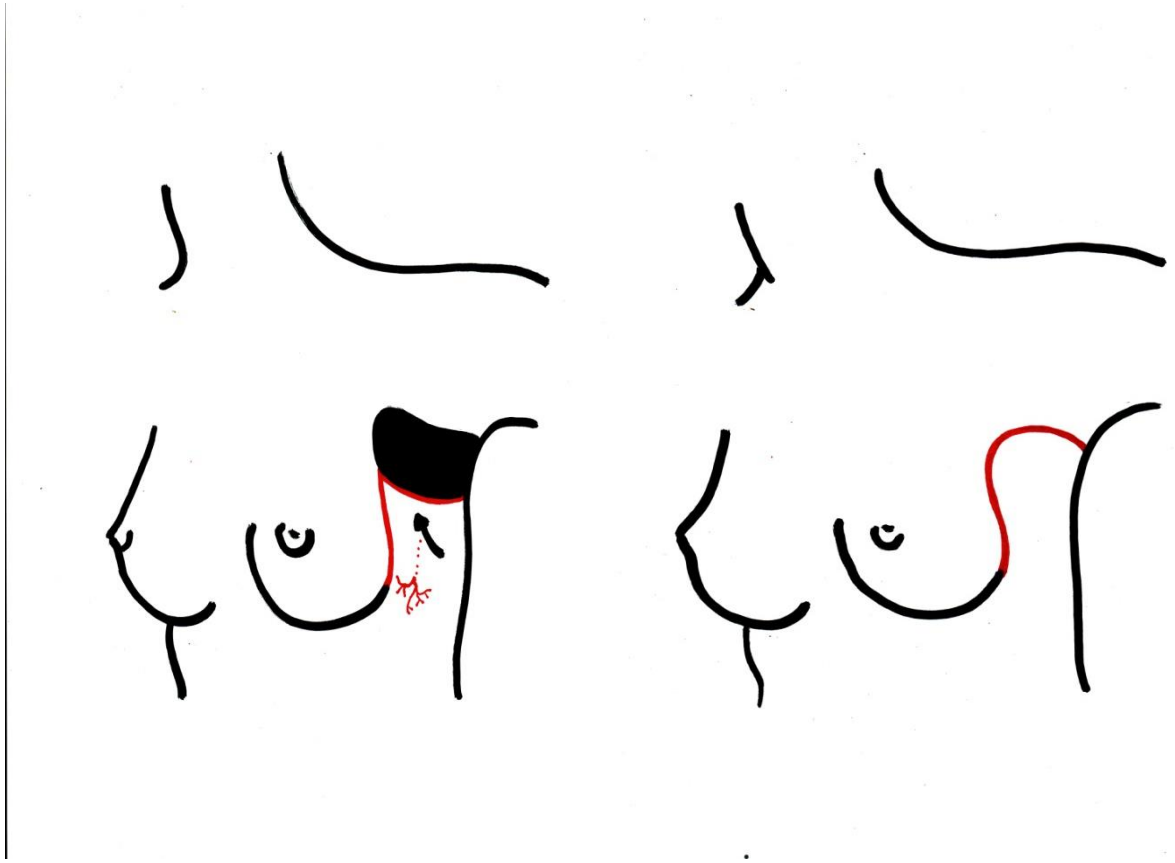
A 58-year-old housewife with non-insulin-dependent diabetes was referred with an 18 year history of bilateral axillary hidradenitis. She was obese and smoked 40 cigarettes per day. In the past she had had multiple surgical procedures, which had left her with extensive scarring. Bilateral double opposing V–Y advancement fasciocutaneous island flaps were used to reconstruct her axillary defects following wide local excision. Follow-up 2 months postoperatively showed healing with no complications, but 5 months postoperatively she had a peripheral recurrence of a discharging sinus.

TAIL OF SPENCE TUMOUR DEFECT CLOSURE





TAIL of SPENCE TUMOUR NEW DESIGN ADVANCEMENT FLAP



TAIL of SPENCE TUMOUR NEW DESIGN ADVANCEMENT FLAP

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TAIL of SPENCE TUMOUR NEW DESIGN ADVANCEMENT FLAP

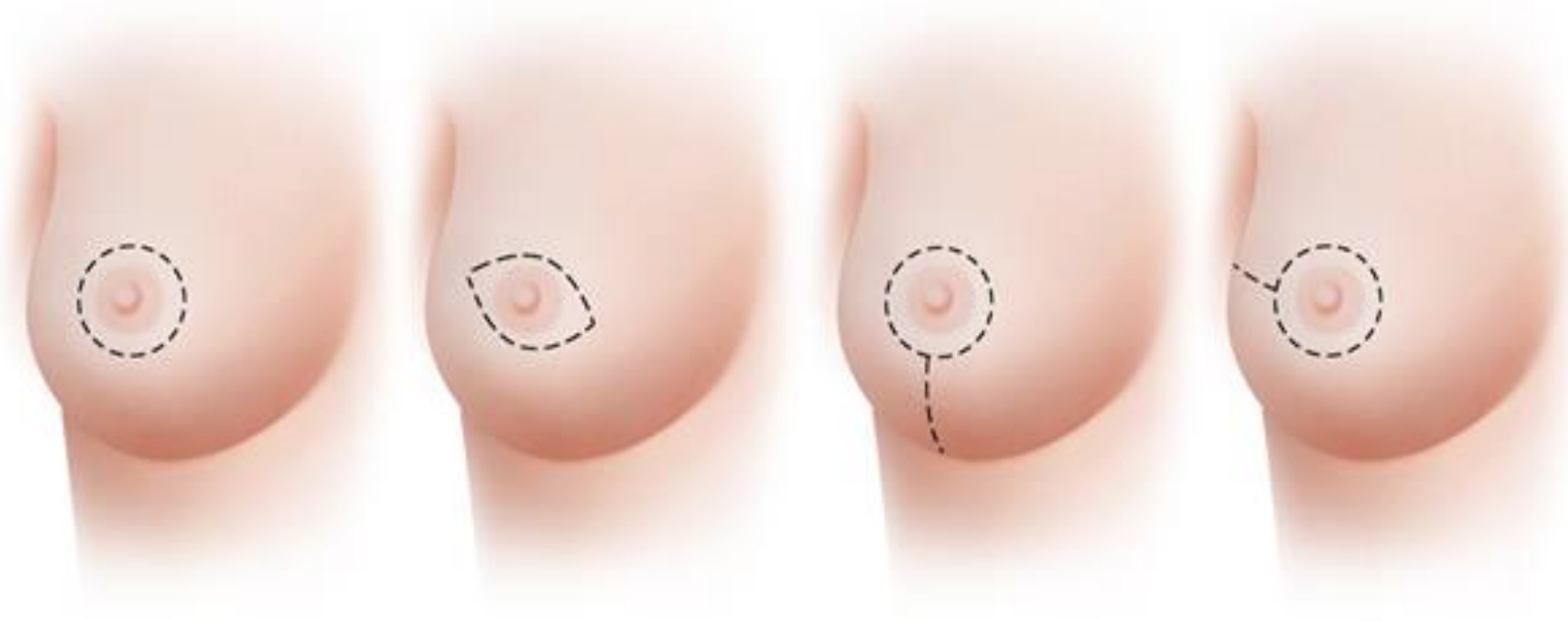
TOTAL NUMBER OF PATIENTS / BREASTS : **19**

TAIL of SPENCE TUMOUR NEW DESIGN ADVANCEMENT FLAP

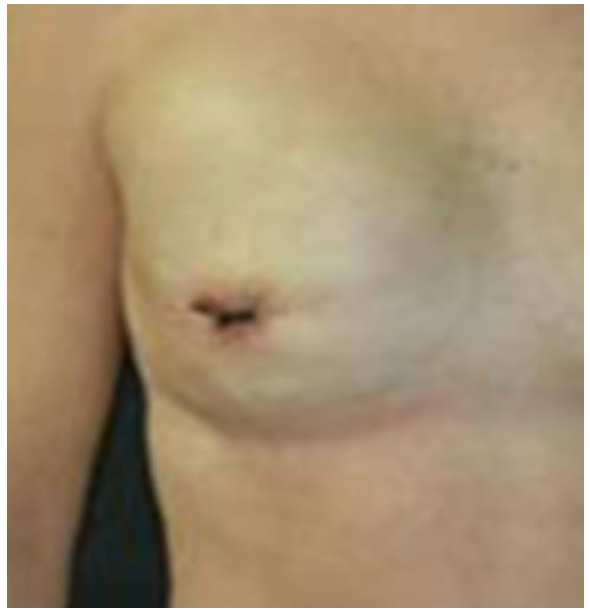
- **DEGREE OF DIFFICULTY :** not difficult at all
- **TIME** : short procedure
- **COMPLICATIONS:** minimal
- **COMPARISON TO STANDARD METHODS:** Well concealed Scar
- **PATIENT SATISFACTION :** High to Very High.

SKIN-SPARING (NAC sacrificing) MASTECTOMY

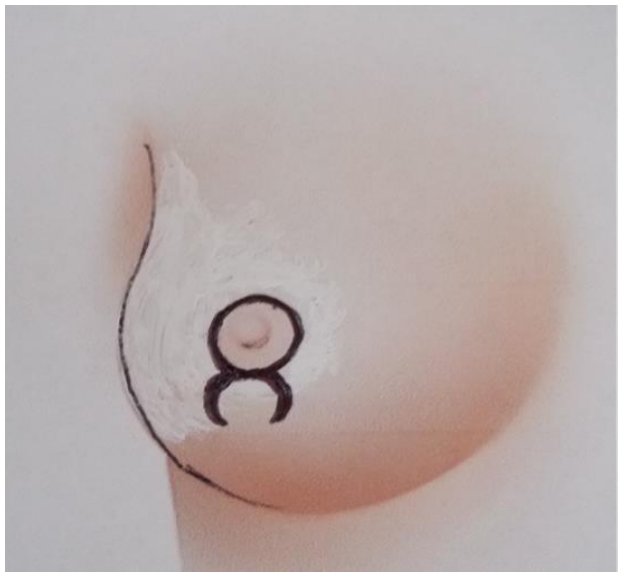
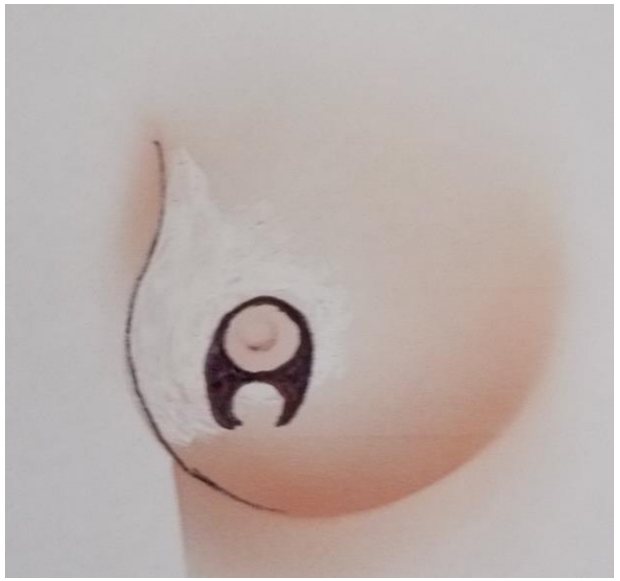
STANDARD SSM INCISIONS

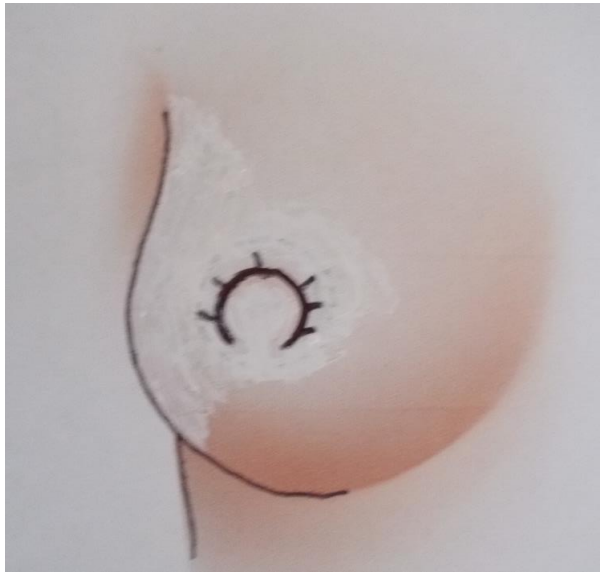


STANDARD SSM INCISIONS



„ DOUBLE MOON ” SKIN-SPARING MASTECTOMY



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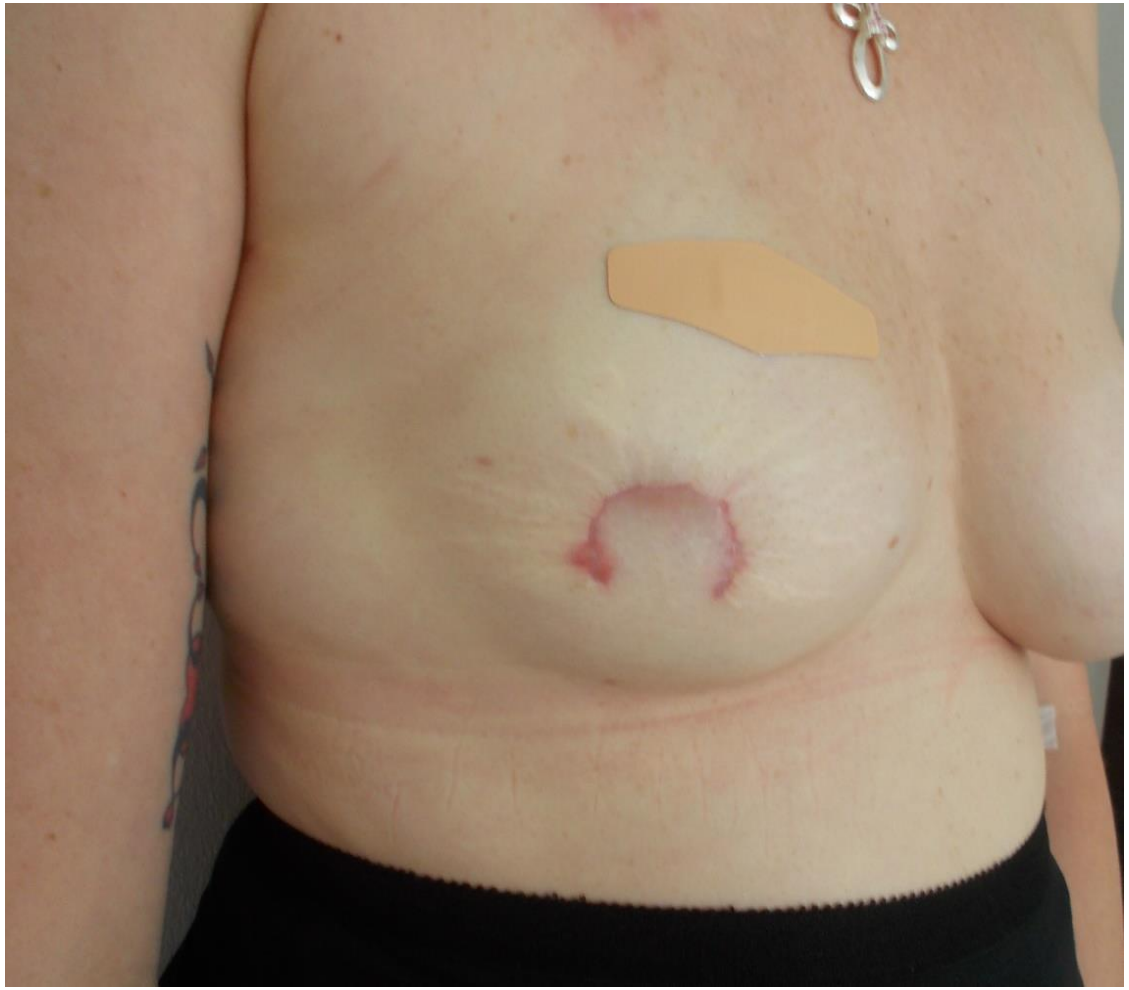
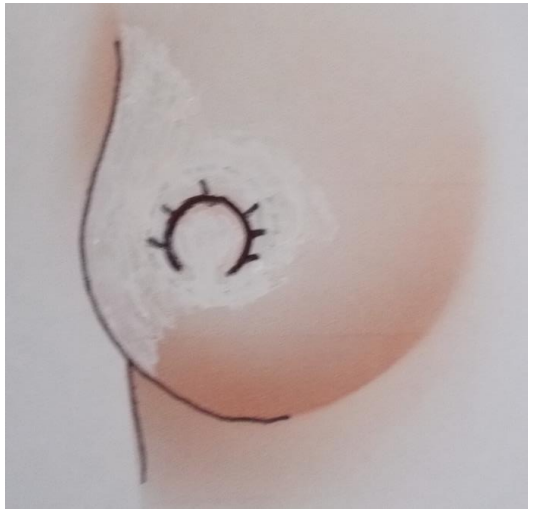


STANDARD

DOUBLE MOON



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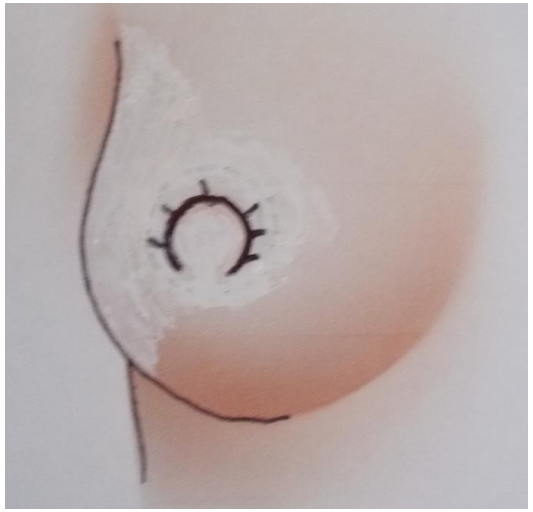

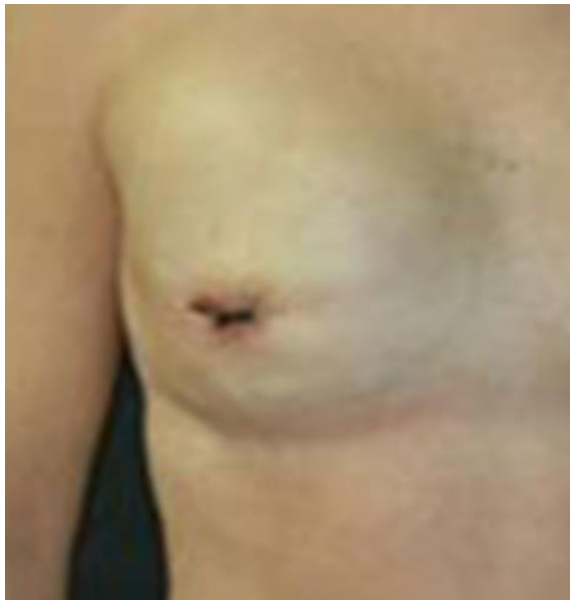

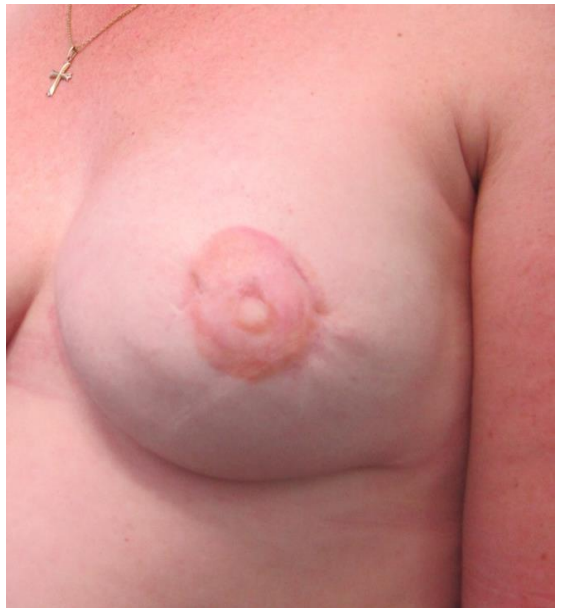

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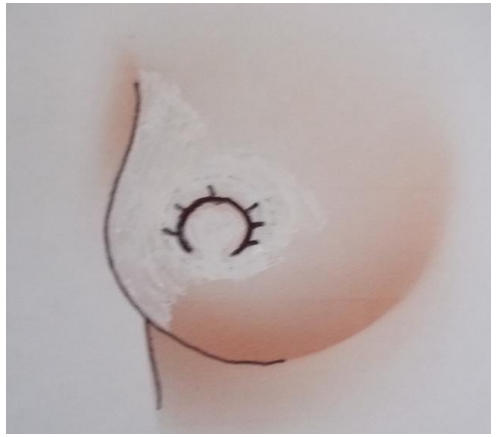

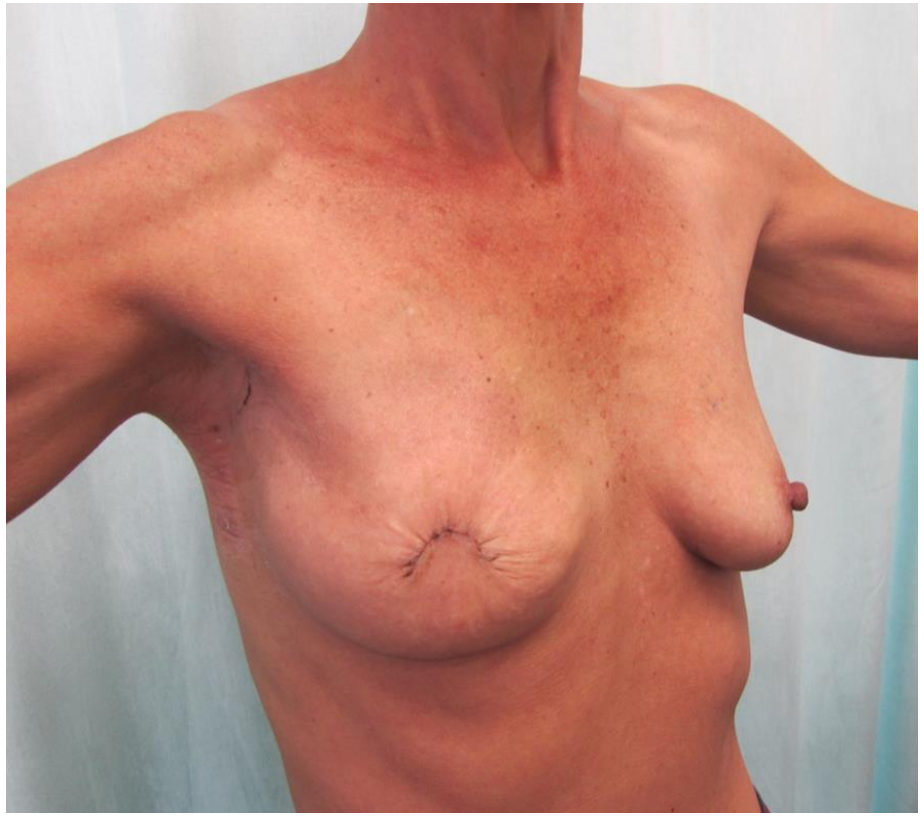

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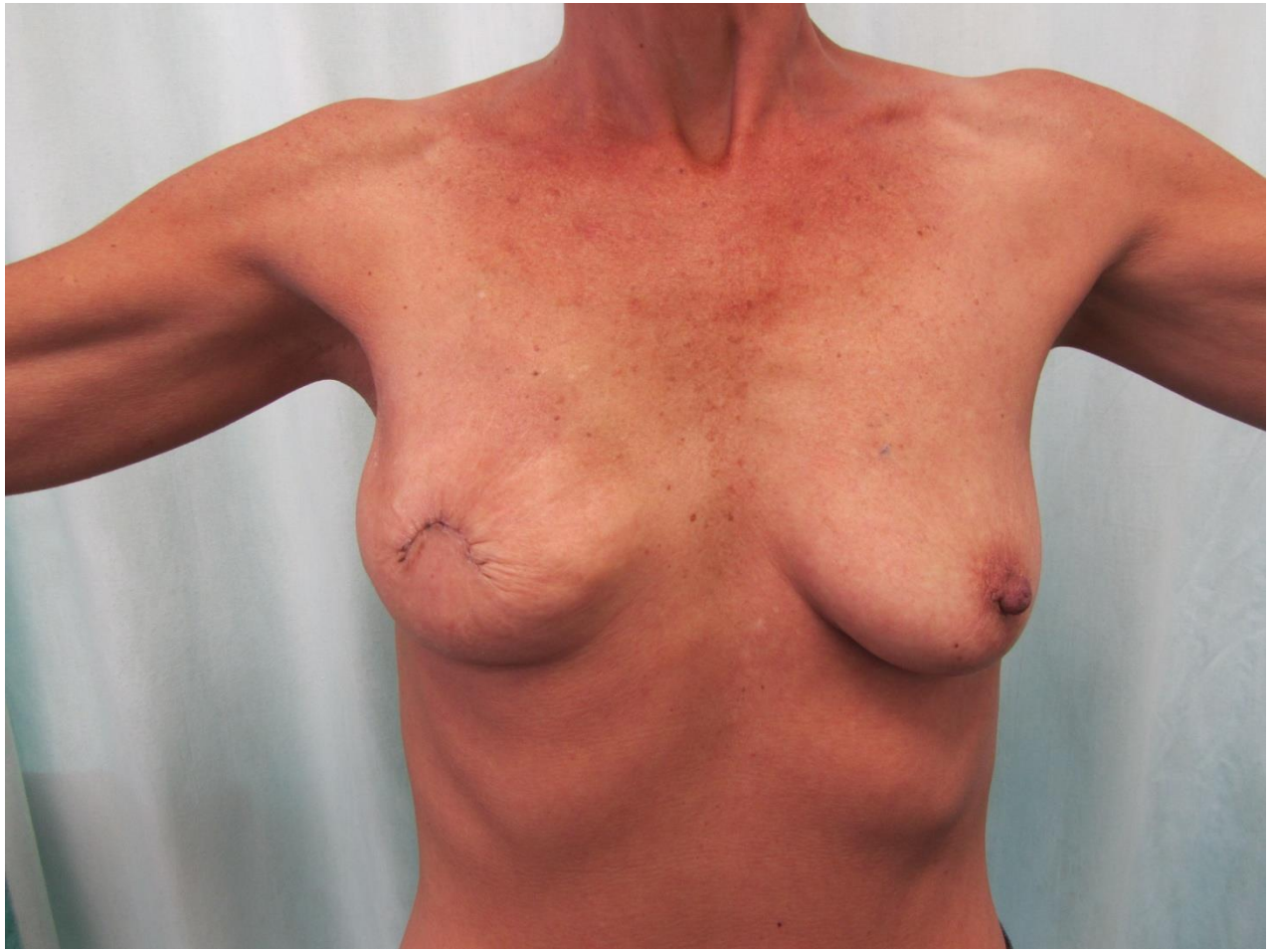

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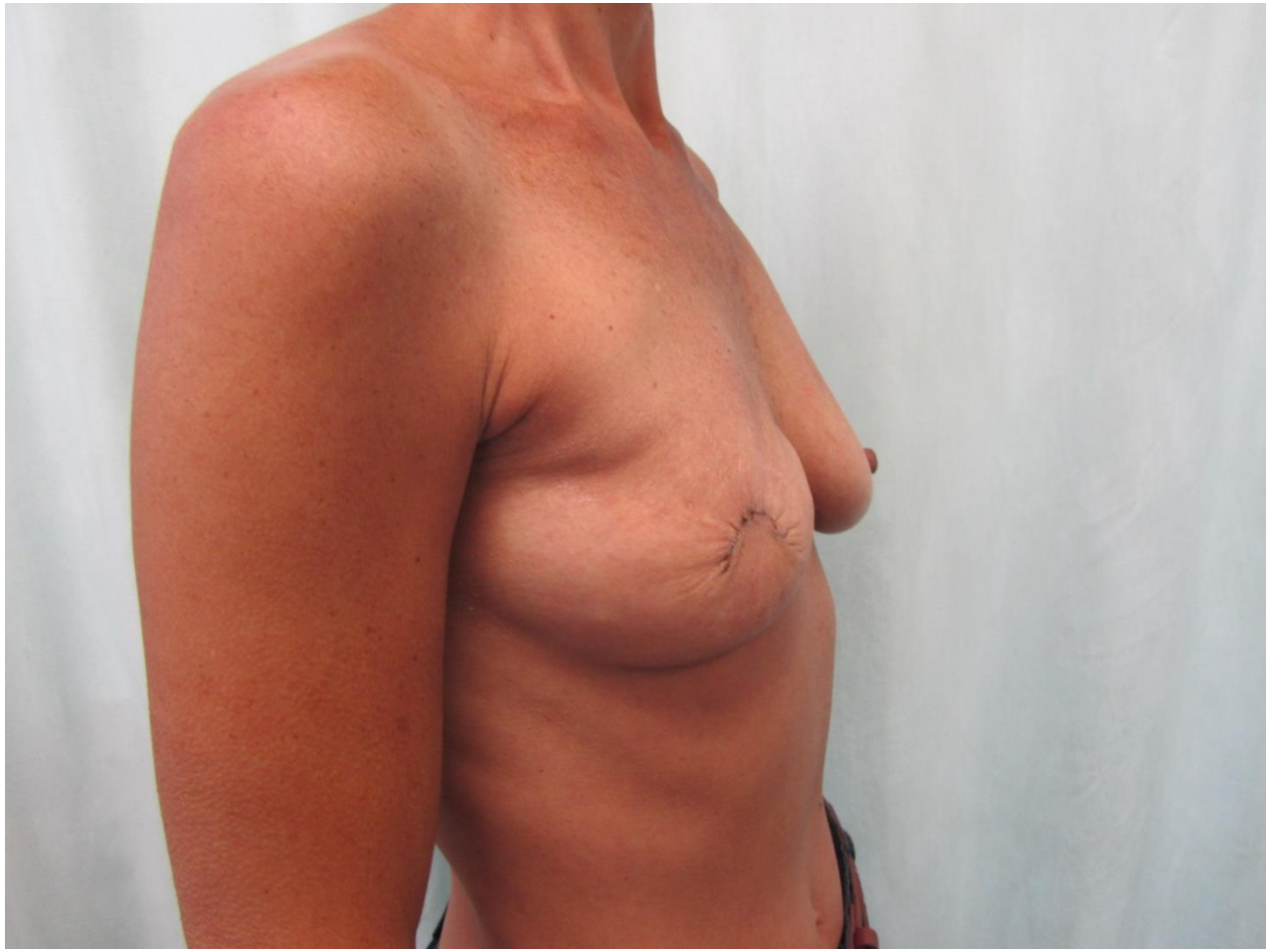

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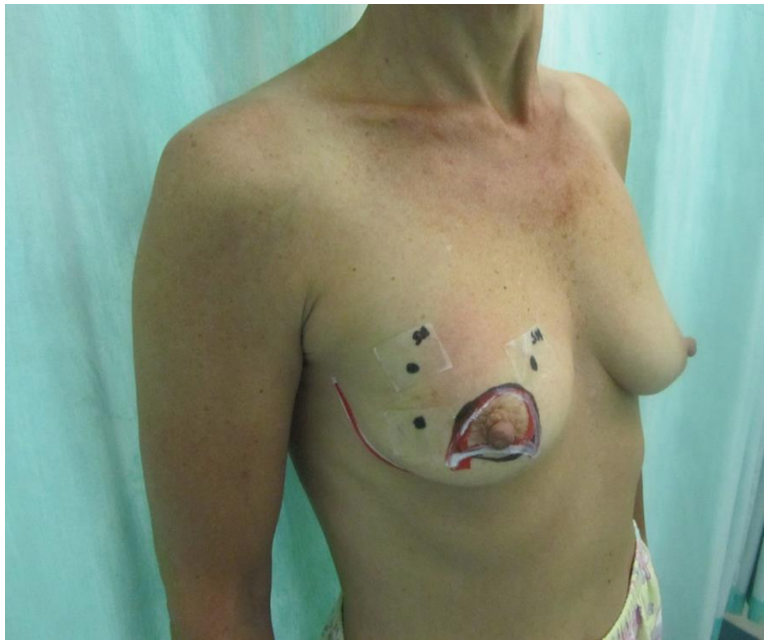

„ DOUBLE MOON ” SKIN-SPARING MASTECTOMY

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„ DOUBLE MOON ” SKIN-SPARING MASTECTOMY

TOTAL NUMBER OF PATIENTS : **27**

TOTAL NUMBER OF BREASTS: **33**

Excluded: Patients suitable for Reduction Pattern SSM

Patients suitable for NAC-Sparing

„ DOUBLE MOON ” SKIN-SPARING MASTECTOMY

- **DEGREE OF DIFFICULTY :** Slightly more difficult
- **TIME :** Slightly shorter than standard
- **COMPLICATIONS:** Not increased
- **COMPARISON TO STANDARD METHOD:** No visible / unnatural scars once the reconstruction completed.
- **PATIENT SATISFACTION :** Very high

NIPPLE RECONSTRUCTION: SKATE FLAP

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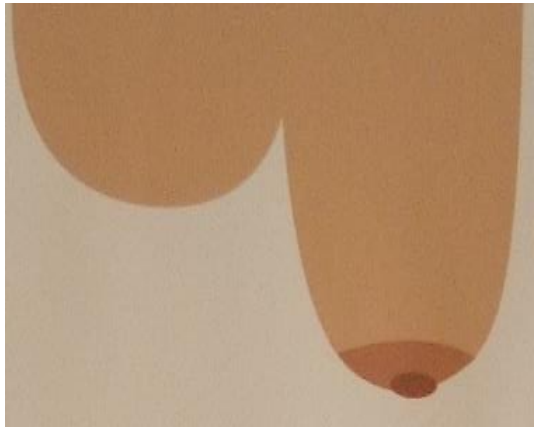
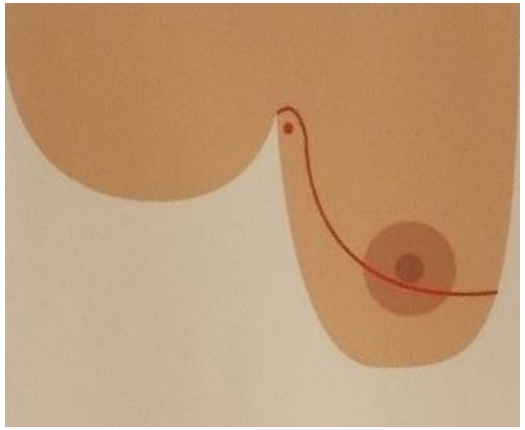
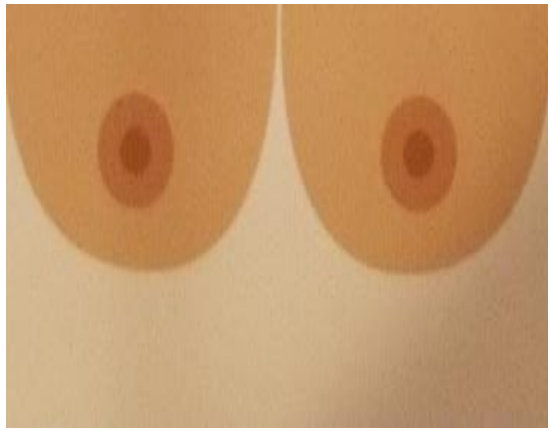
Breast Cancer patients with concomitant Macromastia usually undergo **Skin-sparing Mastectomy in a Reduction Pattern.**

“NIPPLE NIRVANA” RECONSTRUCTION OF THE N.A.C.



“NIPPLE NIRVANA” RECONSTRUCTION OF THE N.A.C.

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TOTAL NUMBER OF PATIENTS / BREASTS : 11

Excluded: Patients not suitable for Reduction Pattern SSM

“NIPPLE NIRVANA” RECONSTRUCTION OF THE N.A.C.

- **DEGREE OF DIFFICULTY :** Average
- **TIME :** fairly short
- **COMPLICATIONS**: acceptable
- **COMPARISON TO STANDARD METHODS :** Realistically appearing, sensate NAC possible .Well concealed scars. Synmastia possible ,easily correctable.
- **PATIENT SATISFACTION :** High to Very High .

CONCLUSIONS:

THESE TECHNIQUES:

- ARE RELATIVELY EASY
- DO NOT RESULT IN INCREASE OF OPERATIVE TIME OR RATE OF COMPLICATIONS
- APPEAR TO BE APPRECIATED BY THE PATIENTS

- COULD BE CONSIDERED ESPECIALLY IN PATIENTS AT HIGH RISK FOR HYPERTROPHIC SCARRING

THANK YOU