

(45%), which was 87% of SN visualized at scintigraphy. SN had tumour cells in 7 patients (35%), which influenced the treatment.

SNB can identify SN at a high rate in recurrent breast cancer if scintigraphy visualizes nodes and the findings may influence further planning of treatment. SNB should be considered as an important option in recurrent breast cancer.

#### **O-77** Incidental malignant breast disease in routine breast reduction specimens

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Breast reduction surgery is a relatively common procedure in the UK. The finding of clinically unsuspected malignancy complicates subsequent management, particularly regarding assessment of margins and lesion size. We have performed a retrospective audit of breast reductions performed at Addenbrookes Hospital. Between 2000–2006 978 reductions were performed, 40% (389) in patients over 40. 61 patients had had previous breast cancer, almost all in the over 40 age group (57/61 patients).

In the remaining 917 cases, previously unsuspected in situ or invasive breast cancer was found in 3 patients, all over 50 years of age (3/135; 2%). One woman in the 40–50 year age group presented with malignant axillary lymphadenopathy shortly after surgery; retrospective histological review revealed a single focus of lymphovascular invasion. No unsuspected cancers were found in patients under 40. Lesions associated with an increased risk of malignancy (lobular in situ neoplasia, atypical ductal hyperplasia or flat epithelial atypia) were found in a further 13 women, 10 over 40 years of age.

In total, 4.4% of women aged over 50 had unsuspected invasive or in situ carcinoma or a high risk lesion, compared to 4.0% of women aged 40–50 and <1% of women aged <40.

Based on these findings, screening mammography may be appropriate in women over the age of 40 prior to breast reduction surgery. Breast reduction specimens from women over 40 should be sampled more thoroughly. In younger women, where the chances of finding an incidental carcinoma are negligible, fewer blocks may be sufficient.

#### **O-78** Microvascular breast reconstruction: lessons learnt following our first 255 flaps

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**Introduction:** Autologous reconstruction is recognized as the "gold standard" and presently remains the preserve of specialist Plastic Surgery Centres. It can be performed rapidly and safely; patient satisfaction is high and it has economic advantages over implant-based procedures.

Over the last five years we performed 255 microvascular reconstructions, consisting of DIEP flap, muscle-sparing TRAM and superior gluteal artery perforator (S-GAP) flaps. The purpose of this study was to review outcome and developments in techniques that have led to increasing success.

**Patients and Methods:** Between 2001 and today, 222 patients underwent microvascular reconstruction (189 unilateral, 33 bilateral, 180 immediate, 75 delayed), requiring 255 flaps. A retrospective review was made of each case, including anastomotic technique and post-operative recovery.

**Results:** The overall number of cases has been rising every year, with 30 microvascular reconstructions in the first 3 months of 2007. Furthermore, an increasing demand

of bilateral microvascular breast reconstructions could be observed. Of the two hundred and fifty five flaps, a total of 10 flaps were lost, 8 in the first 3 years. Two (S-GAP) out of 145 flaps (1.4%) were lost over the last three years. Ten flaps were re-explored, 4 successfully. Important advances included team operating, the use of a venous coupler and venous salvage techniques.

**Conclusion:** In our experience autologous breast reconstruction is a very successful procedure both in regard of patient satisfaction and outcome. Flap survival, patient recovery and complications were all greatly improved with experience and use of innovative techniques. This paper supports the need to provide these techniques in committed centres.

#### **O-79** Skin-sparing mastectomy with immediate reconstruction: To leave or to take the nipple-areolar complex (NAC)

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**Background:** Nipple-preserving mastectomy and immediate reconstruction has further improved the aesthetic outcome of skin-sparing mastectomy. Formal indications are still not published and besides tumour location evaluated preoperatively, intra-operative frozen section is chosen by some groups to help in the final decision to remove or leave the NAC complex.

**Methods:** Forty one cases of skin-sparing envelope mastectomy and immediate reconstruction with intention to preserve the NAC were evaluated. In all cases the pre-operative evaluation showed by imaging (Mammography and ultrasound) a distance of at least 10 mm to the nipple-areolar complex. Cases selected were mainly extensive DCIS, multifocal invasive disease and a tumour/breast size relation or location favouring a worst cosmetic result with conservative treatment. Intra-operative evaluation of the retroareolar region, was done in all cases to decide the preservation or resection of the NAC complex. The methods of reconstruction used were variable and described as implant-only reconstruction (5; 12%), latissimus dorsi muscle with implant (32; 78%), and TRAM flap (4; 10%).

**Results:** In the studied sample there were 17 (41.5%) cases of extensive DCIS, 8 (19.5%) cases of multifocal invasive disease and 16 (39%) cases where tumour/breast size relation or location led to a mastectomy option. The frozen section analysis revealed invasion in the retroareolar position in 7 (17, 3%) cases, 5 (71%) of extensive DCIS. There were no false-negative results in the final report. Additional partial or complete removal of the NAC complex was undertaken in 4 cases (9.8%) due to necrosis (only 1 needed complete ablation and replacement).

**Conclusion:** In patients who are intended to undergo nipple-preserving envelope mastectomy, intra-operative frozen section examination of the retroareolar region is important to help in the final decision even when imaging pre-operative methods show a safe distance to the NAC complex. In our series it precluded a second intervention in 7 (17.3%) cases.

#### **O-80** CCND1 amplification and cyclin D1 expression in breast cancer and their relation with proteomic subgroups and patient outcome

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**Introduction:** Despite strong evidence regarding the role of CCND1 amplification and protein overexpression in