An Advantage to Submuscular Breast Augmentation: Implant-Sparing Mastectomy in Breast Cancer Patients with Previous Augmentation

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Abstract

Breast cancer patients who have undergone previous submuscular breast augmentation prior to diagnosis represent a unique subset of breast cancer patients. An emerging option for breast reconstruction in this group is an implant-sparing mastectomy with delayed implant exchange, wherein the original implant is retained in the breast pocket and later exchanged for a larger, permanent implant. Foregoing the use of tissue expanders or immediate implant reconstruction minimizes the risks associated with tissue expanders or mastectomy flap necrosis with use of immediate larger implant reconstruction.¹

A retrospective review of 21 patients who underwent implant-sparing mastectomies with delayed implant exchange, by two surgeons at a single institution between 2006 and 2012 was performed.

The average age at time of implant exchange was 37.5 years with an average of 7.6 years elapsing between initial augmentation and mastectomy. The average time between mastectomy and implant exchange was 6.8 months. The average size of implant at initial augmentation was 378.5cc (range, 210cc-650cc). The size of the permanent implant was roughly the size of the original implant plus the weight removed at mastectomy and averaged 568.6cc (range, 350cc-800cc). The range of increase in size varied from 100cc to up to 470cc.

Two patients had cancer recurrence, one with positive margin of anterior capsule and one with recurrence at the subcutaneous level on mastectomy scar. Both patients required implant removal, radiation and flap coverage. Four patients underwent additional exchanges: two for larger implants, one for smaller, and one exchanged silicone for saline. No other complications were reported.

Implant-sparing mastectomy with delayed exchange offers a viable alternative to immediate implant reconstruction and/or tissue expander placement and their associated morbidities for breast cancer patients with previously placed submuscular implants. The advantages of this technique includes less strenuous recovery, fewer office visits and no requirement for multiple expansions while sparing the patient the stigma associated with mastectomy defect by preserving breast projection while awaiting the final stage of reconstruction.