

Air vs Saline: Effect of Tissue Expander Fill Prepectoral Breast Reconstruction Postoperative Complication



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INTRODUCTION: The aim of our study was to determine if tissue expansion fill (air vs saline) affects postoperative complications in the setting of pre-pectoral delayed immediate reconstruction.

METHODS: Crude and multivariable-adjusted logistic regression estimated odds ratios were used to identify predictors of postsurgical complications for 144 breasts (86 patients) who underwent immediate prepectoral breast reconstruction with full anterior coverage with ADM over a 2-year period.

RESULTS: The crude association between air vs saline fill on overall complication suggests a protective effect when the tissue expander is filled with air, OR=0.5 ($p=0.04$) and the suggested protective effect is maintained in the adjusted model OR=0.4 ($p=0.05$). Fewer complications requiring salvage reoperation were observed when tissue expanders were filled with air, OR=0.3 ($p=0.02$). Additionally, there is a suggested protective effect regarding skin flap necrosis if the tissue expander is air-filled, OR=0.7 ($p=0.6$).

CONCLUSION: We demonstrate that air-filled tissue expanders were associated with significantly less postoperative complications after breast reconstruction relative to saline-filled tissue expanders.

Breast Reconstruction and Nipple-Sparing Mastectomy: Technical Modifications and Their Outcomes over Time at an Academic Breast Center



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INTRODUCTION: This study reviews our experience with nipple sparing mastectomy (NSM), identifies technique modifications employed over time, and evaluates reconstructive outcomes of NSM and its modifications.

METHODS: A retrospective review of consecutive patients with NSM and breast reconstruction over an 8-year period was completed.

RESULTS: Fifty-five patients underwent 96 NSMs. Indications included invasive and in situ cancer, atypical ductal hyperplasia, and risk reduction. In the first four years of experience, the most frequently used NSM incision was lateral whereas use of a variety of incision patterns were noted in the second four years. NSM complication rate was 40% and included flap necrosis (34.8%), nipple necrosis (13%). In situ cancer of the nipple was identified

in 13% of patients and close margin in 4.3%, 1 patient had locoregional recurrence. Postoperative NSM complication rate decreased over time. One third of patients had fluorescent angiography (FA) to assess mastectomy skin perfusion prior to reconstruction start. 72% of FA demonstrated poor perfusion and 92% of these patients had reconstruction delayed based on FA results. Immediate reconstruction was performed in over 76% of patients and average Regnault ptosis grade was 1.2. Higher ptosis grade was not associated with increased NSM complication rates. An average of 2.9 procedures were required to achieve reconstruction completion and 89.1% of patients completed reconstruction.

CONCLUSION: Despite NSM complication occurrence, the majority of patients will complete the breast reconstruction process. Delayed breast reconstruction timing in conjunction with NSM does not increase the duration or number of operations needed to achieve reconstruction completion.

Breastfeeding Capability after Benign Breast Surgery



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INTRODUCTION: Many breast surgeons hesitate to operate on adolescents due to the potential impact on future lactation ability. Despite these concerns, there is extremely sparse data regarding the effect of benign breast surgery on breastfeeding capability. This study aims to elucidate the impact of benign breast surgery on breastfeeding and lactation performance.

METHODS: Eligible mothers between the ages of 18 and 45 years and between 6 months and 5 years postpartum were recruited to capture their breastfeeding experiences and prior breast surgery history. All data were self-reported.

RESULTS: A total of 85 participants were included, with a mean age of 33.6 years. Fifteen mothers were previously diagnosed with a breast condition, most commonly breast cysts (6), fibroadenoma (3), and macromastia (2). Sixteen mothers underwent breast surgery: augmentation (5), reduction mammoplasty (4), and biopsy (4). More than 80% of mothers successfully breastfed or bottle-fed breast milk, regardless of history of breast surgery ($p = 0.578$). Most mothers with and without prior breast surgery history reported moderate to extreme difficulty while breastfeeding (40% vs 60%, $p = 0.338$). Breastfeeding satisfaction did not differ significantly by breast surgery status ($p = 0.999$).

CONCLUSION: This study is among the first to suggest that breast surgery does not significantly impact breastfeeding ability. Although more data are necessary to generalize results, our findings suggest that benign breast surgery is safe in young women and should not preclude otherwise healthy young women from enjoying the benefits of breast surgery for fear of impairing future lactation.