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Oncoplastic Augmentation Mastopexy: Aesthetic Revisional Surgery in Breast Conserving Therapy

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Abstract : Introduction: Breast conservation therapy remains the mainstay surgical treatment for early breast cancer. Oncoplastic techniques, in conjunction with lumpectomy and adjuvant radiotherapy, have been demonstrated to achieve good aesthetic results without adversely affecting cancer outcomes in the treatment of patients with macromastia or significant ptosis. In our patient population, many women present for breast conservation with pre-existing cosmetic implants or with breast volumes too small for soft tissue, only oncoplastic techniques. Our study evaluated a consecutive series of patients presenting for breast conservation undergoing concomitant oncoplastic-augmentation-mastopexy (OAM) with a contralateral augmentation-mastopexy for symmetry. Methods: OAM surgical technique involves simultaneous lumpectomy with exchange or placement of implants, oncoplastic mastopexy, and concomitant contralateral augmentation mastopexy for symmetry. Patients undergoing lumpectomy for breast conservation as outpatients were identified via retrospective chart review at a high volume private academic affiliated community-based cancer center. Patients with ptosis and either pre-existing breast implants or insufficient breast volume undergoing oncoplastic implant placement (or exchange) and mastopexy were included in the study. Operative details, aesthetic outcomes, and complications were assessed. Results: Over a continuous three-year period, with a two-surgeon cohort, 30 consecutive patients (56 breasts, 4 unilateral procedures) were identified. Patients had an average age of 52.5 years and an average BMI of 27.5, with 40% smokers or former smokers. The average operative time was 2.5 hours, the average implant size removed was 352 cc, and the average implant size placed was 300 cc. All new implants were smooth silicone, with the majority (92%) placed in a retropectoral fashion. 40% of patients received chemotherapy, and 80% of patients received whole breast adjuvant photon radiotherapy with a total radiation dose of either 42.56 or 52.56 Gy. The average and median length of follow-up were both 8.2 months. Of the 24 patients that received radiotherapy, 21% had asymmetry due to capsular contracture. A total of 7 patients (29.2%) underwent revisions for either positive margins (12.5%), capsular contracture (8.3%), implant loss (4.2%), or cosmetic concerns (4.2%). One patient developed a pulmonary embolism in the acute postoperative period and was treated with anticoagulant therapy. Conclusion: Oncoplastic augmentation mastopexy is a safe technique with good aesthetic outcomes and acceptable complication rates for ptotic patients with breast cancer and a paucity of breast volume or pre-existing implants who wish to pursue breast-conserving therapy. The revision rates compare favorably with single-stage cosmetic augmentation procedures as well as other oncoplastic techniques described in the literature. The short-term capsular contracture rates seem lower than the rates in patients undergoing radiation after mastectomy and implant-based reconstruction. Long term capsular contractures and revision rates are too early to know in this cohort.

Keywords : breast conserving therapy, oncoplastic augmentation mastopexy, capsular contracture, breast reconstruction
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