Methods: Data from women undergoing mastectomy without IBR had been collected as part of the National Mastectomy & Breast Reconstruction Audit between January 2008 & March 2009. This included the reasons why IBR was not undertaken. For some patients there were multiple reasons why IBR was not undertaken. In these cases, the reasons were ranked by 2 clinicians and the primary reason determined. We then examined whether patients received radiotherapy.

Results: In total 81 women underwent simple mastectomy. The mean age was 60.7 years (range 35–88). Overall, 54/81 (67%) women received chest wall radiotherapy. The primary reasons why IBR was not performed are given in the table.

Reason for not performing IBR	n	%
Age of patient	13	16.1
Co-morbidity	21	25.9
Concerns re local recurrence	1	1.2
Mental health issues	1	1.2
Anticipated chest wall radiotherapy	29	35.8
Reconstruction may delay adjuvant therapy	2	2.5
Patient choice	14	17.3

17.3% patients declined the offer of IBR whilst nearly a quarter of patients had significant co-morbidity that precluded IBR. In 16.1% patient age was the primary reason why IBR was not performed. The mean age in this group was 74.3 years (range 65–85). Anticipated chest wall radiotherapy was the commonest reason for not offering IBR. Of these 29 patients, 25 subsequently underwent radiotherapy (86.2%).

Conclusions: The MDT is reasonably accurate at predicting the need for post-mastectomy radiotherapy. Whilst reconstructive surgeons have concerns about irradiating a reconstructed breast, greater accuracy in predicting chest wall radiotherapy will minimise the small number of women who not undergo IBR because of overestimation of radiotherapy need.

262 Poster What constitutes an adequate margin in patients undergoing breast conservation surgery for ductal carcinoma in situ?

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Background: There are no national guidelines with regard to extent of clear pathological margin of excision for ductal carcinoma insitu (DCIS) in patients undergoing breast conservation surgery (BCS). In our hospital we look for a pathological margin ≥10 mm. The EORTC DCIS trial reported a high local recurrence rate of 36% at 5 years in patient with close or involved margins (<1 mm or frankly involved).

The aim of our study was to assess adequate margin of excision with regard to local recurrence in patients undergoing BCS.

Materials and Methods: We retrospectively reviewed case notes of patients undergoing surgical treatment for DCIS between Jan 1975 to June 2008. Extend of clear margin of excision in patients undergoing BCS was divided into three groups (<5 mm, 5−9 mm and ≥10 mm). Statistical analysis was carried out using SPSS version 16, and a P value of <0.05 was considered significant.

Results: Two hundred and thirty nine women had BCS for DCIS during the above period. The median age was 59 years (40–86) and the median follow-up was 76 months (1–308). One hundred and eighty one patients (76%) had only one operation. Overall 15 patients had 3 surgical procedures (11 completion mastectomy, 4 re-excisions).

Median size of the tumour was 11 mm (1–50). One hundred and ninety three patients had grades recorded (44 low grade, 54 intermediate grade and 95 high grade). Other pathological findings included 75 cases with comedo necrosis and 5 patients with microinvasion.

Overall local recurrence rate of patients undergoing breast conservation surgery was 17% (40/239), of which 65% (26/40) were invasive recurrences. Forty three percent of patients (6/14) with less than 5 mm margin developed local recurrence compared to 12% (3/25) with 5–9 mm margin and 14% (27/188) with $\geqslant \! 10$ mm margin. Four out of 12 patients with unknown margin status developed local recurrence. The local recurrence rate in patients with <5 mm (6/14) margin was significantly higher compared to those with $\geqslant \! 5$ mm (30/213) margin (p value <0.012).

Conclusion: Our study shows that in patients undergoing breast conservation surgery for DCIS, a clear margin <5 mm is associated with significantly higher local recurrence rate.

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Is a modified Wise pattern the ideal oncoplastic approach in breast-conserving therapy? An analysis of 352 cases

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Background: Breast-conserving therapy (BCT) has made it possible to lessen the psychological impact of surgical treatment for breast cancer. Unfortunately, the cosmetic results of surgery are often unsatisfactory. The majority of unsatisfactory results derives from scar retraction and gland deformity caused by tumor resection. With the use of oncoplastic surgery, it is now possible to perform a radical procedure while minimizing post-surgery cosmetic defects.

The aim of the study was to evaluate oncological and cosmetic outcomes in breast cancer patients undergoing BCT with immediate reconstruction using a modified Wise pattern.

Materials and Methods: The study involved a total of 352 patients treated surgically for breast cancer between January 2000 and January 2009. Treatment in all cases consisted of quadrantectomy plus immediate reconstruction of the surgical defect using a Wise pattern technique.

In 301cases (85.5%), a bilateral procedure was performed, while in 31 (8.8%) cases surgery to obtain breast symmetry was delayed and in 20 (5.7%) cases was not undertaken.

Patient age averaged 52 years (range:29–80). Breast size in all cases was medium to large. Patient satisfaction was determined with the use of questionnaires at 6 months from surgery. Evaluation regarded breast size, form, and symmetry as well as positioning of the nipple-areola complex. Each category was rated numerically, from 4 to 1 (4=excellent, 3=good, 2=mediocre and 1=unsatisfactory).

Results: Surgical resection margins were found to be clear in 327 (92.9%) cases. In only 25 cases (7.1%) was there margin involvement, which required more radical surgery. The rate of local tumor recurrence at 57.2 months was 7 (1.98%). Minor complications (superficial infection, seroma) developed in 23 cases. Minor surgery was performed for scar revision or removal in 18 cases. With regard to cosmetic outcome, 103 patients rated their breast reconstruction excellent, 184 good, 47 mediocre and 18 unsatisfactory. The residual surgical scar was that of an inverted T-scar reduction mammoplasty.

Conclusions: By combining techniques of plastic and oncological surgery for the treatment of breast cancer, it is now possible, in selected cases, to obtain both effective tumor control and a good cosmetic outcome. Oncoplastic surgery does not compromise multidisciplinary approaches and can play a fundamental part in extending the indications for conservative treatment.

Immediate outcomes of oncoplastic surgery – consecutive case study of the first 160 patients in the Portuguese Institute of Oncology-Lisbon

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Introduction: Cosmetic outcomes of conservative breast cancer surgery are influenced by: tumor size, tumor location, breast volume, breast shape and radiotherapy. About 15% of patients have bad cosmetic outcomes, requiring reconstructive surgery.

Oncological and cosmetic outcomes of oncoplastic breast-conserving reconstruction by volume replacement or volume displacement confirmed the clinical utility of this new approach to the surgical management of patients with breast cancer.

Aim: Evaluate the immediate outcomes of oncoplastic breast-conserving surgery.

Patients: Between 21 Jan. 2007 and 10 Nov. 2009, 160 female patients, were submitted to oncoplastic breast-conserving surgery (136 invasive carcinoma, 11 DCIS, 4 papilar tumor, 3 large hamartoma and fibroadenoma and 6 mammographic suspected lesions. Of the 136 patients with invasive carcinoma 10 were submitted to neoadjuvant chemotherapy.

Material and Method: In 48.1% of patients we used Clough KB type I oncoplastic techniques (40 roundblock, 33 "raquette" mammaplasty, 4 hemi-batwing). The remaining patients were submitted to type II oncoplastic techniques (6 Grisotti 6, 32 Vertical mammaplasty with short lateral scar, 31 Inverted, "T" mammaplasty, 11 amputation-type reduction free nipple graft mammaplasty). In 3 patients we used volume replacement: 2 with inframammary adipofascial flap and 1 latissimus dorsae.

Results: Mean operative time was 79.5 minutes (min. 20, max. 200, type I = 61, type II = 98, p < 0.0001), mean specimen weight was 243 g