patients. All of these patients were disease free for the mean time of 22 months (ranges; 6 to 51).

Discussion: Our result suggests that, using the frozen-section analysis of NAC during the operation, NASSM can be a reasonable option for selected patients who want immediate reconstruction of breast.

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Prospective trial of thoracic para-vertebral blockade in immediate latissimus dorsi breast reconstruction

V.R. Velchuru[1], K.P. Murray[1], S. Oosthuysen[3], J.H. Pereira[1]. [1]*James Paget Healthcare NHS trust, Department of General Surgery, Great Yarmouth, United Kingdom;* [2]*James Paget Healthcare NHS trust, Department of Anaesthetics, Great Yarmouth, United Kingdom*

Aims: To determine the efficacy of paravertebral block(PVB) in reducing hospital stay, relieving peri-operative pain and reducing other analgesic requirements in patients undergoing skin sparing mastectomy (SSM) with immediate breast reconstruction using a latissimus dorsi flap for breast cancer.

Methods: Consecutive patients (n = 52) over a period of 8 years undergoing SSM with pedicle LD reconstruction for breast cancer were offered thoracic PVB as an adjunct to perioperative analgesia. PVB was accepted by, and administered in 23 pts using the greengrass technique. Alternative peri-operative methods of analgesia included (1) patient controlled analgesia (PCA) and (2) oral analgesia. Paracetamol, codeine and NSAIDS were prescribed. Postoperative analgesic requests and length of inpatient stay were tabulated in each group. No significant complications occurred with this procedure.

Results: The mean length of hospital stay was 7.0±0.3 days in the non-PVB group vs. 6.0±0.2 days in the PVB group ($P < 0.02$, Unpaired T test). 27 patients in the non-PVB group (n = 29) required a PCA immediately post- surgery compared to only 8 in the PVB group (n = 23) ($P < 0.001$, chi square). The mean number of requests for oral analgesia was 26.1 and 12.1 in non-PVB and PVB patients, respectively ($P < 0.001$, Mann-Whitney).

	PVB group (n = 23)	Non-PVB group (n = 29)
Mean Length of hospital stay (days)	6	7
Number of patients with PCA	8	27
Mean number of oral analgesia requests	12.1	26.1

Conclusions: Immediate LD breast reconstruction is a major procedure and thoracic PVB acts as an important adjunct in postoperative analgesia and reduces hospital stay indicating a comfortable recovery and is not associated with significant complications.

We suggest patients undergoing major breast reconstruction for breast cancer should be encouraged to try thoracic para-vertebral block as a simple method of peri-operative pain relief.

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Radiotherapy post-immediate breast reconstruction – the cosmetic implications. Results of 10-year practice of a single breast surgeon

A.N. Patel, R. Mihai, Z. Rayter. *Bristol Royal Infirmary, Department of surgery, Bristol, United Kingdom*

Background: Adjuvant radiotherapy (RXT) and chemotherapy after immediate breast reconstruction (IBR) provides superior loco-regional control, disease-free survival, and overall survival in node-positive breast cancer patients. Planning for IBR is particularly complex because of the difficulties in determining which patients will require post-mastectomy RXT. There is concern that post-mastectomy RXT can adversely affect the aesthetic outcomes of IBR but data published so far is controversial.

Aim: To determine the impact of post-mastectomy RXT in a cohort of patients treated under the care of one Breast Surgeon over 10 years.

Methods: A retrospective review of clinical notes was undertaken. Data were collected from operative, pathological and outpatient clinic notes.

Results: 118 women underwent immediate breast reconstruction between Jan 1995 and Aug 2005. Their mean age at diagnosis was 48.5 yrs (range 26–68 yrs). Postoperative RXT was used in 15/53 patients with LD flap reconstruction with implant, in 6/14 patients with autologous LD reconstruction (i.e. without the use of an implant) and in 11/52 patients with sub-pectoral Becker's prosthesis reconstruction. After immediate breast reconstruction, 79 women had further operations. Nipple reconstruction was performed in 51 women and contralateral mastopexy in 15 women. Complications requiring further operations (capsulotomy, replacement of implant) occurred in 14/86 of women without RXT and in 7/32 women with adjuvant RXT ($p < 0.01$ χ^2 test).

Conclusion: Using the number of further operations (in particular capsulotomy and revision surgery) as a surrogate marker, it appears that postoperative RXT has a significant impact on long-term cosmetic outcome of breast reconstruction. Formal assessment of aesthetic parameters and prospective collections of clinical information and photographs on such patients should allow a more accurate assessment.

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Can axillary staging be avoided in a selected group of older women with small non-high grade invasive breast tumours?

J. Benson[1], G. Querci della Rovere[2], S. Ashley[2], R. Bonomi[2]. [1]*Addenbrooke's Hospital, Cambridge Breast Unit, Cambridge, United Kingdom;* [2]*The Royal Marsden Hospital, Department of Surgery, Sutton, United Kingdom*

With an increasing proportion of node negative patients, a selective policy for managing the axilla may be more appropriate. Axillary sampling and sentinel node biopsy are alternative methods for staging the axilla, but observation alone may be an acceptable approach for some patients.

In a retrospective analysis of 355 breast cancer patients with either grade I (≤20 mm) or grade II (≤20 mm) oestrogen receptor (ER) positive tumours without lymphovascular invasion (LVI), the overall incidence of positive nodes in this good prognostic group of patients was 13% (95% CI 9.5–16.5). When the analysis was confined to grade I tumours (≤20 mm) and grade II tumours (≤10 mm) the overall incidence of nodal metastases was 10% and only 2.7% of grade I tumours (≤10 mm) had nodal involvement.

In a related study of 173 patients with small (≤10 mm), non-high grade (I and II), ER positive invasive ductal carcinomas (NST) without LVI, axillary surgery was either omitted (135 patients) or delayed (38 patients) at the time of wide local excision or mastectomy. Rates of axillary recurrence at a median follow up of 36 months were only 1% when axillary surgery was omitted according to patient choice/departmental policy and no cases of uncontrolled axillary recurrence were documented.

	No. of pts (total 355)	Node positive (total 46, 13%)	Number of positive nodes 1	2	3	4
Grade I						
1–10 mm	73 (20.5%)	2 (2.7%)	2 (2.7%)	0	0	0
11–20 mm	109 (30.8%)	15 (13.8%)	8 (7.3%)	3 (2.8%)	3 (2.8%)	1 (0.9%)
Grade II						
1–10 mm	69 (19.4%)	8 (11.6%)	3 (4.3%)	1 (1.4%)	2 (2.9%)	(2.9%)
11–15 mm	104 (29.3%)	21 (20.2%)	14 (13.5%)	3 (2.9%)	1 (1.0%)	3 (2.9%)

These results support the conclusion that axillary surgery (staging/therapeutic) can be safely omitted in a selected subgroup of patients for whom the probability of nodal metastases is of similar magnitude to the false negative rates reported for the sentinel node biopsy technique (5–10%) and for whom the risk:benefit ratio for detection of node positive cases does not justify any form of axillary procedure at the time of primary surgery.

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Effect of cavity shaving on re-operation rate following breast conserving surgery

R. Marudanayagam, R. Singhal, B. Balasubramaniam, I. Paterson. *Heart of England Foundation NHS Trust, Breast Surgery, Birmingham, United Kingdom*

Background: Breast conserving surgery (BCS) is an acceptable treatment for primary breast cancer but the risk of local recurrence is higher without adequate margin clearance. We were concerned from an audit that our reoperation rate following BCS to achieve microscopic tumour clearance was too high. Hence we introduced cavity shaving at primary surgery 31 months ago. The aim of this study was to determine how cavity shaving affects the re excision rate.

Method: We compared a prospective group of patients (n = 394) who underwent BCS with cavity shaving of macroscopically clear margins at primary operation, from March 2003 to September 2005 with a