(LD) miniflap while modified radical mastectomy, skin sparing mastectomy and subcutaneous mastectomy were done in 2(5%), 4(10%) and 6(15%) patients respectively with complete reconstruction by extended(LD) flap. The complication rates were noted as follows: partial flap necrosis in 4 patients (10%), wound breakdown in 2 patients (5%), lymphorrhea in 2 patients (5%), seroma in 6 patients (15%), some of patients showed a minor deformity in the back which disappeared with time and most patients had temporary limitation of shoulder movements postoperatively but all recovered completely within few weeks. No patients underwent secondary nipple and areola reconstruction. No local recurrence or distant metastasis in any patient during the follow up period of our study. Evaluation of aesthetic results by patients revealed that 30 patients (75%) were deeply satisfied, 6 patients (15%) were satisfied and 4 patients (10%) were poorly satisfied. While, surgeon aesthetic evaluation was good in 28 patients (70%), satisfactory in 8 patients (20%) and fair in 4 patients (10%).

Conclusion: (LD) flap breast reconstruction is a very versatile, safe and satisfactory technique with a success rate of over 99% and is even suitable for high-risk patients. Donor site seroma is the most common complication and can be treated by repeated aspiration in outpatient clinic. Latissimus dorsi (LD) miniflap is the mainstay of breast reconstruction after partial mastectomy to repair defects in the lateral quadrants and the upper inner pole with low donor site morbidity and deep patient satisfaction.

572 Poster Do Surgeons See Benefit of Operating in Stage IV Breast Cancer?

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Introduction: Historically, patients with established Stage IV disease have been referred for primary palliative management with surgery usually limited to locoregional control. Survival with metastatic breast cancer has improved over the past few decades, but there is concern that resection of the breast primary could disrupt immunologic balance and propagate tumour seeding.

Method: A postal survey of 260 Consultant members of the Association of Breast Surgery (UK) aimed to define factors that influence the decision to surgically treat the breast primary with regards to tumour biology and metastatic variables. Opinions on factors they felt would influence tumour burden, immunosuppression leading to increased tumour burden and whether long term survival could be achieved with aggressive treatments was questioned.

Results: Eighty two (32%) responded. Units saw 100–800 new breast cancers and 5–200 metastatic cancers per year. Ninety percent of surgeons would consider surgery of the primary in Stage IV disease. The younger age group were favourable, with 75.6% treating age 20–50 years; 66% age 50–60 and 18.3% treating the 70–80 year olds with none considering patients aged more than 80 years. Diabetes and previous myocardial infarction negatively influenced surgeons 36.6% and 26.8% respectively as did 39% if patients had either previous chemotherapy or radiotherapy. No more than a third were influenced by tumour biology factors; 61% were positively influenced by the sole presence of bone metastases and 55% if only one distant site was affected.

The majority (86.6%) believe that duration of response to systemic therapy should influence the decision for surgery. Sixty percent did not know of any evidence relating to durable benefit of treating patients with metastatic disease and 36.6% believed that removing the primary tumour significantly eradicated a source of metastatic spread. More than two thirds (68.3%) didn't believe that removing tumour bulk had any impact in restoration of immunosuppressive factors. Nearly 50% believed that both debulking surgery increased efficacy of systemic therapy and that surgery and anaesthesia caused significant immunosuppression. Only 24.3% felt operative therapy can achieve complete remission and long-term survival.

Conclusion: Definitive answers in the absence of a large multicentre clinical trial, leave this issue controversial. Evidence to date suggests that an aggressive approach to surgery with curative intent in selected, physically fit patients with well-controlled metastatic disease with systemic therapy is at least a reasonable option for consideration. The oncology community remains divided and management of these patients warrants the perspectives of the multidisciplinary team.

573 Poster Sentinel Lymph Node Dissection in Breast Cancer Relapse After

Previous Axillary Surgery

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Background: Use of sentinel lymph node biopsy (SLN) is still controversial in patients with ipsilateral breast cancer recurrence (IBTR) and a previous

axillary surgery (axillary lymph node dissection or SLN). Although previous reports have showed extra-axillary drainage in 40–60% of patients, the clinical significance of this drainage is unknown.

Material and Methods: Between 2008 and 2011, SLN was performed in 40 patients with IBTR and previous axillary surgery. The day before surgery ⁹⁹Tc nanocolloid was injected retroareolar in the affected breast and injected intratumorally when the recurrence was after a mastectomy. Linfoscintigraphy and SPET-TC were obtained in all patients. During surgery, the sentinel node was identified using a gamma probe. Sentinel lymph node was excised at the discretion of the surgeon when considered technically feasible. In patients with previous SLN, an ALND was performed after the SLN. The study was approved by the IRB and all patients signed an informed consent.

Results: 40 patients were included in the study. In 31 (77%) the initial axillary surgery was an ALND and 9 (23%) patients has had a previous SLN. Median time between first surgery and local relapse was 108 months (range 15–276). In 3 (7%) patients, the recurrence was located in the mastectomy flap and in 37 the IBCR was after a lumpectomy, more frequently in the same quadrant that the initial lumpectomy (34 patients). The identification rate using SPECT-TC was 77% but only in 25 (62.5%) at least one sentinel node was removed. Extra-axillary drainage was recorded in 17 patients by the SPET-TC. In two cases the node wasn't found during surgery because low activity and in 6 cases the surgeon decided not to excise it. In 10 (25%) patients some hotspot was saw in the SPECT-TC but not removed. None of those patients had a relapse after a median follow-up of 12 months. In 5 patients (20%) the sentinel node was positive. Only one patient with previously SLN had a positive node in the second surgery and this was the only positive node. There were no false negative SLN in the patients who had a complete ALND.

Conclusions: Although rates of SLN excision in patients with previous axillary surgery and a local recurrence were low, 20% of patients had a positive SLN removed during the procedure that has an impact on the management of this patients.

74 Poster

Nipple Sparing Subcutaneous Mastectomy (NSSM) as Dual-plane Prosthetic Reconstruction Using the Modified Wise Pattern Mastectomy, Fasciocutaneous Flap and Titan-Polypropylen-Mesh-Interponation in Women with Macromastia

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Introduction: Ablative surgery of voluminous, ptotic breasts poses the problem of implant cover of the lower and lateral two thirds that are not coverd by the liftet pectoral muscle. Based on reduction mammaplasty techniques we applied a method that utilizes the excess mammary skin in terms of vertical, lateral, and medial de-epithelialized fascio-cutaneous tissue columns that serve together with a mesh (TiLoop®Bra) as cover for the subpectoral implant.

Material and Methods: Between 06/2009 and 09/2011 we performed 10 nipple and skin sparing mastectomies with marked tissue reduction (defined as difference in weight between implant and resected tissue of more than 300 g) in 7 patients. Indications comprise primary and secondary prophylactic as well as 4 nipple sparing mastectomies after neoadjuvant chemotherapy.

Results: Mastectomy weights ranged between 325 and 1100 g; implant volumes ranged between 295 and 685 cm³. There occured three partial necrosis of the nipple-areolar complex (NAC) and one partial skin necrosis at the margin of the vertical incision with inverted T cut. Two patients had to be operated on a second time for cosmetic reasons. The overall complication rate was very low.

Conclusions: The method described herein using the de-epithelialized excess mammary skin and the advantages of the titanized polypropylene mesh archieves stable reconstructions and a safe vascularization of the NAC.

575 Poster Subpectoral Implants in Oncoplastic-reconstructive Breast Surgery – Habit or Necessity?

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Introduction: We perform nipple-sparing subcutaneous mastectomies since 2002. Herein we report on 302 cases, in 107 of which acellular dermis or meshs as tissue interponates were used.

The standard procedure of subpectoral implant positioning with or without caudo-lateral tissue interponates (acellular dermis or mesh) can lead to postoperative problems due to detachment of muscle. Against this

Poster Sessions Friday, 23 March 2012 S213

background we did not form a submuscular pocket in individual cases, but instead placed the implant in a cranially and caudally covering mesh pocket

Material and Methods: Between 06 and 12/2011 seven patients were operated according to the above protocol, and the short-term follow up analyzed. Patients that had to get radiation therapy were not admitted to the study. Furthermore, we only included patients that were planned to get a second, contralateral operation so that corrections of the first operation were possible.

Patients were between 34 and 58 years old. One patient had to receive radiotherapy due to a nodal involvement not diagnosed before.

Results: Four patients had received prior surgery. Indications for subcutaneous mastectomies comprised invasive carcinomas with large DCIS, R1 resections or secondary prophylaxis.

Mastectomy weights ranged between 225 and 480 g; implant volumes ranged between 225 and 430 cm³. Titanized meshs (TiLoopBra) were used in four cases and partially absorbable polypropylen meshs (SeragynBR) in three cases as interponate materials. The cosmetic outcome was excellent, we the margins of the implants were not visible. In three cases there was a partial necrosis of the nipple and in one case a partial skin necrosis with the necessity of a wound revision.

Discussion: Using a mesh-pocket instead of subpectoral positioning of the implant makes the operation in individual cases easier. Post-operative mobility is immediate and unrestricted. Since the implant size has to be chosen according to the tissue weight removed, a bilaterally identical cosmetic result can be archieved. Complications inculde a mild seroma formation without the necessity to puncture. However, the small number of cases and the short term follow up do not allow to make any statements about consectuive capsular fibrosis.

576 Poster

Wide Local Excision of Breast Cancer Under Local Anaesthetic – a Treatment Option

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Background: Elderly and medically unfit patients make up a small but significant proportion of breast cancer patients. Treatment of such patients can be challenging.

Methods: A prospective study of breast cancer wide local excisions (WLE) performed under local anaesthesia (LA) from Mar 2008 to Apr 2010. Preoperative assessment included calculation of American Society of Anaesthesia (ASA) status, Portsmouth Physiologic and Operative Severity Score for enumeration of Mortality and Morbidity (PPOSSUM), mini mental state examination and oestrogen receptor (ER) status. Treatment options were then discussed with patients and their carers.

Results: 17 patients were included, with average age of 81 years (range 59–94 years). 10 patients had ASA grade 3 and 7 patients had ASA grade 2. 1% lignocaine with adrenaline was used diluted in normal saline as LA. Dose was calculated according to body weight, average volume injected was 37 ml (range 20–80 ml).

	Expected (Calculated by PPOSSUM score, if done under general anaesthesia)	Observed (Follow-up; range 8-34 months, median 19 months)
Morbidity	28.5% (range 15-60%)	5.8% (one patient developed haematoma)
Mortality	1.8% (range 0.1-6.1%)	0

Size range was 13-47 mm with median of 26 mm. 9 patients were ER negative and 7 were positive. One had involved margins needing further wider excision under LA. All patients were offered appropriate adjuvant treatment.

Conclusions: WLE of breast cancer under LA is a useful option. All patients in this selected 'unfit' group were treated as day cases. Despite a relatively short follow-up, all patients currently remain disease free.

577 Poster

Role of Intra-operative Specimen Imaging and Systematic Cavity Shaves in Reducing Re-excision Rate for Breast-conserving Cancer Surgery

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Background: Clear cancer resection margin in breast-conserving cancer surgery is considered to be one of the predictive factors for the local recurrence. This study aims to assess the ability of intra-operative specimen imaging and systematic cavity shaves in ensuring complete cancer excision.

Methods: 145 patients (149 breast cancers) undergoing breast-conserving surgery over a four-year period under a single consultant were studied prospectively. All these patients underwent preoperative mammography and ultrasonography. Cancer specimens were x-rayed intraoperatively. If cancer was not seen on the x-ray, the specimen was scanned under ultrasonogram. Cavity shaves were taken from around the main specimen.

Results: Preoperative mammogram detected 142 cancers (95.3%), ultrasonogram detected 135 cancers (90.6%) and combined detection rate was 99% (148/149). Intra-operative x-ray found 147 cancers (98.7%) whereas in the remaining 2 patients specimen ultrasonogram confirmed the cancer, hence achieving 100% intra-operative cancer detection. Cavity shaves were positive in 17 patients (11.4%), needing re-excision. 13 opted for wider excision and 4 decided to have mastectomy at this stage. Histological analysis confirmed that only 4 had residual cancer, 1 had carcinoma-in-situ and 12 did not have any residual malignancy. A third operation was required in one patient (0.67%).

Conclusions: We conclude that intra-operative specimen imaging

Conclusions: We conclude that intra-operative specimen imaging combined with the systematic cavity shaves during breast conserving surgery helps achieving complete cancer excision, thereby significantly reducing the re-excision rate.

578 Poster Ambulatory Breast Cancer Surgery is Safe and Feasible in an Asian

Ambulatory Breast Cancer Surgery is Safe and Feasible in an Asian Population

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Background: Breast cancer surgery done in the ambulatory setting has been shown to be safe, feasible and more cost effective. Although this is widely practiced in the West, it is less popular in Asia. Many in Asia believe that a patient receives ideal care and recovers best in hospital, and are thus hesitant and apprehensive about being discharged so soon after surgery. Since 2004, our Service has moved towards ambulatory breast cancer surgery as routine standard of care. In this study, we review the results and outcomes of this practice.

Methods: A retrospective review was conducted on 1858 breast cancer surgeries performed in 1742 patients from 1st March 2004 to 31st December 2010. Ambulatory surgery was performed either as a day procedure (with patients being discharged on the day of surgery) or as an AS23 procedure (whereby the patient remains in hospital and is discharged the following morning). All patients are reviewed by the surgical team, including a specialist breast care nurse, prior to discharge. Patients are then reviewed in the outpatient clinic by the breast care nurse 3 to 4 days later and by the surgeon about 1 week after surgery.

Results: The proportion of breast cancer surgeries performed in the ambulatory setting increased significantly from 48% in 2004 to 72.3% in 2010. Elderly patients, those with significant co-morbidities, and those with poor family support continued to be managed as inpatients, as were those who underwent immediate breast reconstruction following mastectomy. Seventy-four patients (5.7%) who were planned as ambulatory procedures were managed inpatient post-operatively instead. Closer monitoring because of intra-operative events (such as cardiac arrhythmias), wound bleeding and pain, giddiness and nausea were among the more common reasons for a change to inpatient management. Median length of inpatient stay was 2.0 days (1-22). In the initial 30-day period following discharge, 33 patients (2.5%) who had undergone ambulatory surgery were re-admitted through Emergency Services because of post-complications, compared to 20 patients (3.6%) from the planned inpatient admission group. Common reasons for readmission included wound hematoma, persistent bleeding and wound infection. These patients were typically discharged within 1 or 2 days of readmission.

Discussions and Conclusions: Our study has shown that close to three quarters of our patients now undergo ambulatory breast cancer surgery. A change to inpatient management because of intra-operative or post-operative problems is uncommon, as is the readmission rate within the initial 30 days following surgery. Careful patient selection, and a comprehensive set-up combining clinicians, specialist breast care nurses and coordinators, have been instrumental in making ambulatory surgery with early postoperative discharge from the hospital a feasible and well accepted concept among our local patients.

Poste

An Assessment of the Impact of OSNA (One Step Nuclear Acid Amplification) Analysis On the Rates of Axillary Clearance in Breast Cancer Patients

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Background: The introduction of OSNA (one step nuclear acid amplification) in breast cancer patients allows rapid and accurate intra-operative