



Transabdominoplasty – Breast Augmentation (TABA): a Series of 150 Consecutive Patients with Implications for Capsular Contracture

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Introduction

Transabdominoplasty-breast augmentation as an approach to combination tummy tuck and breast implants has been described previously in the literature by Brinker and Jack [1] as well as by Wallach [2, 3] and others [4, 5]. The senior author, in this series, performed 150 consecutive cases of subpectoral breast augmentation with both saline and cohesive silicone gel implants and abdominoplasty through a single lower transverse abdominoplasty incision with a mean follow up of 2-1/2 years. The outcomes in all cases were excellent requiring no further surgical intervention in the breast implant pocket. Of significant note is that the instance of capsular contracture in the entire series was zero out of 150 cases. Additionally, the complications associated with the tummy tuck were similar to that of abdominoplasty alone. The implications for capsular contracture cannot be overstated.

Tummy tucks and breast implants are a common combination in women who seek improvement of their body contours after child bearing. This also can be seen as a result of significant weight loss with changes in body habitus. The combination of transabdominoplasty-breast augmentation has previously been described by Brinker, Jack, and Wallach [1, 2, 3], but a significant series in the literature has not been published with any long-term follow-up. The senior author on this paper has performed 150 consecutive transabdominoplasty-breast augmentations over a 10-year period with a lower transverse abdominal incision. The patients who are candidates for both procedures include those who exhibit no ptosis, pseudo ptosis, or minimal ptosis.

Background

The technique of Transabdominoplasty-breast augmentation has appeared in the plastic surgery literature over the past decades, with little or no follow-up with regard to complications. This sizable series looks at the procedure with evaluation of safety and associated complications. Both saline and silicone cohesive gel round implants were used.

Patients and Methods

Over the course of approximately 10 years, 150 consecutive patients underwent transabdominoplasty-breast augmentation with both

saline and new cohesive silicone implants (all smooth) placed in the subpectoral plane. The clinical record of each patient was examined for major and minor complications for the purposes of this study. All patients who underwent the procedure had no ptosis, pseudo ptosis, or minimal grade 1 ptosis to meet the criteria for inclusion into the study.

The operative procedures were all performed under general anesthesia in an outpatient surgical setting. The average operative time was approximately two hours. Many of the patients additionally underwent liposuction of their lateral flanks as part of the abdominoplasty.

The patients were all marked preoperatively in the standing position, marking the lower transverse incision as well as the inframammary folds. There was no need to modify the inframammary fold in any of the patients selected. The patients who underwent liposuction, were all tumesced with standard Klein tumescent fluid. No injection was made into the breast implant pocket prior to incision. The patients all underwent a lower transverse incision as well as periumbilical incision. The skin and fat was elevated off of the rectus sheaths up to the level of the rib cage bilaterally as well as to the xiphoid. At this point, 3 to 4 cm tunnels were made until the fibers of the pectoralis muscles could be seen. This was done with the aid of a fiber-optic retractor. Once the pectoral fibers were noted, incisions were made using the Bovie electrocautery device into the subpectoral plane overlying a rib. The pockets were then dissected bluntly, first with finger dissection and in some cases with the use of a male urethral dilator. The pockets were irrigated with antibiotic solution. It is common practice for the senior author to use a combination of betadine, Ancef, and bacitracin solution absent any antibiotic allergies. Hemostasis was always noted to be complete using the fiber optic retractor. Both saline and silicone implants were used and were split approximately evenly amongst the patient cohort in this study. The early patients in the study underwent closure of the tunnel with 0 Vicryl suture. In the last 70 patients of this study, the pockets were left open to drain and no sutures were used. In the cases without sutures, there was no distortion seen of the inframammary fold postop, as the tunnels were kept under two inches and healed uneventfully. The patients were placed in the upright position and inspected for symmetry. The patients then were replaced into the supine position to allow for traditional closure of the ventral diastasis or plication of the rectus sheaths above and below the umbilicus. No drains were used in any case in the breast implant pockets. One or two Jackson-Pratt drains were used in the abdominoplasty incision. The implants were selected preoperatively based upon the dimensions of the patient's breasts and preoperative cup size and desire for cup size addition. Sizers were not used in any of the cases in this study. The plication of

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the rectus sheath was done with either 0 Mersilene suture or 0 PDS suture. The patient's excess skin and fat were trimmed. In the cases in which liposuction was performed, this was done prior to incision of the abdominoplasty and the patient was re-prepped after the liposuction was completed. The wounds were closed over JP drains typically using 0-0 Vicryl, 3-0 Vicryl, and running intracuticular Monocryl suture. No quilting sutures were used to tack the abdominoplasty flaps to the muscle layer in any cases. The umbilici were inset using 4-0 Vicryl suture and 4-0 Monocryl suture. The patients were dressed in compression garments as well as a standard surgical bra for three weeks postoperatively. The traditional postoperative antibiotics were prescribed for the patient for a duration of ten days along with postoperative narcotics. All patients were completed as an outpatient.

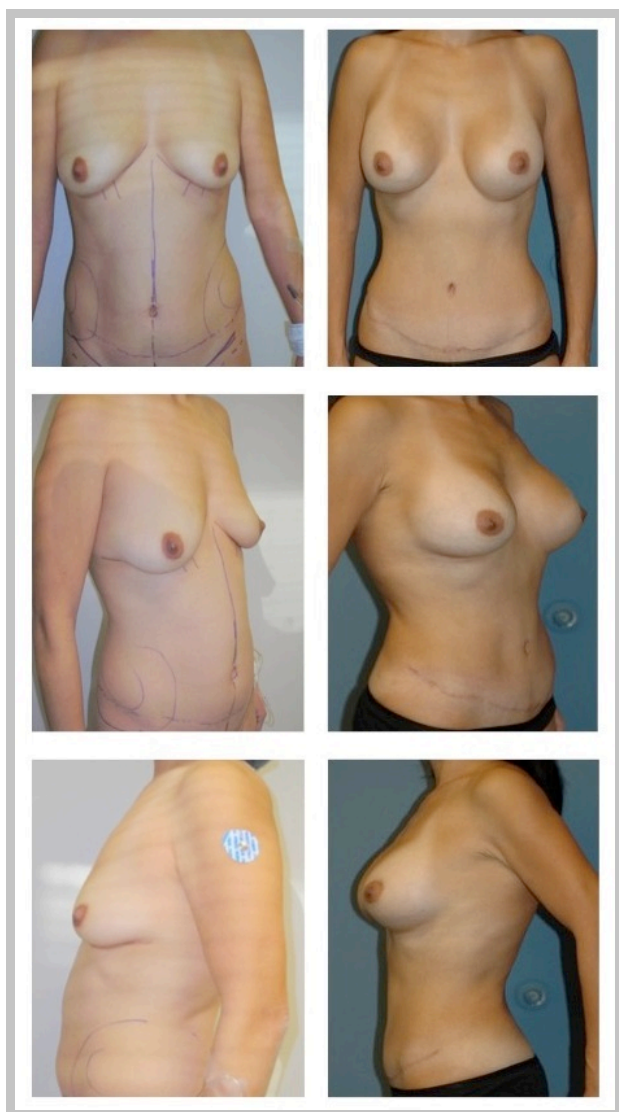


Figure 1: (Left) Preoperative Views, (Right) 6-month Postoperative Views

Results

Between 2004 and 2014, 150 patients underwent transabdominoplasty-breast augmentation with mean follow up of 2-1/2 years. Of note in the results, there were no cases of capsular contracture seen in



Figure 1: (Left) Preoperative Views, (Right) 6-month Postoperative Views

any of the patients, as defined as any patient with a Baker II capsule or higher. This is compared to the senior author's personal experience with traditional breast augmentations through periareolar, inframammary fold, and transaxillary approaches with rates of capsular contracture between 6 and 7%. There were no hematomas noted and no infected implants that required any subsequent treatments. There were no transfusion requirements as result of the procedure. There was one patient who developed a DVT postoperatively which was treated with six months of anticoagulation therapy. There were two incidents of minor wound-healing problems at the suprapubic area of closure, which required only minor topical wound care for closure.

Any revision surgeries that were performed were for touch-up liposuction and minor scar revisions of the abdominoplasty wound. No interventions were required for the patient's breast implants. The patient satisfaction rates exceeded typical approaches to breast augmentation. Specifically, patients appreciated the lack of any incision on or near the breast, hiding most vestiges of implant surgery. The senior author routinely received calls from patients' primary care doctors, asking where the incisions for the implants were, as they were often incredulous that the patients had any surgery performed on the

breast. There was no disparity in the inframammary folds noted as compared to traditional approaches

Discussion

While transabdominoplasty-breast augmentation has been long noted in the literature prior to this series, no significant study has been published looking at the complication rate associated with this combined procedure. Of note by the senior author, an excellent outcome for both procedures can be performed with not only no additional morbidity with the combined procedures, but also a marked reduction of capsular contracture graded higher than a Baker I, relative to traditional dual incision approaches [6-10]. The implications for capsular contracture in this study in general are, in the senior author's view, significant, given that the senior author's experience of several thousand breast augmentations in his career, have yielded the classic rate of capsular contracture between 5 and 10% [11-14]. The incidence in such a large series, of no capsular contractures, is of significance. Perhaps it is due to the absolutely minimal exposure of the implants to breast tissue with the transabdominoplasty approach, reducing possible contamination of the implants. Other possibilities include the allowance of the subpectoral pockets to drain into the tummy tuck "pocket", preventing any fluid accumulation around the implants. This certainly would mitigate the role of blood accumulation as a capsulogenic nidus. While it is possible to have a contaminated breast implant as a result of the transabdominoplasty approach yielding biofilms, none were seen in this series of 150.

Conclusion

Transabdominoplasty- breast augmentation remains a safe, viable, and likely preferential approach to a combined procedure with no additional morbidity. Additionally, this approach likely reduces capsular contracture rates [15]. The learning curve for this procedure is quite straightforward and it should be considered as an alternative approach to combined procedures in any patient who is in need of both procedures done simultaneously. Given the very high rate of patient satisfaction and improved cosmesis with this approach, this procedure should become a part of any surgeon's armamentarium of procedures.

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