



Tips for Success

*With the Contour Profile®
6200 Tissue Expander*

Provided by **Dr. Mark Migliori**, FACS Edina, MN

1. Expander Selection

The first step in the process is selection of the appropriate expander. The volume dimensions of the expander are only of secondary importance. The base width or footprint of the expander is most critical. Pre-operative breast width measurements will help determine which expander will be most effective. I have found that generally, the expander that is the size just smaller than the actual breast width is the best.

2. Pocket Dissection

Accurate pocket dissection is necessary for optimal use of this expander and will lead to a satisfactory shape during the expansion and will prevent rotation of the expander in the pocket. The pocket dissection must accommodate this expander. One can draw out the dimensions of the expander on the chest wall to visualize the pocket.

Immediate Reconstruction: In an immediate reconstruction setting, the pocket is dissected under the pectoralis major muscle medially to the sternal edge and superiorly to a sufficient extent to accommodate the expander height. The superior dissection is quite easy but over dissection in this area may allow for expander malposition, as the expander is wider than it is tall. At the meridian of the breast, the inferior dissection raises the pectoralis major fibers in continuity with the anterior rectus fascia down to the level of the top of the 6th rib. This portion of the dissection may often be compromised by disruption of the fascia during the mastectomy. One might choose to intentionally leave the expander at the level of the 5th rib or interspace if the fascial coverage is suspect. The lateral portion of the pocket is dissected under the lateral half of the pectoralis minor muscle, which is raised in continuity with the lower slips of the serratus muscle. The lower lateral area is the most frequently under-dissected portion of the pocket. While the meridian of the pocket should rest no lower than the top of the 6th rib, the infero-lateral portion of the pocket may be at the 7th rib or interspace due to the upward curvature of the ribs. If this portion of the pocket is under dissected, the implant will not have room to be positioned appropriately in the horizontal plane. As a result, the implant will turn slightly.

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Delayed Reconstruction: In a delayed reconstruction setting, the pocket dimensions are similar but the dissection may be simplified if the soft tissue coverage is durable and pliable. For instance, the pocket should still be dissected down to the top to the sixth rib but one might choose to divide the fascial plane between the pectoralis muscle and the anterior rectus fascia leaving the anterior rectus fascia against the chest wall. Also, the serratus and pectoralis minor dissections can be avoided, allowing the expander to be subcutaneous infero-laterally. Doing this assumes that the lateral skin flaps are of sufficient thickness and durability to withstand the expansion. However, the respect for matching pocket size and expander dimension should be maintained.

3. Expander Placement

With the pocket dissected, the expander is removed from its packaging, sterile saline is injected into the expander using a closed filling system and the residual air is removed. Typically, 60-120 ccs are placed into the expander at this time. The expander is then slipped into the submuscular pocket in the appropriate orientation. Care is taken to ensure that the back panel lies flat in the pocket and in the appropriate horizontal plane. The muscle pocket is closed allowing for complete coverage of the expander. The expander can now be filled so that there is slight tension within the pocket. Depending on the patient's tissue characteristics, this is typically anywhere from 60 to 240 cc's.

Using the orientation tab: To aid in the maintenance of this orientation during the early post-operative period, a soft, absorbable suture can be placed at the inferior pole of the pocket at the meridian and placed through the reinforced orientation tab at the base of the implant. *Ensure that the suture is placed through the suture tab prior to placing the expander in the pocket as this will minimize the chance of accidental puncture. This suture can be placed through the rib periosteum or through the external intercostals muscle. It is not a strength stitch and should only be secured after the expander is appropriately positioned.

4. Drains

Rotation of an expander may be promoted by the presence of peri-expander fluid in the early post-operative period. Drains may help in this regard. The majority of the fluid will accumulate in the subcutaneous mastectomy space and a drain should be placed superficial to the pectoralis muscle. It may also be helpful to place a small drain in the submuscular space until the first expansion. Once expansion begins, the pressure of the expander should hold it in the appropriate position.

5. Post-surgical Garments

Pressure garments or taping should be avoided in the immediate post-mastectomy patient to avoid compromising the skin flap vascularity. In a delayed tissue expander reconstruction, however, these dressing techniques may be safer and may prove helpful to avoid peri-expander fluid accumulation and malposition.

Appropriate timing of first expansion is a matter of personal preference. Most patients will require a couple weeks of recovery before they are ready for their first expansion. Weekly or bi-weekly expansions of 60-100ccs are usually well tolerated.