The inframammary dome – a modification of the keyhole pattern for reduction mammaplasty/mastopexy

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Dear Editor,

A modification of the keyhole pattern for reduction mammaplasty and mastopexy is presented. An inframammary dome with a 3-cm diameter and 6 cm base is inserted on the inframammary fold. The authors believe that this modification reduces the incidence of vertical incision separation and minimizes later “bottoming out” of the surgically reduced/lifted breast.

Breast reduction and mastopexy are among the few procedures in plastic surgery that test our ability to achieve superb and long lasting aesthetic results. The choice of the appropriate breast reduction technique and attention to fine technical details in planning and execution are very important in determining the outcome of surgery and ultimately, patient satisfaction (1, 2). The inferior pedicle technique and its variations are in wide use thanks to the reliability that the technique offers (3). We present a minor modification of the dependable keyhole pattern with additional technical pearls, proven to be effective in our hands. The senior author has used these modifications in his practice over the last 5 years in 333 patients (161 mastopexies and 172 reduction mammaplasties) with high patient and surgeon satisfaction.

Preoperative markings are made with the patient in the standing position (3). The midclavicular line is marked through the nipple. Standard keyhole markings are made and the inframammary fold is then marked. On the moclavicular line an inframammary dome is designed with a 3-cm radius and 6 cm base in the inframammary fold (Figure 1).

Note deepithelization of the pedicle, except for the inframammary dome, follows the preoperative markings (4). The new nipple position skin resection is left to be
performed at the end of the procedure, similar to the technique suggested by Hester (5). A figure-of-eight 3-0 Vicryl suture is placed through the nipple in a 3rd to 9th vector at the beginning of the procedure to facilitate the final nipple position, nipple areola delivery and to prevent rotational distortion (Figure 2).

In the final step of the central and inferior skin flap resection, adjustment is made to fit around the inframammary dome. In this way the tension of the skin flap closure is distributed along a 9.42-cm arch instead of a one-point maximal tension juncture, which is standard with the standard inverted T- closure (Figure 3).

The postoperative course in all our patients has been uneventful with no skin flap necrosis and no incisional separation occurring on the vertical and horizontal scar connection. Reduction mammoplasty using the inferior glandular pedicle to perfuse the nipple-areola complex has maintained its popularity and proven its reliability over two decades of widespread use (3, 6, 7). The majority of published series report a 5-10% incidence of incisional separation that causes delayed wound healing (5, 8). Different techniques have been recommended for prevention of incisonal skin separation, including a double dermal keyhole technique (9) and the sliding nipple technique (10). Both groups report improved cosmetic appearance and decreased early postoperative wound dehiscence. We believe that with the dome modification of the inframammary incision the incidence of wound dehiscence is reduced.

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Figure 1 Preoperative markings of the inframammary dome.

Figure 2 a) Resection; b) Nipple/areola is delivered to the final position.
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