Introduction: Historically breast cancer surgery was associated with significant psychosocial morbidity and suboptimal cosmetic outcome. Recent emphasis on women's quality of life following breast cancer treatment has drawn attention to the importance of aesthetic outcome and the potential benefits of immediate breast reconstruction (IBR). Although breast conservation is the ideal, more radical surgery is still indicated for approximately one-third of patients. For these women, IBR could avert such morbidity and improve aesthetic results. Our aim was to assess oncological safety, morbidity and patient satisfaction after IBR.

Methods: A prospectively collected database of all breast cancer patients who underwent IBR at a tertiary referral breast unit was reviewed. Clinicopathological and operative data were obtained; patients were reviewed clinically, and administered two validated quality of life questionnaires following their treatment.

Results: Two hundred and fifty five patients underwent IBR following skin-sparing mastectomy over 61 months. Reconstruction with autologous ipsilateral latissimus dorsi flap was most commonly performed (88%). After median follow-up of 36 months, no patient had experienced local recurrence (0%), distant metastases developed in 4.8% and mortality was 2.2%. Post-operative morbidities included wound infection (11.9%), chronic pain (1.8%), prosthesis removal/replacement (9.3%; 42.8% of whom had radiotherapy) and fat necrosis (14.2%). Patient satisfaction was comparable to a group of age-matched women ($n = 160$) who underwent breast conserving surgery ($p = 0.89$).

Conclusions: IBR is a highly acceptable, desirable form of treatment for women requiring mastectomy. With its low associated morbidity, good oncological safety and high rates of patient satisfaction, IBR is an appropriate recommendation for all women requiring mastectomy.

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O-7 CELL-ASSISTED LIPOTRANSFER FOR BREAST RECONSTRUCTION AFTER BREAST CONSERVING THERAPY

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Background: Although breast conserving therapy (BCT) is the standard of care for early stage breast cancer, recent literature suggests that contour deformities, breast asymmetry, and poor esthetic outcomes are not uncommon.

Methods: We have performed transplantation of progenitor-enriched adipose tissue (Cell-assisted lipotransfer; CAL) for management of contour deformities after BCT. In CAL, autologous adipose-derived stem/stromal cells (ASCs) are used in combination with lipoinjection. Adipose tissue was harvested from the abdomen, upper hip or thigh. A stromal vascular fraction containing ASCs was freshly isolated from half of an aspirated fat sample and attached to the other half of aspirated fat sample. The graft material is injected into the subcutaneous layer and pectoralis muscles.

Results: Twenty-six patients underwent CAL. The volume of injected fat was from 180 to 250 ml. In some patients who have received radiotherapy, it seems to be a poor recipient bed for fat grafting because of fibrosis, atrophy or retraction in these areas. After performing single session, the panel judged contour improvement to be good or very good in 13 patients, moderate in 10 patients and poor in 3 patients. The previously irradiated breast may require a multisession procedure for restoration of the breast volume.

Conclusions: Breast reconstruction with lipoinjection has several advantages such as lack of scarring in recipient and donor sites. CAL is useful and effective option for management of contour deformities after BCT.

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O-8 PATIENT REPORTED OUTCOME MEASURES ARE AN INTEGRAL PART OF CLINICAL OUTCOMES IN FUTURE TREATMENT RECOMMENDATIONS IN BREAST RECONSTRUCTION

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Introduction: Treatment recommendations in breast reconstruction should encompass the assessment of both clinical outcomes as well as patient reported outcomes (PROs) that include body image and satisfaction with cosmetic appearance.[1] The Body Image Scale (BIS) has been used to gauge the effects of mastectomy and breast reconstruction as well as study-specific questionnaires (SSQ) that assess patient satisfaction with aesthetic appearance.

Methods: In a prospective study of women undergoing types of Latissimus Dorsi (LD) breast reconstruction (±RT), the BIS and an aesthetic satisfaction SSQ were administered up to 5 years after surgery. Standardised 5 view photographs were taken and independently scored using a 5-point Likert scale comprising a panel of 3 HCPs. Spearmans correlation was used to test between PROs and HCPs scoring of back symmetry and scar, satisfaction with overall aesthetic appearance and overall outcome of the surgery.

Results: In 72 women (over 5 years) there was a significant correlation between the PROs and the HCPs reporting of aesthetic appearance ($p = 0.001$). The SSQ correlated significantly with BIS ($p < 0.001$) at all time points up to 5 years. However, there was no significant correlation between HCP assessments compared with other PROs and BIS.

Conclusions: HCPs assessments of breast reconstruction outcomes do not necessarily correlate with PROs and therefore cannot be used exclusively in treatment recommendations regarding the optimal types of breast reconstruction. The SSQ has been shown to correlate with BIS[1] and is of value in assessing PROs until the introduction of a validated breast reconstruction-specific questionnaire.

Reference:

1. A multicentre prospective longitudinal study establishing level II evidence of HRQL after types of immediate LD breast reconstruction. Cancer Research 2009;69(24):682s [abtr. no. 3106].

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