541 - MODIFIED “NO-VERTICAL-SCAR” REDUCTION MAMMOPLASTY: A SAFE ONCOPLASTIC OPTION FOR PATIENTS WITH EXTREMELY LARGE AND PTOtic BREASTS

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Introduction: It is known that one of the most commonly used breast reduction surgeries is the inverted-T scar (Wise pattern). Numerous reports have established its efficacy in oncoplastic procedures and its aesthetically pleasing shape. However, it has some disadvantages and limitations, such as extensive scar pattern, risk of dehiscence, and its difficulty in reductions in larger and ptotic breasts (removal >800 g per side). As an alternative, the “No-Vertical-Scar” reduction mammoplasty has been proposed in plastic surgery for breasts in which a massive mass excision is required and where marked ptosis exists. Although this technique has not been frequently described and performed in oncoplastic surgeries, it has many advantages in breast cancer patients involving technique, feasibility, and convenience. Objective: The aim of this study was to describe the critical technical points, adjustments, and safety for oncoplastic surgery of the classic horizontal breast reduction, designated as modified "No-Vertical-Scar" reduction mammoplasty, allowing for the elimination of the vertical scar and axillary approach through the same incision. Methods: This is a single-center case-series study. We included patients with a breast cancer diagnosis who underwent surgical treatment between 2020 and 2021. Patients were selected for this technique if they had large and ptotic breasts (grade 2 or 3 according to Regnault classification) and a minimum distance of 27 cm between the mid-clavicle and the superior aspect of the areola. Clinical and anatomo-pathological data were collected. Results: A total of 25 patients underwent this modified oncoplastic mammoplasty. Preoperative skin markings were made with the patient in the standing position. The proposed new nipple position was determined based on a distance between 18 and 23 cm from the breast midline and the sternal notch. The lower edge of the “apron” flap was then marked at a distance of 5–6 cm below the inferior aspect of the new areola, and it needed to be located above the superior aspect of the original areola. An important step was to delineate the new lateral border of the breast, especially in wide-based breasts. This modified step is crucial to narrow the transverse base of the new breast and to provide a more natural silhouette. The areolated or nonareola pedicle was then selected and designed in accordance with the tumor location. In all patients, axillary surgery (sentinel lymph node biopsy or lymphadenectomy) was performed through the same breast incision. After flap development, lumpectomy, and axillary approach, the superior “apron” flap was then brought down over the remaining breast tissues and sutured in place. A free nipple complex graft or inferiorly pediculated nipple complex was then brought to the new areola site. The volume of removed tissue in each breast varied from 700 to 2,000 g. The complication rate was low (20%, 5 patients) and included minimal dehiscence that resolved in 2–3 weeks (2 patients), nipple epidermolysis (2 patients), and surgical site infection (1 patient). There were no cases of fat necrosis, nipple-areola complex necrosis, or other major complications. Patients were satisfied with the results in 96% of cases. Conclusion: The modified “No-Vertical-Scar” reduction mammoplasty has been shown to be a safe, easy, and cosmetic alternative in patients with very large and ptotic breasts. It has the advantage of eliminating the vertical scar present in both the inverted-T (Wise pattern) and vertical scar techniques, a low risk of complications and the ability to perform axillary staging through a single incision. It can also result in an “unoperated” look after surgery with good patient satisfaction. Once learned, it is fairly easy to perform, and the results are reproducible and free of major complications.