

**Patients and Methods:** 1461 consecutive patients (under one surgeon) received treatment between 1 January 1996 and 30 Nov 2006. 583 (40%) received mastectomy of whom 124 (21%) underwent IBR (72 Latissimus Dorsi, 52 Subpectoral). Node positive patients received axillary radiotherapy/clearance. Adjuvant treatments were prescribed according to local protocols.

**Results:** Median age Group A = 63 years (range 28–91), Group B = 48 (range 23–77). Median follow up 42 months. All figures relate to absolute events at 36/12.

Nottingham Prognostic Index		Group A	Group B
Good	Total patients	51 (20%)	25 (25%)
	Deceased	6	2
	LR	1	1
	No LR CHI=0.27	44	21
	P=0.6		
	DM	2	2
Moderate	No DM CHI=0.5	43	21
	P=0.5		
	Total patients	126 (50%)	48 (49%)
	Deceased	12	4
	LR	6	2
	No LR CHI=0.42	106	42
Poor	P=0.8		
	DM	12	7
	No DM CHI=0.64	103	40
	P=0.4		
	Total patients	76 (30%)	26 (26%)
	Deceased	24	5
	LR	11	4
	No LR CHI=0.13	46	18
	P=0.9		
	DM	17	5
	No DM CHI=0.33	49	20
	P=0.6		

**Conclusion:** IBR after mastectomy for breast cancer is safe and is associated with no increase in risk of local or distant recurrence either overall or within Nottingham Prognostic Groups.

**O-74** Comparison of the incidence of severe capsular contracture following implant-based immediate breast reconstruction with or without postoperative chest wall radiotherapy using 40 Gy in 15 fractions

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**Aim:** To determine the incidence of capsular contracture requiring revisional surgery in patients receiving post-operative radiotherapy (RT) following mastectomy and immediate breast reconstruction.

**Material and Methods:** 178 immediate breast reconstruction patients operated on at the Cambridge Breast Unit between January 2001 and December 2005 were identified. The incidence of severe capsular contracture (CC) in patients undergoing implant-based reconstructions, with and without postoperative RT, was recorded. The RT was delivered using a standard UK fractionation scheme of 40 Gray in 15 fractions over 3 weeks. The two groups were compared using the Kaplan-Meier method to perform univariate statistical analysis.

**Results:** 110 patients had implant-based reconstructions with a median follow up of 30 months. 42 (38%) patients received postoperative RT (68 patients did not). In the RT group, there were 5 instances of severe CC requiring revisional surgery, a crude rate of 11.9%, with an actuarial

rate of 0% at 1 year, 4% at 3 years and 28% at 4 years follow up. In the non RT group, there were no cases of severe CC. This difference is highly significant ( $p < 0.01$ ).

**Conclusions:** This series showed a significantly higher rate of severe CC in patients who received postoperative RT. This finding has important clinical implications when counselling patients for immediate breast reconstruction.

**O-75** Survival in breast cancer after nipple-sparing subcutaneous mastectomy: a prospective study with 13 years follow-up in 216 patients

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**Aim:** Validation of oncological safety of nipple-sparing subcutaneous mastectomy and of the outcome in patients with locoregional recurrences after this procedure.

**Patients and Methods:** 216 patients, mean age 52.8 years (range 29–81) with primary unilateral breast cancer, not suitable for partial mastectomy because of large (>3 cm) or multifocal carcinoma, underwent nipple-sparing subcutaneous mastectomy and immediate reconstruction with a prosthesis between December 1988 and September 1994. The nipple-areola complex was spared only in cases of a negative frozen section from underneath it. 40.3% had lymph node metastases, and 47 patients (21.8%) received postoperative radiotherapy. Median follow-up was 13 years. The end-points were locoregional recurrence (LRR) or distant metastases (DM) as first events, disease-free survival (DFS) and overall survival (OS).

**Results:** LRR occurred in 52 patients (24.1%) and DM in 44 (20.4%). DFS was 51.3% and OS 76.4%. The frequency of LRR was 8.5% among irradiated patients and 28.4% among non-irradiated patients ( $p = 0.025$ ). After the occurrence of LRR, 5 years DFS and OS were 60% and 82%, respectively. OS was the same for patients who suffered LRR as for those who did not. Specificity at frozen section was 98.5%, and 85% of the patients kept their nipple-areola complex intact throughout the follow-up time.

**Conclusions:** Nipple-sparing subcutaneous mastectomy is an oncologically safe procedure and could be offered to most patients with breast cancer unsuitable for sector resection only. A much lower frequency of LRR could be obtained by further use of radiotherapy. LRR after this operation does not significantly affect overall survival.

**O-76** Sentinel node biopsy in operations for recurrent breast cancer

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Sentinel lymph node biopsy (SNB) accurately predicts the status of the axilla in primary breast cancer. The aim was to evaluate SNB in operations for recurrent breast cancer in patients with earlier axillary lymph node dissection (ALND) and adjuvant radiotherapy.

In a prospective series of 50 patients from 2003 to 2006, 47 patients (mean 66, range 43–86 years) were evaluable. ALND was negative in 72% at primary surgery. Adjuvant radiotherapy was given to 24/47 patients.

The analysis comprised of one scintigraphy and one surgery group. Standard technique for SNB included isotope- and Patent blue injection, static images after 2–4 hours and the nodes were formalin-fixed, paraffin-embedded and stained by haematoxylin-eosin.

In the scintigraphy group one or more axillary sentinel nodes (SN) were identified in 24/47 patients (51%), in both axilla in one and outside the axilla in 6/47 patients (12%). In the surgery group SN was identified in 20/44 patients