

Results: Mean follow up time was 18.3 months (range from 6 To 49 months). It was performed after BCS in 77 cases (62 patients) and after breast reconstruction in 114 cases (93 patients). Most of the patients required just one procedure. Immediate complication was observed in 7 cases (3, 6%) and consisted of liponecrosis and cellulites. Follow up was made at least once after 6 months of the procedure. Only in 4 cases (5.9%) of the BCS group mammogram became abnormal after the procedure but always classified as benign lesion, with no need of further investigation. In 54 cases (70.1%), mammogram did not changed.

During the follow up, there was just one case of local recurrence (LR) that was misdiagnosed in the day of the procedure. Therefore we do not associate this LR to the procedure. Three patients were metastatic (bone metastasis) before the procedure. During the follow up the lesions were stable. No further events were identified.

Conclusion: This study is pioneer one and shows that breast fat grafting technique is effective and safe after breast cancer surgery. It is a simple procedure with minimal surgical complications. Local and distant disease control was not affect by the procedure. Mammographic changes were not found in the follow up. Of course further studies and longer follow up is needed to support our data, but no doubt this is a very promising technique with wide indication in the field of breast reconstruction.

288

Poster

Promoting quality of care through a regional breast cancer surgery community of practice

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To promote uniform high quality breast cancer surgical care in a defined geographic area (population 1.2 million), we implemented a unique Communities of Practice (CoP) model in 2006. The Champlain Regional Breast Cancer Surgery CoP is a network of healthcare practitioners and administrators in eight hospitals that links performance data and quality initiatives with individual and group learning. It leverages the clinical insights and commitment of practitioners and the system-oriented perspective of hospitals. We describe the experience of the CoP and lessons learned.

The CoP has functioned through a process of collaborative priority setting and annual workshops, quarterly journal clubs and weekly diagnostic/planning rounds (video-conferenced with regional hospitals), participant surveys, and e-mail newsletters and meeting summaries. Participants represent surgery, diagnostic imaging, pathology, medical and radiation oncology, nursing, social work, and hospital program leaders and administrators. Retrospective data (e.g. clinical volumes, mastectomy rates, re-operation rates) have been developed and shared. More detailed quality indicators (e.g. wait times, sentinel node procedure rates, positive margin rates) are currently being acquired.

The CoP has met with high levels of satisfaction and has strengthened relationships among practitioners and hospitals as evidenced by survey responses. Multidisciplinary and academic/community practitioner participation have been sustained. As an early priority, the CoP developed regional recommendations for managing patients with early stage breast cancer based on a process of evidence review and consensus. Standardized patient education materials have been developed and centralized educational programs established. Clinical mentoring and institutional collaboration have led to the establishment of sentinel node procedures in five hospitals. Clinical pathways reflecting combined best practices have been adopted across the region. Participants have placed a high value on the promotion of regional linkages and a culture of collaboration by the CoP, support of individual innovations, and the development of regional standards. A majority have indicated the intention to modify their practices based on CoP activities.

The Champlain Regional Breast Cancer Surgery CoP is a unique model that promotes collaborative learning and high quality care across a network of healthcare practitioners and hospitals. Active management of the CoP, support for the necessary infrastructure, ensuring the clinical relevance of CoP activities, executive sponsorship, and accurate and timely performance data are key success factors. Competing personal priorities are the main barrier to full CoP participation. There remains the need for more detailed data to support CoP and related activities and to formally evaluate the impact of the CoP on quality of care and clinical outcomes.

289

Poster

The QUEST Trial: a multi-centre randomised trial to assess the impact of the type and timing of breast reconstruction on quality of life following mastectomy

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Aims: To evaluate Health Related Quality of Life (HRQL) as a primary outcome measure in women undergoing Latissimus Dorsi breast reconstruction (LDBR)

Background: Breast reconstruction is performed to improve HRQL for women facing mastectomy, but there is a paucity of high-quality evidence to suggest optimal type or timing of surgery to guide patients and their surgeons in making informed decisions regarding their options in the future. This is particularly evident in the context of post-operative radiotherapy. A randomised clinical trial (RCT) is required, but as this is a novel approach internationally, a feasibility study is essential to assess acceptability of randomisation.

Methods: Funding has been awarded for a multicentre RCT consisting of two parallel phase III trials. Trial A compares autologous extended LDBR (ALD) with implant-assisted LDBR (LDI) for women where post-operative radiotherapy is not required; Trial B compares immediate with staged-delayed ALD (with initial temporary subpectoral tissue expander) for women where post-operative radiotherapy is anticipated. Centres can opt to participate in one or both trials.

Results: The trial is currently in development with extensive consumer input regarding the patient information sheets and the production of a patient information DVD. Their contributions have optimised communication in relation to the concept of randomisation and the trial design. Detailed patient and Health Care Professional (HCP) questionnaires and interviews will be used to gauge perceptions of equipoise evidence and randomisation.

Conclusion: As the rate of survival of breast cancer increases, HRQL is an increasingly relevant outcome. It is only through a RCT, however that Level I evidence can be produced to allow women to make informed decisions regarding their reconstructive options in the future. A randomised trial in breast reconstruction is a challenging proposal for both patients and their surgeons, but one which is desperately needed.

290

Poster

Mammographic volumetric assessment to predict specimen weight after BCS for breast cancer: development of a new tool for quality assurance

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Background: Breast conserving surgery (BCS) is well established in the management of breast cancer. Good local control can be achieved once margins are clear. To achieve margin clearance surgeons excise a variable amount of tissue with often unnecessary and extensive radial margins. Large unnecessary excisions have potential adverse cosmetic effects. There is no requirement at present to record specimen weight and none is recorded in operation notes or pathology reports. There is no established pre-operative planning and quality assurance tool to help surgeons minimise excessive tissue loss during BCS. We describe a simple tool to predict specimen weight after BCS for breast cancer which can be developed into a QA measure.

Method: Consecutive patients from September 2009 undergoing BCS for breast cancer were included in the study. Volumetric assessment of the cancer was made from the mammogram. The maximal antero-posterior (a) and medio-lateral (b) dimension was measured in cm from the cranio-caudal view of the mammogram and the cranio-caudal (c) measurement was taken from the oblique view. Volume, in cubic centimetres, can be measured by multiplying a, b and c. The dimensions of the proposed excision were taken as a+1, b+1, and c+1 and the volume calculated. The volume in cc co-relates with weight in grams. For each tumour size a predicted weight of the excision specimen was made. The proposed excision dimensions were marked on the skin and the lesion excised by a peri-areolar incision or a curvilinear incision over the lump. The cavity walls were clipped, for radiotherapy purposes, using titanium clips. Complete excision was confirmed either by palpation or specimen ultrasound of lesions in dense breasts where palpation was difficult.

Results: 30 patients were included in the study. Two had bilateral cancers, therefore a total of 32 procedures were performed. The age range of patients was 34 to 72. Tumour size varied from 7 mm to 43 mm. All

were palpable cancers except for 3 cases which required wire localisation for excision. Invasive ductal carcinoma was found in 30 cases and 2 were lobular cancers. All had clear margins for the invasive disease but in 2 cases DCIS was found at the margin and further excision was recommended. The specimen weight co-related well with the mammographic prediction in all except 2 cases where excessive tissue (more than 20%) was excised, both of which were in dense breasts. For summary purposes the average weights are shown in the table.

Tumour size (cm)	Number of cases	Average predicted weight (g)	Average of actual specimen weight (g)
<2	19	19	21
2-3	11	30	36
3-4	1	39	42
>4	1	125	104

Conclusion: Mammographic volumetric assessment allows better pre-operative planning and excision necessary for achieving clear margins. An algorithm can be developed for each tumour size with a predicted excision specimen weight. This can be developed into a quality assurance tool. Further work needs to be done in lobular cancers which are often underestimated on mammography.

291 Poster Simultaneous excision of non-palpable double lesions in the same breast using radioguided occult lesion localisation

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Background: Nonpalpable breast lesions are being successfully targeted by means of radioguided occult lesion localisation (ROLL). The present study describes an experience with our ROLL technique in the excision of more than one suspected occult lesions in the ipsilateral breast.

Material and Methods: Between December 2004 and July 2009, 325 patients underwent ROLL procedure. Included in this study were 6 women who underwent simultaneous excisions of ipsilateral nonpalpable double breast lesions.

Results: The mean age of the patients was 48.3 years (range, 42–61 years). All patients presented with two separate nonpalpable breast lesions detected either on ultrasonography (USG) or mammography or both. Multicentricity was observed in 5 patients (83%) and multifocality in 1 patient. Preoperative fine needle aspiration/tru-cut biopsy performed in 2 cases revealed atypical ductal hyperplasia. Image guidance was done either by USG as in 4 cases or stereotaxis in 2. All lesions were successfully localized and excised. Postoperative histopathology results revealed benign lesions in 5 cases and multifocal invasive ductal carcinoma in 1 case.

No. Age/Sex	Preoperative findings	Pathology (FNAB/Tru-cut)	Localisation technique	Final pathological diagnosis
1. 43/F	Mammography: Multicentric clusters of microcalcifications localized in the outer superior and inferior quadrants of left breast (BIRADS 4).	–	Stereotaxis	Outer superior lesion: lipogranuloma Outer inferior lesion: dystrophic calcification
2. 61/F	USG & Mammography: Multifocal 2 suspicious lesions each measuring 12 mm in diameter localized in the inner lower quadrant of the right breast (BIRADS 5).	–	USG	Multifocal IDC
3. 48/F	Mammography: Multicentric clusters of microcalcifications localized in the outer superior and inner inferior quadrants of left breast (BIRADS 4).	–	Stereotaxis	Outer superior lesion: fibrocystic disease Inner inferior lesion: fibrocystic disease
4. 42/F	USG: Multicentric 2 solid nodules measuring 12 mm and 7 mm in diameter localized in the outer superior and inferior quadrants of left breast (BIRADS 4).	Atypical ductal hyperplasia	USG	Outer superior lesion: sclerosing adenosis Outer inferior lesion: intraductal papillomatosis
5. 56/F	USG & Mammography: Multicentric 2 solid lesions each measuring 15 mm in diameter localized in the outer and the inner superior quadrants of right breast (BIRADS 3).	Atypical ductal hyperplasia	USG	Outer superior lesion: fibroadenoma Inner superior lesion: involuted lobular tissue
6. 40/F	USG & Mammography: Multicentric microcalcifications and 2 solid lesions measuring 20 mm and 10 mm in diameter localized in the outer and inner superior quadrants of right breast (BIRADS 4).	–	USG	Outer superior lesion: fibroadenoma Inner superior lesion: fibroadenoma

Conclusions: Based on our experience with a small number of patients, ROLL has proved to be a safe and an accurate procedure in the simultaneous excision of nonpalpable double lesions in the same breast.

292 Poster Indications and technique of one-stage implementation of radical mastectomy and laparoscopic ovariectomy in young patients with breast cancer

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In the Republican Oncological Scientific Center under the Ministry of Health of Republic of Uzbekistan a new approach to performing of the one-stage operation in young patients with breast cancer has been developed and introduced into practice. Out of 85 young patients who received surgical ovarian off as part of complex therapy of breast cancer in 53 patients were performed laparoscopic ovariectomy. Age of patients ranged from 27 to 45 years; mean age was 36.5±1.7 years.

In the preoperative period in addition to clinical visual examination all patients were examined in regard to levels of sex hormones (estrogen, progesterone) and Her-2/neu (Human Epidermal growth factor Receptor 2), the presence of positive results was a direct indication for the implementation of one-stage operations.

As a result of one-stage radical mastectomy and laparoscopic ovariectomy operating period lasted about 20–24 minutes that is 2 times shorter than in the laparotomic ovariectomy. Pain syndrome also was reduced due to minimally invasive method. This in turn led to:

- a decrease in taking of narcotic of analgesics;
- a rapid postoperative recovery period patients; and reduction of the length of patients stay in hospital (14.8±2.5 days, instead of 18.2±3.1 days).

Thus, the implementation of one-stage radical mastectomy and laparoscopic ovariectomy in young patients with breast cancer is effective both socially and environmentally, and leads to rapid rehabilitation of patients.

293 Poster The first in Bulgaria single institution experience with nipple-sparing mastectomy – preliminary results

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Background: Different kinds of skin and nipple-areola conserving mastectomies with immediate reconstruction are widely performed worldwide over the past decades but still are not popular in Bulgaria.

The aim of our study is validation of oncological safety and reconstructive efficacy of nipple-sparing mastectomy (NSM) with immediate reconstruction performed by us.

Material and Methods: Between Dec 2006 and Nov 2009 in Dept. of Breast Surgery, "St. Sofia" Hospital 15 patients with breast cancer (BC) or high-risk undergone NSM with immediate reconstruction with prosthesis or expander. Three of the women were operated bilaterally, i.e total number of NSM performed is 18, including 14 for cancer treatment and 4 prophylactic. We selected women with medium to small size breasts, mean age 41.7 years, tumor size up to 3.5 cm and tumor-areola distance at least 2 cm. The interventions were made under general anesthesia and local tumescent technique. We used periareolar, lateral, inframammary skin incision or excision of the overlying skin in case the tumor was very close to it. Axillary dissection was performed through the same incision or second incision in the axilla, depending on the case. In all cases the implants were placed subpectoral and the pocket were made again by local tumescent technique. Permanent implants were used when volume up to 400cc is needed and permanent expander Backer type in case of bigger volume desire. The retroareolar tissue was always sent separately for histologic exam. Definitive histological examination reveal no tumor invasion of the tissue under the nipple in none of the patients. Adjuvant therapy was administered if appropriate following the standards.

Results: Follow-up period was 1–34 months (mean 8.8 months). None of the patients developed local recurrence, distant metastasis and all are alive. Partial edge necrosis of the nipple appeared in 5 (27.8%) cases. Only 1 patient (5.6%) reported significantly changed NAC sensitivity. Overall cosmesis was subjectively judged by patients and surgeon as good to excellent in all cases (4-point scale of cosmetic results).

Conclusion: Although small number of cases and very short follow-up time our initial results are quite encouraging. This study is still ongoing and