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Correspondence and Communications

Refinements to the Yin-Yang breast reduction technique after 163 consecutive cases

Dear Sir,

Introduction

The Yin-Yang technique as originally described by the authors, introduced an innovative method of glandular resection, remodeling, and skin redraping.¹

Characteristics of the previously described Yin-Yang technique are: (1) vertical skin pattern, (2) supero-medial pedicle (SMP) for the nipple, (3) glandular resection pattern: an S-shape on the right breast and the opposite S-shape on the left breast, and (4) a laterally based inferior pole (LBIP) dermo-glandular flap. The two flaps are sutured with a rotation advancement movement to each other and at the parasternal line to reconstitute the mammary pillars, narrow the mammary base and achieve good projection.

The original Yin-Yang technique showed good immediate postoperative results. However, long term outcomes showed that lower pole stability was not always, especially in medium and large breast hypertrophies. To avoid these uncontrollable lower pole changes, we added a Wise pattern to the originally described technique.

Methods

We performed the Yin-Yang breast reduction technique on 163 patients between 2002 and 2016. We have evaluated retrospective data from 6, 12 and 18 months post-operatively. To compare the two techniques and their outcomes, we measured the position of the inframammary fold (IMF), stretching of the vertical limbs and the mammary base width over an 18 month period. Surgical times of the two techniques were also recorded.

Surgical technique

1. Markings for the “modified” Yin-Yang breast reduction procedure are performed with the patient in a standing position (Video 1).

2. The Wise pattern is incised and the LBIP flap and the nipple SMP are sculpted by dissection through the gland until the pectoral fascia, preserving its vascular supply. During dissection, the pectoral fascia and the mammary septum are respected to protect the sensitivity and vascular supply to the nipple.
3. Glandular resection is performed in an S-shape pattern on the right breast and exact opposite S-shape on the left breast, including the axillary rolls through the same incision access.
4. The SMP and the LBIP flaps are inset with opposite spiral movements, forming the two components of the Yin-Yang symbol. The nipple is transposed to the new position with a 45 degree movement and the two breast pillars are sutured together with a spiral advancement. The LBIP flap is progressively advanced and rotated towards the parasternal line and sutured to the new inframammary fold which will be repositioned higher. The LBIP dermoglandular flap is anchored medially to the pectoral fascia on the parasternal line at the level of the nipple and then sutured with 2-0 polydioxanone (PDS) sutures to the breast pillars and the IMF, acting as a support bra for the lower pole (Figure 1).
5. The final closure is achieved joining the Wise pattern cardinal points together (Figure 2). No tension is present on the skin edges
6. A drain and a lower pole compressive dressing are used postoperatively.

Results

Seventy-nine cases were operated with the original technique described in 2011.¹ Since 2013 we have used the modified Yin-Yang technique on 84 patients, aiming to improve outcomes. At 18 months post-operatively, the modified Yin-Yang technique resulted in a mean decrease in mammary base width of 4.73 cm (standard deviation 1.43 cm) and a mean improvement in breast projection of 3.44 cm (standard deviation 1.85 cm). Patients operated on with the “modified” Yin-Yang technique experienced greater stability of the lower pole over time when compared to the “original” technique. We have found that the modified technique allows for more control of the lower pole over time in both medium and large breast hypertrophies. The mean stretching of the vertical limbs at 18 months post-operatively has been found to be 5 cm with the “original” technique and 2 cm with the “modified” technique. Mean surgical time was 3 h and 45 min for the “original” technique and 2 h and 50 min for the “modified” technique. We did not notice any

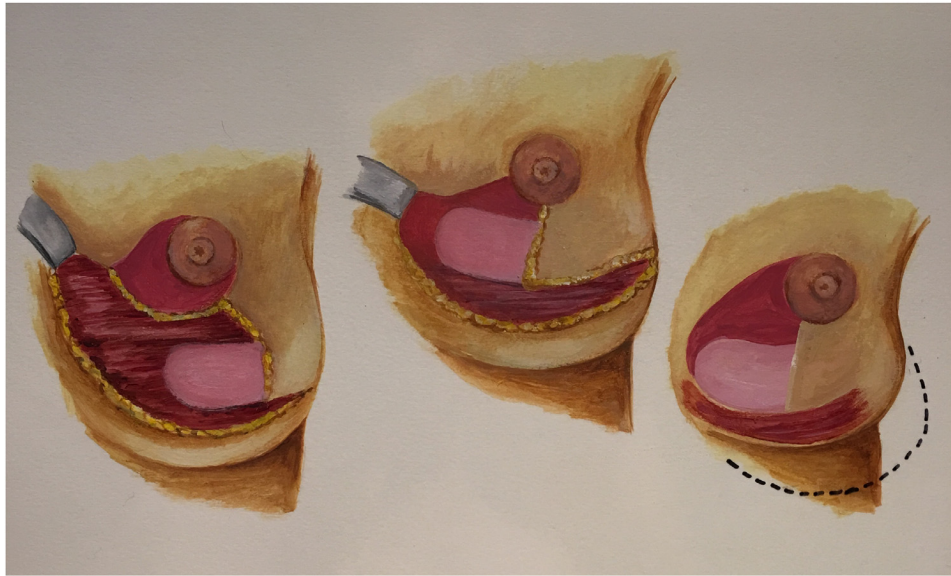


Figure 1 Two flaps are inset with opposite spiral movements, the nipple is transposed to the new position, the LBIP flap is advanced and rotated towards the parasternal line and sutured to the new inframammary fold and the LBIP dermoglandular flap is anchored medially to the pectoral fascia on the parasternal line at the level of the nipple.



Figure 2 Comparison of pre-operative and post-operative breast shape.

difference in the quality of scars or healing time. The number of required revisions was lower for the modified Yin-Yang technique. Using the previous technique, five out of 79

patients required revisions. Using the modified technique, only two patients required revisions in our sample of 84 patients. There were no noted complications, loss of nipple sensation, nipple seroma or partial/complete nipple loss.

Discussion

The modifications to the Yin-Yang technique have been found to provide long lasting and reliable results over time. This technique is also reproducible and not time consuming. The morphometric changes over time of the breasts operated with the “original” Yin-Yang technique showed a progressive lengthening of the vertical limbs with lower pole prolapse. By applying the Wise pattern, we noticed that the technique became more reproducible and feasible to new surgeons willing to try it. The surgical time was significantly improved as well. The morphometric changes over time of the “modified” Yin-Yang technique showed more stability of the lower pole in terms of length of the vertical limbs of the scars and the IMF position.

Conclusions

The modified Yin-Yang technique has shown to have better outcomes for stability of the lower pole, breast shape over time and surgical operative time. The Wise pattern allows a shorter vertical scar and avoids tension on the nipple.

Conflicts of interest

The authors have no conflicts of interests to disclose.

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Supplementary materials

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Reference

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