Inframammary Fold Elevation and External Synmastia Repair: Morgan—Metcalf Method

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"Raising the IMF: it's the hardest thing in breast surgery."

Peter Cheski, MD

67.1 Introduction

After several hundred cases using the transumbilical approach to breast augmentation, the author found that overdissection of the cleavage area and sometimes the inframammary crease led to an occasional complication of low inframammary fold or synmastia. Taping these areas with foam tape secured with tincture of benzoin or other tape adherent under a supportive bra sometimes yielded good results, but other times it did not. Of additional help was an inframammary crease garment invented by Metcalf and perfected in 2006 by Design Veronique[™] [1]. Although the Veronique[™] garment is truly a significant improvement on anything we have had before, and it can sometimes correct a problematic dissection if the patient is compliant (wearing it for 1-3 weeks), it does not work every time, and sometimes it will "ride up" to make an inframammary crease that is too high.

Opening the breast and suturing a mature capsule from the inside is the time-honored approach to this problem. However, the following method works well and avoids an additional scar load on a breast for the right candidate. As with most surgeries, the patient's ability to heal properly and thus produce a durable result is clearly related to her nutritional and health status. This is particularly important when trying to ensure a smooth, round contour around a foreign body, the implant.

67.2 Synmastia

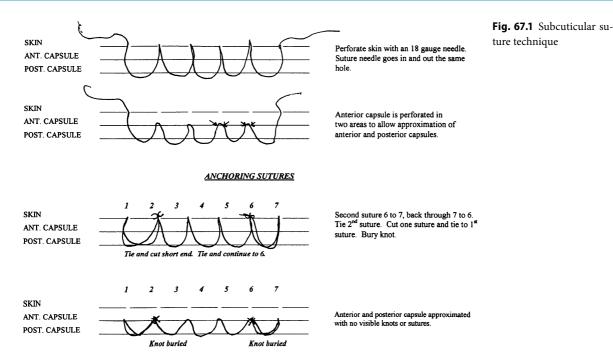
Synmastia is often related to inadequate lateral breast pocket dissection, which puts pressure on the medial

aspect of the implant. The admonition to be conservative with the lateral dissection of any breast implant pocket is well taken, for obvious reasons: the importance of avoiding manipulation of the 4th intercostal nerve, and the ease with which overdissection is often, unfortunately, accomplished. The best policy is to dissect only what is needed for implant fit— no more and no less. Great cleavage, which is a desirable feature of breast implants, is always a trade-off between the rate of synmastia and how many of a surgeon's cases have too much space between the implants centrally. The ideal is to choose the implant diameter that allows a finger's width between the breasts yet shows implant centering side to side under the nipple-areola complex. Using only the (less expensive) regular-profile implants is not a good approach, for the surgeon often cannot meet the above requirements and still satisfy the patient's volume/ cup size desires. For example, for a size 34–36 chest, the most appropriate implant is a medium-profile implant, unless unusually large size and projection are desired, in which case the high-profile implant may be best.

67.3 Technique

The surgeon should always obtain consent for incision and open surgery in case the implant is accidentally punctured or if other complications necessitate repair from the inside.

Prep and drape the patient in sterile fashion. Mark the new contour of the breast carefully. Using number 1 Prolene or nylon on a curved needle, and with the assistant holding the implant away from the area being sutured, perform a running submerged suture (Fig. 67.1). The suture can either be run both ways and the ends tied to each other, or it can be tied at each end. Pull it tight to submerge the suture points where entry is affected. There is little danger of invading the thorax because as the curved needle is passed through the deep tissues, and possibly even the periosteum, it is kept parallel to



the chest wall. In the technique originally described by Metcalf [2], an 18-gauge needle is used to allow the knot and puncture points to submerge. It is useful to slightly dilate the puncture wounds with iris scissors. As the suture is passed with the large curved needle, the overlying skin can be manipulated so the holes are only 1–1.5 cm apart.

The lateral/superior dissection must have previously been adequate, or this technique will not work long term because of the extra tension at the suture line, causing breakdown of the repair.

Results have been durable, and skin changes have resolved nicely (Figs. 67.2, 67.3).



Fig. 67.2 a Patient with overdissected medial aspect of the right breast. **b** *1* Correction with the continuous suture technique. *2* Sutures not visible



Fig. 67.2 (continued) **b** 1 Correction with the continuous suture technique. 2 Sutures not visible. **c** Three weeks following the procedure. The result was excellent, although irregularities



of the inframammary crease were seen; these had almost disappeared a few months later



Fig. 67.3 a Overdissected medial aspect of the left breast. b *1* Using number 1 Prolene or nylon on a curved needle, and with the assistant holding the implant away from the area be-

ing sutured, a running submerged suture is performed. 2 Suture site. ${\bf c}~1$ Results 3 weeks after the procedure. 2 Suture site



Fig. 67.3 *(continued)* **c** *1* Results 3 weeks after the procedure. *2* Suture site

References

- Design Veronique home page. http://www.designveronique.com. Accessed 29 May 2008
- 2. Metcalf D: Breast implant complications. Presented at the 18th Annual Meeting of the American Society of Cosmetic Breast Surgery, Newport Beach, CA, 8 June 2002