The P1 Method: A Novel Approach To Pre-Pectoral Breast Reconstruction To Minimize The Palpable Implant Edge And Upper Pole Rippling

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Background:
Pre-pectoral prosthetic-based breast reconstruction (PBBR) has become increasingly popular as an alternative to the partial or total submuscular approach. Potential issues with the pre-pectoral approach include a noticeable superior implant edge and implant rippling. These concerns are particularly apparent in thin patients. We introduce a novel technique of developing a partial thickness slip of pectoralis muscle in the creation of an otherwise pre-pectoral plane to mask these upper pole defects, mask superior implant rippling and provide greater implant support (The P1 Method).

Methods:
A retrospective review of all patients undergoing modified pre-pectoral (P1) breast reconstruction at a single institution over two years were identified. Data was collected pertaining to patient demographics, mastectomy type/weight, reconstruction type, aesthetic and surgical outcomes. Aesthetic outcomes were assessed by multiple reviewers at postoperative clinical visits using clinical exam and standardized medical photography.

Results:
Fifty patients (93 breasts) were identified during the study period. Mean final follow up was 63 weeks (r, 53-85). Patients undergoing P1 reconstructions achieved improved aesthetic results with less implant rippling and complete elimination of animation deformity seen on postoperative clinical images or at final follow-up.

Conclusions:
As pre-pectoral PBBR becomes more popular, architectural adaptations will be made to improve surgical and patient-centered outcomes. The P1 Method is effective in improving the superomedial contour in thin patients, minimizes upper pole rippling and provides greater overall implant support.