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TECHNICAL NOTE

The inframammary skin-sparing mastectomy technique

Mastectomie et reconstruction mammaire immédiate avec cicatrice sous-mammaire sans cicatrice verticale

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Seins ptosiques

Summary Skin-sparing mastectomy and immediate implant-based breast reconstruction is technically a challenging procedures for women with large, ptotic breasts. This is usually performed using the Wise pattern incision resulting in an inverted T scar, which is associated with postoperative complications. The other challenge is obtaining adequate coverage of the prosthesis. We describe a technique that avoids the inverted T scar and provides a single horizontal scar with a double dermo-muscular layer coverage of the prosthesis.

Résumé La mastectomie avec conservation de l'étui cutanée associée à une reconstruction mammaire immédiate par implants est une procédure techniquement difficile chez les femmes avec des seins larges et ptotiques. Elle est généralement effectuée selon la technique de Wise aboutissant à une cicatrice en T inversée qui est parfois associée à des complications post-opératoires. L'autre défi consiste à obtenir une couverture adéquate de la prothèse. Nous décrivons une technique chirurgicale avec une seule cicatrice horizontale dans le sillon sous-mammaire, sans cicatrice verticale, et une double couverture dermo-musculaire de la prothèse.

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Introduction

Skin-sparing mastectomy (SSM) and immediate reconstruction for breast cancer is now recognized as oncologically safe. It can achieve local control, superior aesthetic outcomes and preserves women body image [1—3] compared to mastectomy with delayed reconstruction. For women with large and ptotic breasts, the SSM and immediate implant-based reconstruction remains a technically challenging procedure. The type IV SSM one-stage procedure as described by Carlson et al. permits these patients to have a skin reducing mastectomy with implant reconstruction with a cosmetic rewarding outcome [4]. There is however a high rate of complication, up to 25% is reported in many series using the Wise pattern incision [4—7].

The challenge when performing SSM with immediate implant reconstruction is coverage of the inferior part of the implant.

To address this challenge, we describe a surgical technique, which uses a single inframammary scar with the implant covered by a de-epithelialized segment.

Description of surgical technique

The patient is marked in an up-right position (Fig. 1A and B).

A bolus of intravenous antibiotic (cefazoline 3 g) is administered preoperatively and 1 g every 4 h during the surgery.

An elliptical incision is drawn with to encompass the superior and respectively inferior edge of the nipple areola-complex (Fig. 2).

The lower pole of the mastectomy skin flap (between the inferior incision and the inframammary fold) is de-epithelialized (Fig. 3).

SSM (including the nipple areola-complex) is performed at the junction of epithelialized and de-epithelialized skin by following Cooper's ligament plane and preserving the inframammary fold (Fig. 4).

Once the breast is removed from the pectoral fascia, the pectoralis muscle is detached off the chest wall and a submuscular pocket is created. The implant is inserted in this pocket (Fig. 5).

The implant is completely covered superiorly by the pectoralis muscle and inferiorly by the de-epithelialized skin flap, which is attached to the free edge of the pectoralis muscle with vicryl 2.0 (Fig. 6).

The superior mastectomy skin flap is then sutured in the inframammary fold directly without section of the dermis with monocril 3.0 continuous stitch. Disparity in length between skin flaps can be accommodated with ruffled suturing (Fig. 7).

Two drains are placed, one in the cavity of the mastectomy and one in the cavity of the implant.

We recommend the patients to wear a sports bra day and night for a month.

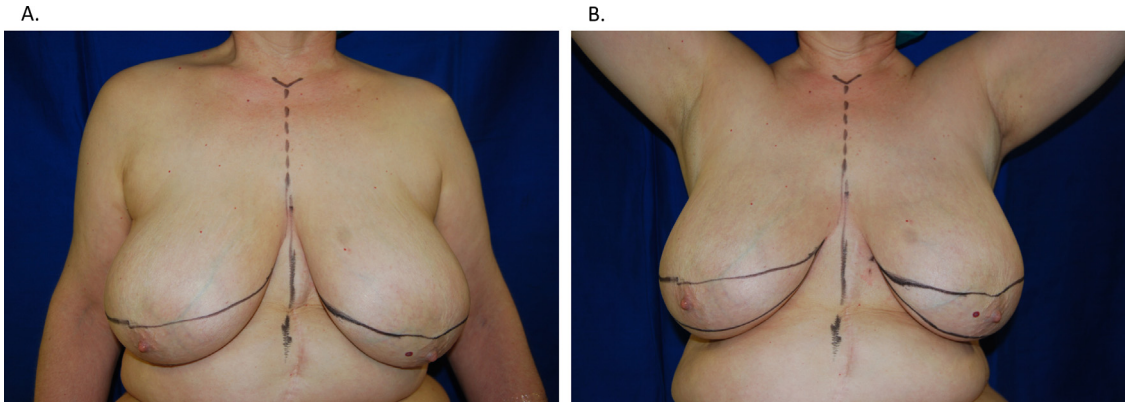

Figure 1 The drawings in an up-right position. A. Hands down. B. Hands up.

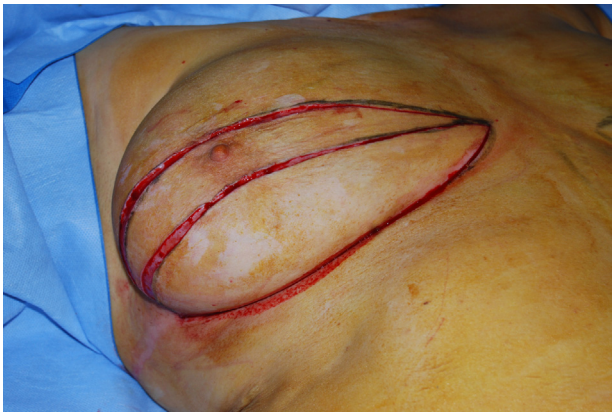

Figure 2 An elliptical incision to encompass the superior and respectively inferior edge of the nipple areola-complex.

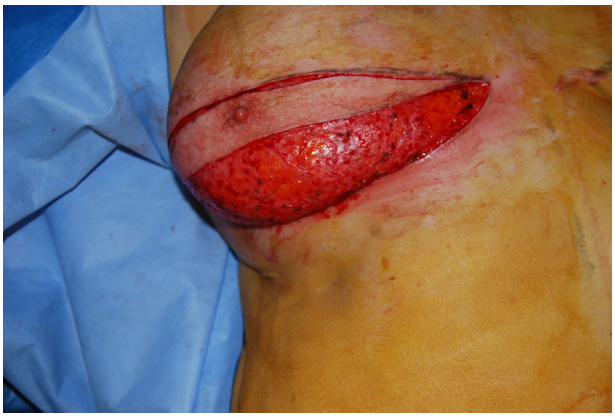

Figure 3 The de-epithelialization of the lower pole of the mastectomy skin flap.

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