

2003 and May 2011. Patients with a mammographic lesion underwent VABB under ultrasonographic guidance (USG) with an 8-Gauge needle. Lesion classified as BIRADS 4a or below was completely removed under USG and patients classified as BIRADS 4b or above received VABB for the purpose of incisional biopsy only.

Result: When comparing the tumor size measured by clinical T stage based on US and by final pathological T stage after surgery, we found in 10 out of 10 cases (100%) in pT1a, the histologically measured tumor size was smaller than when measured by the US method. The pT1b included 38 cases, in which 31 cases (81.6%) showed a smaller size in histology than in imaging. 32 out of 62 cases (51.6%) in pT1c, 26 out of 55 cases (47.3%) in pT2 and zero out of three cases in pT3 (0%) reported a smaller size in histology compared to US, indicating that the greater size of primary tumor, the easier it is to have a pathological measurement leading to less occurrence of underestimation because the specimen removal diagnosed at VABB is relatively low and residual lesion remains across a wide area.

As a result of classification by ultrasound examination, 23 out of 35 cases (65.7%) at BIRADS 3-4a who underwent complete removal at VABB and 76 out of 133 cases (57.2%) at BIRADS 4b-5 who underwent incomplete excision for biopsy purposes reported a smaller size in histology compared to US, showing that histological underestimation occurs more often when the lesion is confirmed as malignant after complete removal of a target lesion through VABB.

Conclusion: In patients diagnosed with breast cancer through VABB, it is confirmed that when primary tumor is smaller at the point of diagnosis and complete removal is performed for the lesion of BIRADS 3-4a, it is more likely to result in underestimation in the histopathological measurement after breast cancer surgery compared with the size measured by pre-surgery US. Due to this underestimation, patients can miss adjuvant chemotherapy essential to their treatment, so it is necessary to consider the size of the clinical lesion appropriately prior to determining staging.

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Poster

Oncoplastic Breast Surgery: Oncologic Benefits and Limitations

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Background: Breast conservation therapy with lumpectomy is a valuable part of breast cancer treatment, with equivalent survival outcome to that of mastectomy. Recently, oncoplastic surgery has been popularized as a method to improve margins and yield better aesthetic outcomes when traditional lumpectomy either anticipates poor results or is not possible. This study was undertaken to examine the oncologic benefits and limitations of this technique in providing adequate breast conservative therapy.

Methods: This was a retrospective review of the surgical outcomes of all patients offered breast conserving therapy at a tertiary care hospital from 2008 to 2011. Patients were divided into three groups: the Traditional lumpectomy group (no attempt was made to close the defect), Oncoplastic level I group (less than 20% of the breast tissue excised; general undermining to close the defect) and Oncoplastic level II group (skin resection, greater than 20% of the breast tissue excised) which included batwing resection, Binelli mastopexy, reduction and J-raquet mammoplasties.

Results: A total of 237 patients had lumpectomies during this period; 106 patients in the Traditional, 97 patients in level I, 34 patients in the level II Oncoplastic group. There was no significant difference in the age, cancer stage, proportion of DCIS versus invasive disease, histology of invasive disease, ER, PR, Her 2 status and postoperative complication rate between all three groups. No statistically significant difference in the ability to get wide margins ($p=0.09$) or in the re-excision rate ($p=0.66$) between either of the oncoplastic and the traditional groups. However, the level II Oncoplastic group had a better ability to provide adequate resection for multifocal ($p=0.03$) and larger T stage ($p=0.01$) tumors, but only when DCIS was excluded. Finally, oncoplastic surgery achieved adequate resection of tumors in the lower inner/ lower outer quadrants ($p=0.01$).

Conclusion: Oncoplastic surgery level II techniques extend the scope for breast-conserving surgery, allowing for resection of the larger and multifocal tumors in traditionally cosmetically difficult quadrants of the breast, without greater postoperative complication rates.

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Poster

Intercostobrachial Nerve Role in the Postmastectomy Pain Syndrome

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Background: Breast cancer patients who underwent axillary lymphadenectomy often complain about pain, reduced sensation or sensory deficit. These clinical complaints are known as postmastectomy pain syndrome.

There are many clinical and laboratorial studies that identify the etiology of this syndrome and focus on the damage of the intercostobrachial nerve.

In our research we assessed the role of intercostobrachial nerve in postmastectomy pain syndrome and tried to reveal patient risk factors which increase risk of developing this syndrome.

Material and Methods: In the study we included unselected two following patients groups – in a study group were included 65 patients who underwent axillary lymphadenectomy with intercostobrachial nerve routinely sacrificed and control group where 65 patients underwent axillary sentinel lymph node biopsy. All patients underwent the procedure at least 8 months before we interviewed them. We collected data from patients' medical histories and conducted interviews with patients, asking them to assess pain, sensation, hand stiffness, weakness and edema. Patients also filled SF36v2TM questionnaires.

Results: In axillar region there are significant differences in pain sensation between both groups. In the study group 16 patients feel constant pain vs 7 patients in control group ($p=0.010$, pTM physical health summary in study group 48.7 points vs 52.3 points and mental health summary 34.6 vs 35.2. Comparing with general population (50 points average) in both groups are significant decrease in social function 35 vs 35 points, emotional role 32.6 vs 32.6 points and mental health 41.6 vs 38.7.

Conclusions: Intercostobrachial nerve plays an important role in axillar region pain development as well in sensory deficit development. Patients with higher body mass index have increased risk to develop pain syndrome after axillar lymphadenectomy with intercostobrachial nerve transection. Both groups showed equally decreased social and emotional life quality.

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Poster

Modified Extended Latissimus Dorsi Myocutaneous Flap with Added Vascularised Chest Wall Fat in Immediate Breast Reconstruction of Large Breast Women After Sparing Mastectomies

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Background: The development of SSM & NSM with immediate breast reconstruction achieved the goal of radical excision of the tumor with improved cosmetic outcome. Immediate autologous breast reconstruction yields the most durable and natural appearing results with the greatest consistency. The aesthetic results from autologous reconstruction are superior to those of implant based reconstruction due to their versatility, their more natural appearance, consistency and durability. Moreover, autologous tissue can better withstand radiotherapy.

Patients and Methods: In our series; five hundred & seventy patients of stage I to III breast carcinoma have autologous breast reconstruction with modified extended LDF with added vascularised chest wall fat; 47% had SSM and the remaining had NSM. Age ranges from 23 to 53 years (median = 40.5).

Results: Subjective patient satisfaction was excellent in 71%, good in 20%, fair in 7% & poor in 2% of cases. Bilateral size & shape symmetry are excellent in 56%, good in 26%, fair in 12% & poor in 6% patient. The overall RT-related complications are 9%, the most common complications are skin burns (5%) & fat necrosis (4%). Patients are followed for mean follow up of 75.5 months (2-96).

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, micro vascular procedure second stage surgery or surgical manipulation in the other breast. In addition the overall survival & local recurrence rates were similar to MRM.

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Poster

The Oncoplastic Surgery in Large Breast Egyptian Women with Cancer

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Background: The management of breast cancer in patients with large breast carries a lot of difficulties; breast conservation therapy develop more complications and unacceptable cosmesis due to heterogeneous distribution of the radiation dose and improper positioning of the breast between treatments. Traditional mastectomy is associated with unacceptable asymmetry and unpleasant discomfort due to the huge volume and weight.

Patients and Methods: Three hundreds of large breast women with stage I to III breast carcinoma have oncoplastic surgeries. Two hundred patients had sparing mastectomies with immediate reconstruction using extended LDF with added vascularized chest wall fat, fifty patients had therapeutic reduction mammoplasty, twenty patients had conventional

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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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