A Matched Cohort Study of Superomedial Pedicle Vertical Scar Breast Reduction (100 breasts) and Traditional Wise-Pattern Breast Reduction (100 breasts): An Outcomes Study Over Three Years

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Abstract

Background: The superomedial pedicle (SMP) with vertical scar breast reduction (BR) is gaining popularity for its round, projecting breast and shorter incision when compared to the traditional Wise-pattern reduction using an inferior pedicle (IFP). However, there is paucity of large volume institutional outcomes studies after SMP/BR. The purpose of this study is to compare outcomes after SMP/BR and IFP/BR in the largest matched cohort study-to-date.

Methods: A retrospective review of a prospectively-maintained database of all bilateral BRs over the three-year period was performed. 100 SMP/BR breasts (50 patients) were matched to 100 IFP/BR breasts (50 patients). Matching was implemented based on age (+/-3 years), BMI (+/-3 points), and size of reduction (+/-200 grams). Patient demographics, comorbidities, BMI, size of reduction, NAC sensitivity, minor and major postoperative complications, and aesthetic result were assessed.

Results: 292 patients underwent bilateral breast reduction between 1/2009-3/2012 at a single institution; IFP/BR was used in 79% of cases. Mean age and BMI was 31.9yrs (15-59yrs) and 30.9 (24-37) in SMP/BR and 31.6yrs (15-56 yrs) and 31.7 (22-37) in the IFP/BR. Mean volume of tissue reduced was 805.4g (range 200-2068g) and 841.9g (250-2037g), respectively. All patients achieved symptomatic relief. No statistical difference in major or minor complications was seen between two cohorts; SMP: major 2% (dehiscence 1%, wound infection 1%) and minor 21% (seroma 5%; skin breakdown 9%; decreased nipple sensation 7%) and versus IFP: major 4% (NAC necrosis 1%; hematoma 1%; wound infection 2%) and minor 27% (seroma 1%; skin breakdown 13%; decreased nipple sensation 13%). Aesthetic result was good-excellent in SMP/BR and fair-excellent in IFP/BR.

Conclusions: SMP/BR is a novel, alternative reduction mammaplasty technique with low complication rates and excellent functional and aesthetic outcomes.

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