DERMOGLANDULAR ROTATION FLAP WITH SUBAXILLARY ADVANCEMENT FLAP AS AN ONCOPLASTIC TECHNIQUE FOR BREAST CANCER

LEE SEOKWON¹, Jung Younglae¹, Bae Youngtae¹

Authors Affiliation:
1. Department of Surgery, Biomedical Research Institute, Pusan National University Hospital, Busan, Republic of Korea

Background: We propose a novel oncoplastic surgical technique, dermoglandular rotation flap with subaxillary advancement flap, as a feasible one-stage operation.

Methods: Breast conserving surgery, incorporating the dermoglandular rotation flap with subaxillary advancement flap, was performed in 49 female patients with breast cancer, between January and December 2015. After a full-thickness fibroglandular resection including the tumor, an inferior- or a superior-based rotation flap was performed according to the location of the defect. The subaxillary flap consisted of skin, dermis and subcutaneous fat tissue and was mobilized from the chest wall musculature. Since subaxillary skin has greater redundancy, it can be easily moved to reach the lateral aspect of the breast. Approximation of the subaxillary flap to the lateral side of rotated dermoglandular flap served to relieve skin tension and avoid displacement of the nipple-areola complex (NAC). Consequently, there was wider dermoglandular tissue rotation and efficient filling of defect without any significant postoperative deformity.

Results: Mean tumor size, on pathology, was 2.1 cm (range, 0.4–6.0). Mean excised breast tissue weight was 78.4 g (range, 28.6–195.0). More than half of the patients (51%) studied had excised breast tissue weighing more than 80 g. None of the included patients had positive surgical margins in final pathologic reports. Most patients answered excellent or good for self-estimated cosmetic outcomes including symmetry of the breast and NAC, breast shape, scarring, and overall satisfaction.

Conclusions: A modified dermoglandular rotation flap technique along with subaxillary advancement flap, is a feasible and effective oncoplastic technique for breast cancers.

Keywords: Breast cancer, oncoplastic surgery, dermoglandular rotation flap, subaxillary advancement flap, cosmetic outcomes