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Short Communication

Pre-pectoral breast reconstruction in a patient with prior cosmetic breast implants- an elegent modification of a previously described technique

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Background

The prevalence of cosmetic breast implants is rising, so it is not uncommon to see new breast cancers arising in individuals who already have breast implants.[1] Given their aesthetic concerns, and their previous choice to have breast implants, these patients frequently want to have an immediate implant based breast reconstruction if they require a mastectomy. This can be technically challenging as these individuals are generally slim with little autologous tissue cover[2] (Figures 1–3).

A standard implant based reconstruction in a ptotic breast uses an implant covered superiorly by the pectoralis muscle and inferiorly by a de-epithelialised dermal flap.[3] There has been increasing interest recently in the use of pre-pectoral reconstruction to reduce morbidity from lifting the pectoralismuscle. This has been described with a prosthetic mesh (such as Braxon® manufactured by

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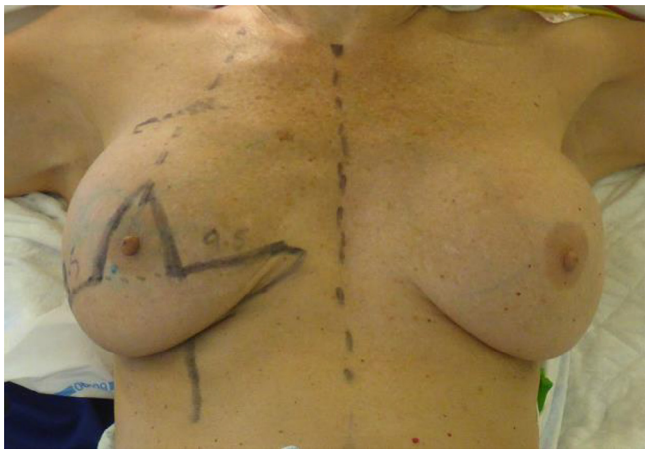

Figure 1. Pre-operative marking for a wise pattern reducing mastectomy.

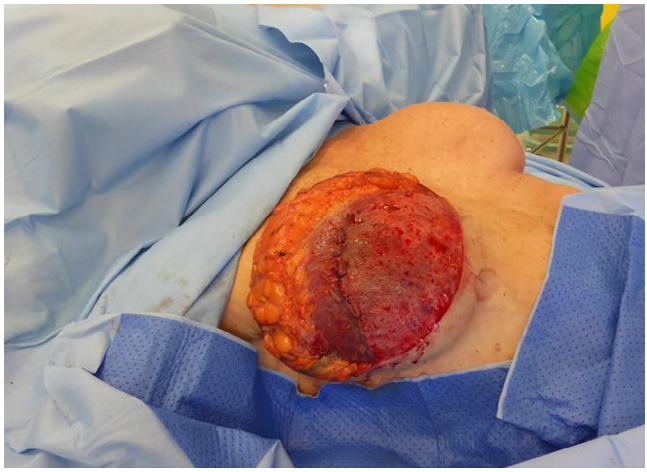

Figure 2. Dermal sling sutured to existing implant capsule with the mastectomy skin flaps retracted.

Decomed, Venice, Italy) covering the entirety of the implant and being placed on top of the pectoralis muscle.[4] We describe a novel muscle sparing technique where the existing sub-glandular implant capsule can be used for superior coverage of the implant.

Case history

A 61 year old patient with previous subglandular cosmetic implants was found to have 32 mm of microcalcification on the central part of her right breast on mammograms. This was confirmed to be high grade DCIS on subsequent biopsies. She was counselled for a skin reducing mastectomy and sentinel lymph node biopsy with immediate implant based reconstruction using a dermal sling for lower pole coverage.

Her mastectomy specimen weighed 158 grams and her final histology confirmed a 25 mm area of high grade DCIS with clear margins all around.

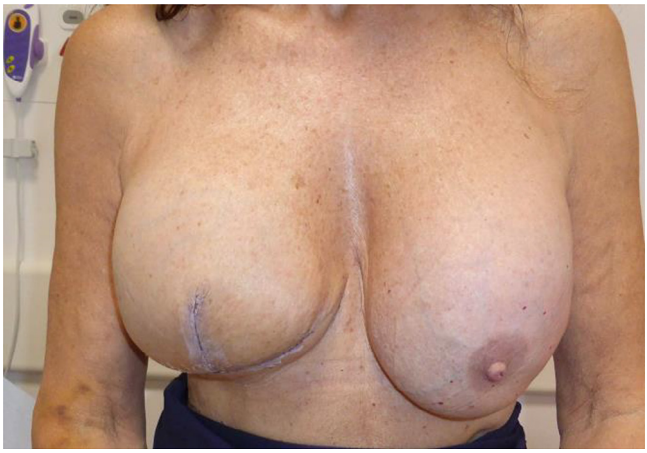

Figure 3. Post-operative pictures at 2 weeks.

Technique

A standard wise pattern skin reducing mastectomy is performed leaving the existing pre-pectoral implant capsule in place superiorly and retaining an inferior dermal sling of de-epithelialised breast skin. A fixed volume implant (of the same shape as the contralateral side but with increased dimensions to account for the mastectomy volume (Nagor GFX-EHP465)) is placed on the pectoralis muscle. The upper part of the implant capsule is then sutured to the dermal sling over the implant. The mastectomy flaps are draped over the "capsule/dermal pocket" and sutured to the inframammary fold in the usual manner.

Discussion

The benefits of this technique include coverage of the implant without disruption of the underlying pectoralis major muscle. No drains are required and, as no muscle is dissected, minimal pain is reported post-operatively, with early mobilisation. Such a technique can also avoid the issue of animation described in some patients with subpectoral implants.[5] This technique is only suitable in those patients with a long nipple to inframammary fold distance[6]; and given that there is a "false" posterior limit to the breast, in some cases, partial removal of the implant capsule may be required to obtain a satisfactory posterior margin thus making this technique unsuitable for some patients. Early results show a good aesthetic outcome using this technique which is suitable for reconstruction in some patients with existing implants who have been diagnosed with breast cancer.

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Conflict of interest

There is no conflict of interest.

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