Oncoplastic Neoareolar Reduction Mammoplasty with Nipple Reconstruction: Improving Cosmesis for Central Cancers

Anganela Crown, MD and Janie W. Grumley, MD.
Virginia Mason Medical Center, Department of General, Thoracic and Vascular Surgery, Seattle, Washington.

BACKGROUND: Breast cancer patients with lesions abutting the nipple-areolar complex are frequently advised to undergo mastectomy because of concern for poor cosmetic outcomes associated with central resections. Immediate nipple reconstruction is rarely considered in patients undergoing breast conservation. This study reports our experience with oncoplastic central partial mastectomy with neoareolar reduction mammoplasty with immediate nipple reconstruction.

METHODS: This is a single institution retrospective review of patients with central tumors who underwent central partial mastectomy reconstructed with neoareolar reduction mammoplasty with immediate nipple reconstruction. Patients were offered this procedure regardless of presence of comorbidities or smoking history. Patient demographics, lesion size on imaging and on final pathology, margin width, mastectomy and re-excision rates, and cosmesis were evaluated.

RESULTS: Thirteen patients underwent neoareolar reduction mammoplasty with immediate nipple reconstruction for central cancers between January 24, 2017 and October 05, 2017. Average patient age was 61.8 ± 9.5 years and average BMI was 29.4 ± 5.9 kg/m². Average lesion size was 52.8 ± 47.7 mm on preoperative imaging and 54.7 ± 48.6 mm on final pathology.

Table 1. Patient demographics.

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<th>Demographics</th>
<th>Average patient age 61.8 ± 9.5 years</th>
<th>Average BMI 29.4 ± 5.9 kg/m²</th>
<th>Recent smoking history 5 (38.4%) patients</th>
<th>Diabetic 1 (7.7%) patient</th>
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Table 2. Lesion characteristics.

Lesion Characteristics

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<th>Imaging size</th>
<th>52.8 ± 47.7 mm</th>
<th>Pathology size</th>
<th>54.7 ± 48.6 mm</th>
<th>DCIS present 10 (76.9%) patients</th>
<th>ER positive 9 (69.2%) patients</th>
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CONCLUSION: Neoareolar reduction mammoplasty with nipple reconstruction as a single stage operation can allow for excellent cosmetic outcomes in patients with centrally located tumors. This technique allows patients to avoid mastectomy and to minimize the number of operations required for reconstruction. Presence of extensive DCIS resulted in significant need for re-excision; however, re-excision can be performed without compromising cosmetic outcomes.