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Reverse Abdominoplasty, a Viable Option for Breast Reconstruction

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Introduction: The reverse abdominoplasty was first described in the 1970’s, and since then, it has been described for reconstruction of thoracic wall defects, upper abdominal wall contouring, and augmentation mammoplasty. It has received little attention in the literature, it can however be a useful method of breast reconstruction in a select group of patients, such as those who are obese. We present a series of 3 patients who underwent post-mastectomy breast reconstruction with the reverse abdominoplasty flap after being found unsuitable for other methods of breast reconstruction.

Methods: Three patients underwent breast reconstruction with reverse abdominoplasty, and complication and Breast-Q data were obtained prospectively.

Patient 1 is a 55-year-old lady with a body mass index (BMI) of 48.30, who underwent 2 stage bilateral breast reconstruction with reverse abdominoplasty and insertion of tissue expanders.

Patient 2 is a 49-year-old lady with a BMI of 38.40, who underwent 2 stage bilateral breast reconstruction with reverse abdominoplasty and insertion of tissue expanders.

Patient 3 is a 36-year-old lady with a BMI of 28.00, who underwent reverse abdominoplasty to correct a unilateral partial mastectomy defect.

Results: Patients 1 and 3 did not experience any post-operative complications, and Patient 2 experienced minor wound healing problems. All three patients were satisfied with their outcomes, everyone having significant improvements in the Breast-Q scores across various domains.

Conclusion: Although not for everyone, we present a safe and satisfactory option for breast reconstruction, when other usual methods of breast reconstruction are not available, especially in the obese patient group.

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Role of Antibiotic Irrigation in Preventing Capsular Contracture and Other Complication After Breast Augmentation: A Systematic Review and Meta-analysis

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Introduction: In vitro and in vivo studies have described a number of different antibiotic solutions for irrigation of the pocket in implant-based breast augmentation in order to prevent the formation of biofilm, which is implicated in capsular contracture development1-3. Our objective was to determine if antibiotic irrigation reduced the rate of capsular contracture compared with saline irrigation.

Methods: We systematically searched MEDLINE, EMBASE and CENTRAL from inception to January 2016 by two independent reviewers. We included in vivo studies with the following criteria1 primary breast augmentation
with implants in female 18 years old or more; the use of intraoperative irrigation with antibiotic; and documentation of capsular contracture. Our primary outcome was postoperative rate of severe capsular contracture (Baker III and IV). We assessed the methodologic quality of included studies using validated tools (JADAD and MINORS). Pooled random effects estimates and 95% confidence intervals (CI) for complication and capsular contracture rates were derived. Comparisons were performed for breast augmentation with or without the use of intraoperative antibiotic irrigation using a pooled odds ratio and 95% CI.

RESULTS: The initial search revealed 308 studies. After screening the title and abstract, 293 articles were excluded. A total of 12 studies were included in the review. The most common antibiotics used alone or within mix of solution were gentamicin, and bacitracin. The triple antibiotic solution were used in three studies. In 12 studies, the pooled estimates were 2.5% (95% CI, 1.2 - 4.2%) for capsular contracture, 4.8% (95% CI, 0.9 - 11.6%) for reoperation rate, 1.4% (95% CI, 0.5 - 2.8%) for infection, 2.4% (95% CI, 0.8 - 4.7%) for seroma and 1.5% (95% CI, 1.2 - 2.0%) for hematoma. The fixed effect pooled OR of four comparative observational studies was 0.33 (95% CI: 0.19, 0.57) indicating a protective effect for intraoperative antibiotic irrigation over the saline only control. The methodological quality of the included studies was overall low. There was no attempt to stratify or adjust for potential influential confounding factors.

CONCLUSION: The current evidence favors the instillation of antibiotic irrigation solution in primary breast augmentation. However, this conclusion is hindered by the fact that it is based predominantly on studies that are retrospective with several methodological flaws. This analysis illustrates the need for better designed studies to definitively answer the question.

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Same-Day Discharge for Women Undergoing Implant-Based Breast Reconstruction Using an Enhanced Recovery after Surgery Model Is Safe

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PURPOSE: To compare enhanced recovery after surgery (ERAS) with traditional recovery after surgery (TRAS) for patients undergoing implant-based breast reconstruction.

MATERIALS AND METHODS: A retrospective chart review of two patient groups (ERAS and TRAS) was performed. Data from patients undergoing implant-based breast reconstruction (immediate and delayed) from a single reconstructive surgeon working with three general surgeons was collected from February 2012 - October 2013 for the TRAS group and September 2013–2015 for the ERAS group. The ERAS protocol included day surgery, multi-modal analgesia, and preoperative anti-emetic prophylaxis. The TRAS pathway involved overnight admission, narcotic-based analgesia, and no preoperative anti-emetic. Demographics, operative variables, and complication rates were compared between groups.

RESULTS: Sixty-three ERAS patients and 78 TRAS patients were included in the study. Follow-up was reported for 100% of patients, and included antibiotic use and complications rates up to 30 days post-reconstruction. Length of stay was shorter for ERAS patients compared to TRAS patients (0.31 nights vs. 1.45 nights, p=0.00). No differences were observed between groups in the frequency of preoperative radiation (6% vs. 5%, p=0.70) or immediate reconstruction (97% vs. 89%, p=0.09). The ERAS patients underwent more bilateral mastectomies (83% vs. 55%, p=0.00) and direct-to-implant (vs. expander) reconstructions (65% vs. 24%, p=0.00). Despite the increased risk for the ERAS group due to more implant-based and bilateral reconstructions, there was no significant difference in major complications [repeat surgery, readmission, or IV antibiotics (13% vs. 9%, p=0.48)], minor complications such as seroma or partial tissue necrosis (29% vs. 27%, p=0.83), or