

conservative breast surgery, and thirty patients had myomammary flap reconstruction. Age ranges from 23 to 63 years (median = 41.7).

Results: The oncologic outcome of extended LDF with added vascularized chest wall fat in the reconstruction of the huge breast was superior to myomammary flap with near equal oncologic outcome. In special situation; the therapeutic reduction mammoplasty is employed with better outcome than conventional conservative breast surgery as the safety margin which in the first is wider (5–10 cm) and more confidential than the conventional conservative breast surgery (CBS), the aesthetic outcome is better than CBS but the operative time and hospital stay are longer than CBS. In comparison to sparing mastectomies with extended LDF with added vascularized chest wall fat which is aesthetically and oncologically near equal to therapeutic reduction mammoplasty.

Conclusion: Modified extended latissimus dorsi myocutaneous flap with added vascularised chest wall fat is a single stage totally autologous breast reconstruction allows reconstruction without the additional cost of an implant, many complications of synthetic implants. Therapeutic reduction mammoplasty is an oncologically safe surgical procedure in special situations that yields satisfactory aesthetic results and low morbidity in large breasted women with cancer.

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Poster

Intraglandular Flap Technique with Racquet Incision for Cancers Located in Upper Outer Quadrant of the Breast

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Background: The two major aims of locoregional treatment of the breast cancer are the removal of the tumor with safe margins and the preservation of the natural contour of the breast. Intraglandular flap technique used for tumors located in upper outer quadrant of the patients with medium and small breasts that do not need to be treated with reduction mammoplasty might be the correct surgical option. In this paper, preliminary results of the patients operated with intraglandular flap technique with racquet incision were presented.

Patients and Methods: Fourty seven consecutive patients with T1 and T2 tumors were analyzed prospectively. Preoperative breast volume, mammographic tumor size, breast density, the length of incision, tumor characteristics, the results of sentinel lymph node biopsy, the distance to the nearest lateral surgical margin, specimen volume and postoperative complications were recorded.

Results: The median age of the patients was 46.5 (24–63) and the mean tumor size was 2.53±0.8 cm. The mean preoperative breast volume, the volume of excised specimen, the length of incision and the distance to the nearest lateral surgical margin were 920±125 cm³, 185±29 cm³, 9.68±1.8 cm and 1.65±0.4 cm, respectively. Fat necrosis was developed in 8 patients (17%) and hematoma in 2 patient (4.2%).

Conclusion: We believe that, intraglandular flap technique with racquet incision is easy and safe technique with respect to surgical margins and complications.

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Poster

Outcome of Breast Conserving Therapy Via Reduction Mammoplasty in Breast Cancer Patients

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Background: Macromastia has been considered a relative contraindication to breast conserving therapy (BCT) because of difficulties with postoperative radiation therapy and cosmesis. Breast volume of these patients cannot be reduced sufficiently with techniques like lumpectomy or segmental mastectomy. Oncoplastic surgery describes surgical techniques for wide excision of breast tissues containing tumor and healing of the residual breast tissue with best cosmetic results. Reduction mammoplasty (RM), which has long been used for the treatment of macromastia, has recently become a preferred technique in the surgical treatment of breast cancer patients with macromastia. In the present study, we have reported the late results of the 106 breast cancer patients with macromastia treated with this technique.

Patients and Methods: One hundred six breast cancer patients with macromastia who underwent BCT via RM between 2003 and 2010 at Ankara Oncology Hospital were enrolled in the study. Age, histopathological type, tumor size, local recurrence, distant metastasis, weight of the reduction mammoplasty specimens were analyzed. Radiotherapy to the breast was applied to all patients.

Results: Median age was 53 years. The median follow-up time was 27 months. Median weight of the reduction mammoplasty specimen for the cancerous side was 960±58 g, for the other side was 980±74 g. The 5-year disease free survival (DFS) rate was 68% and the overall

survival (OAS) rate was 77%. During follow-up one loco-regional recurrence was noted. Seventeen patients developed distant metastases. Axillary dissection was used for patients with metastatic sentinel lymph nodes proven at frozen section, and for patients with unidentified sentinel lymph nodes and clinically axillary positive.

Conclusion: Reduction mammoplasty provides techniques to achieve good esthetic results while also providing possibility for wide excision margins. Our findings indicate that BCS via RM are as effective and safe as standard surgical procedures in breast cancer patients with macromastia.

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Poster

Volume Replacement with Polyglactin 910 Mesh for Breast Reconstruction After Endoscopy-assisted Breast Conserving Surgery for Treating Early Breast Cancer – the Early Results

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Purpose: We introduce a new technique using a Vicryl® mesh made with polyglactin 910 for breast reconstruction after performing endoscopy-assisted breast conserving surgery (EA-BCS).

Materials and Methods: From July 2006 to July 2008, we performed EA-BCS in 30 patients with early breast cancer (EBC). Of the total patients, 14 underwent reconstruction procedure with the use of a Vicryl® mesh, the others were not. We were evaluated for their quality of life (QOL), the surgery-related complications and the cosmetic outcomes. Three patients were excluded from the study; two patients required mesh removal due to infection and the other patient had a total mastectomy performed due to a positive resection margin.

Results: The median age of the patient was 49.4 year (range 36–60 year) and all of the patients had a diagnosis of EBC (less than stage IIb). In general, the patients were satisfied with the outcome for their QOL. The patients were especially satisfied with the cosmetic outcome. The patients' satisfaction increased with longer follow-up, as compared to that for the shorter interval. At 10 months after surgery, there was encapsulated granulation tissue within a collection of tissue fluid, as seen on ultrasonography. At 20 months after surgery, the skin and breast shape were recovered.

Conclusion: The results of this study that for relatively short follow-up period, breast reconstruction with using Polyglactin 910 mesh, which is made from oxidized regenerated cellulose, resulted in satisfactory cosmetic results and a good QOL after BCS.

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Early Results of an Endoscopy-assisted Nipple-sparing Mastectomy for Early Breast Cancer

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Background: When the breast-conserving surgery (BCS) is not recommended, rising interest in improved cosmesis has increasingly led to the introduction of nipple sparing mastectomy (NSM) as potential alternatives to mastectomy for the surgical treatment of early breast cancer (EBC). We adopted endoscopic technique to NSM for the selected patients to minimize the surgical scarring and improve the aesthetic results.

Materials and Methods: We retrospectively analyzed 15 patients with EBC who underwent EA-NSM between June 2006 and June 2009. A 3-cm axillary skin incision was made along the axillary skin crease. First, we performed a dye- and radioisotope-guided sentinel lymph node biopsy (SLNB). The work space was created with a wound retractor. After the retromammary space was dissected through the axillary incision, we made a periareolar incision to excise tissues, totally, under endoscopic assistance and carried out frozen section biopsies to assess tumor invasion at the resection margins, especially NAC involvement.

Results: The mean volume of extracted specimens was 825.9 cm³. The mean operation was 213.2 minutes. All the patients underwent EA-NSM and SLNB. An ALND was performed in two patients who had positive frozen SLNB results. An immediate augmentation mammoplasty was performed in four patients. The postoperative complications were as follows: NAC necrosis in one patient, ecchymosis in two patients, and seroma in one patient. All these complications were cured by conservative management. After a mean follow-up period of 18.7 months, neither locoregional recurrence nor distant metastasis has been detected.

Conclusions: We have described a novel EA-NSM and SLNB for EBC. This technique can reduce surgical scarring and is expected to achieve the optional aesthetic outcomes. It is a feasible and viable option for selected patients requiring a mastectomy. However, a randomized trial comparing

EA-NSM with the conventional method and a large clinical trial with long-term follow-up are needed to accept its safety and complications.

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Poster

Excision of Breast Cancer Followed by Radiofrequency Ablation of Margins Decrease the Need for a Second Surgery for Close or Positive Margins

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Background: Excision of breast cancer followed by radiofrequency ablation (e-RFA) is a technique designed to increase the margin in breast conservative surgery (BCS) by heat generated from high frequency alternating currents. The objective of this study is to analyze the impact of the e-RFA in avoiding a second surgery for close or positive margins after BCS.

Material and Methods: From February 2008 to May 2010, 20 patients with a diagnosis of stage I invasive ductal carcinoma of the breast and planned BCS were included in the study after signing an informed consent. After lumpectomy, the RFA probe was deployed in the lumpectomy cavity and heated at 100° during 15 minutes. After the RFA, biopsies from each margin from the radial ablated cavity walls were obtained. The biopsies were sent fresh to Pathology and placed in the Triphenyltetrazolium chloride (TTC) vitality stain for assessment of the ablation zone width and tumor viability. Lumpectomy and sentinel nodes were analyzed by standard pathologic examination. All patients received radiation therapy to the breast as part of the BCS treatment.

Results: e-RFA was successful in 19 patients. Mean age was 66.9 years (range, 46–76 years). The mean pathologic size of tumor was 14.7 mm (range, 4–28 mm). In all patients the devitalized tissue extended beyond the 5–10 mm radial depth of the biopsy sample. Six patients (26%) had margins <2 mm in the final pathology, 4 of them with <1 mm margin. All the 6 patients had the incisional biopsies from the cavity wall with no tumor viability after stained by TTC. The other 13 patients had negative margins although in one patient, a small ductal in situ carcinoma was found at the edge of the cavity biopsy following the coagulative necrosis. She underwent a mastectomy. There were no complications from the RFA. Six patients (25%) developed a lipid cyst in the mammogram at one year after the RFA. At a median follow-up of 28 months (range, 12–43 months), no local recurrences have occurred.

Conclusions: This study supports the feasibility of radiofrequency lumpectomy cavity treatment to extend final negative tissue margins by approximately 1 cm. The e-RFA has spared 25% of patients to undergo a re-excision surgery for close or focally positive margins and in long term it may reduce local recurrences.

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Poster

Presence of Symptoms and Timing of Surgery Do Not Affect the Prognosis of Patients with Primary Metastatic Breast Cancer

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Background: Though most studies on surgical resection of the breast tumor in patients with primary distant metastatic breast cancer indicated that surgery is associated with prolonged overall survival, some state that this effect has been confounded by indication for an operation and the timing of surgery. In this study we analysed these possible confounders and their relation to overall survival.

Methods: The Eindhoven Cancer Registry of the Comprehensive Cancer Centre South records data on all newly diagnosed patients with cancer in the south of the Netherlands. With these data we already performed a study on 728 patients with primary distant metastatic breast cancer. The current study includes a selection of the patients, derived from four large

teaching hospitals in the south of the Netherlands, resulting in 318 eligible patients diagnosed between 1995 and 2005 for whom extensive analysis was possible.

Results: The median survival in patients treated with surgery of the breast tumor was 39 months, compared to 15 months for those without surgery ($p < 0.0001$). The median survival of patients with symptomatic metastatic disease ($n = 112$) was 19 months, compared to 22 months for those without symptomatic disease ($n = 167$) ($p = 0.15$). Patients who received surgery and whose metastases were detected before surgery of the breast tumor had taken place ($n = 40$) had a median survival of 38 months, compared to 40 months for patients in whom the metastatic disease was diagnosed after surgery ($n = 43$) ($p = 0.81$).

Conclusion: Presence of symptomatic metastatic disease and the timing of surgery were no significant prognostic factors for breast cancer patients with distant metastasis at diagnosis. Therefore, it is unlikely that the prolonged survival after surgery is explained by these two potentials confounders.

Table 1. Characteristics of patients who had surgery before or after the diagnosis of the metastases ($n = 83$)

	Number of patients with surgery		P-value
	Before diagnosis of metastases (n = 43)	After diagnosis of metastases (n = 40)	
Age at diagnosis (years)			0.53
<50	15	10	
50–69	17	16	
≥ 70	11	14	
Median age [range]	54.6 [32.6–88.7]	64.8 [27.1–92.1]	
T-classification			0.0001
T1–2	32	13	
T3–4	5	21	
Unknown	6	6	
Hormone receptor status			0.01
ER and/or PR positive	30	38	
ER and PR negative	11	2	
ER/PR unknown	2	0	
Site of metastases			
Bone	24	30	0.07
Liver	14	6	0.06
Lung/pleural	3	5	0.39
Cutaneous	2	1	0.30
CNS	0	1	0.60
Other/unknown	3	3	0.93
Number of metastatic sites			0.52
1	39	35	
≥2	3	5	
Unknown	1	0	
Symptomatic metastases			<0.0001
Yes	2	16	
No	41	24	
Margin status			0.86
Complete resection	33	28	
Positive margins	7	8	
unknown	3	4	

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Poster

Sentinel Lymph Node Biopsy in Breast Cancer: the Approach in Day Surgery Under Local Anaesthesia for Quality-of-life and Effective Cost Reduction

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Background: Sentinel lymph node biopsy (SLNB) is widely used in the management of breast cancer patients without axillary metastases and inflammatory breast cancer.

Purpose of this study is to investigate the approach in day surgery (DS) under local anaesthesia (LA) for quality of life and cost reduction.

Materials and Methods: From Jan.1st 2006 through Apr. 30th 2011 we performed 265 SLNB at St. M. Goretti Hospital. Mammary carcinoma was diagnosed as malignant by cytology and/or biopsy. Quadrantectomy and SLNB were performed at the same time in cases of positive cytology or biopsy. All patients underwent pre-operative lymphoscintigraphy