

Oncoplastic Volume Replacement Using Local Perforator Flaps

Kathryn E Williams, MD MB ChB; Rachel Holt, MD MBBS; Ashley Topps MB BS; Lyndsey Highton, MB BS; John Murphy, PhD MB BS.

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Introduction

Patients undergoing breast conserving surgery require tumour excision with replacement of the resected tissue to ensure good long-term cosmesis following radiotherapy. Adequate volume replacement can be challenging using local mobilization of glandular tissue alone in the smaller non-ptotic breast. This can be addressed by importing tissue and we describe our unit experience using local perforator flaps.

Methods

Patients undergoing partial mastectomy defect reconstruction with loco-regional perforator flaps were identified. In our unit the LICAP, LTAP and TDAP flaps were used. For the majority of the cases of BCS (29/30) a two-stage approach was adopted to ensure complete surgical excision and avoid flap compromise if subsequent axillary dissection was required.

Results

Between January 2014 and May 2016, thirty-six patients underwent unilateral breast reconstruction using 18 LICAP flaps (50%), 14 combined LICAP & LTA (39%), 2 LTA flaps (5.5%) and 2 TDAP flaps (5.5%). In 30 cases surgery was performed following wide local excision of breast cancer and the mean excision volume was 92g (27-149g). Six procedures were performed as revisional surgery for asymmetry correction.

All flaps were transferred successfully and the donor sites were closed primarily. Nine patients (30%) had incomplete tumour excision necessitating further excision at second stage and one patient required a completion axillary node clearance. There were two patient who had post-operative complications; one patient had delayed wound healing (non primary cancer patient) and one patient had an infection seroma which responded quickly to percutaneous drainage and oral antibiotics. Adjuvant therapy was not delayed in any patient. The cosmetic outcomes were good and to date no patients have required further revisional surgery.

Conclusions

Local perforator flaps are reliable and useful for the correction of breast deformity with minimal donor morbidity. Success depends on patient selection and coordinated planning