Expanded Algorithm And Updated Experience With Breast Reconstruction Using A Staged Nipple-Sparing Mastectomy Following Mastopexy Or Reduction Mammoplasty In The Large Or Ptotic Breast

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Background:
Staged nipple-sparing mastectomy following mastopexy or reduction mammoplasty was first described in 2011 by Spear et al. to expand the indications for NSM to women with large or ptotic breasts. Since that time, we have revised our treatment algorithm and technique to enhance oncologic safety and improve wound healing complications.

Methods:
An institutional review board-approved retrospective review was undertaken of all patients undergoing staged NSM following mastopexy or reduction mammoplasty at a single institution from July 2011 through July 2016. Management followed an updated treatment protocol to improve surgical and oncologic outcomes.

Results:
Thirty-one patients (57 breasts) were identified who underwent staged NSM. Twenty-six patients (50 breasts) underwent a planned operation, while five patients (7 breasts) were unplanned (previous reduction/mastopexy). Five breasts (8.8%) required reoperation for a complication such as infection or tissue necrosis. Two devices (3.5%), both in the planned, therapeutic cohort, required explantation due to infection. Skin flap necrosis and nipple-areolar complex necrosis were each seen in 2 breasts (3.5%), all within the planned cohort. Infection was seen in four breasts (7.0%) in the planned cohort, while wound healing complications were seen in only two breasts (3.5%), all in the planned prophylactic cohort.

Conclusions:
We offer our updated treatment algorithm for a staged approach to NSM for patients with macromastia or Grade II or III ptosis. Our results build upon previously published reports.
demonstrating the safety and efficacy of this approach for nipple preservation and oncologic management in this patient population.

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