BREAST

Benefits of Surgical Treatment in Stage IV Male Breast Cancer Patients with Known Hormone Receptor Status
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INTRODUCTION: Male breast cancer (BC) represents <1% of all BC diagnoses. Given the rarity of this disease, limited research is available. Recent publications in female Stage IV BC have shown that surgical intervention has a survival benefit. This study aims to determine the impact of surgical intervention in men with Stage IV BC and known estrogen receptor (ER) and progesterone receptor (PR) status.

METHODS: The National Cancer Database was used to identify 539 Stage IV BC patients with known ER/PR status from 2004-2017. Chi-square tests examined subgroup differences between the treatment modalities received. Overall survival (OS) was assessed using the Kaplan Meier method (Figure). Multivariate Cox proportional hazard models examined factors associated with survival.

RESULTS: A survival advantage was noted in patients who received systemic therapy, surgery, and radiation (Trimodality) compared to systemic therapy alone (ST) (hazard ratio [HR] 0.622, 95% CI 0.459-0.843; p<0.0022). ER+ patients who received trimodality or ST and surgery (ST+Surg) had an improved 5-year OS rate when compared with ST (Trimodality 40%, ST+Surg 27%, ST 20%, p<0.0028). PR+ patients who received trimodality or ST+Surg had an improved 5-year OS rate when compared with ST (Trimodality 39% ST+Surg 24%, ST 20%, p<0.0325). The sequence of treatment was significant, with the greatest survival advantage noted in recipients of neoadjuvant chemotherapy (NAC) compared to adjuvant chemotherapy in ER+ patients (ER+ NAC HR 0.342, p<0.0244).

CONCLUSION: Surgery with ST has a survival benefit in stage IV male BC patients with known ER/PR status and should be considered after NAC in patients with ER+ disease.

Chest Wall Resection for Breast Cancer: 21st Century Experience
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INTRODUCTION: Breast cancer involving the chest wall is uncommon and usually due to recurrence. We hypothesized the combination of full thickness chest wall resection (FTCWR) with advanced surgical techniques and modern systemic therapy provides local control and good overall survival.

METHODS: We performed a retrospective review of adult women with breast cancer who underwent FTCWR (resection including rib or part of sternum) between 2000 and 2020 at our institutions. Primary endpoints included 90-day minor and major morbidities and all-cause mortality. Secondary endpoints were locoregional and distant recurrence, disease-free survival (DFS) and overall survival (OS).

RESULTS: Thirty-five patients met criteria, all FTCWR were for recurrence. Median time to recurrence was 6 years. Tumor subtype was 50% ER+HER2-, 50% ER-PR-HER2- and no tumor was HER2+; 58% were palliative resections. FTCWR included rib(s) in 89% and a portion of sternum in 57%; 94% required reconstruction, and 77% were R0 resections. There were no 90-day mortalities. Overall morbidity was 29%; 5 major, with 4 reoperations. Forty percent received neoadjuvant chemotherapy (CT), 17% neoadjuvant endocrine therapy (ET) and 9% neoadjuvant radiotherapy.

Table

<table>
<thead>
<tr>
<th>Overall Survival by Treatment Intent</th>
<th>Curative patients (n=15, 4 deaths)</th>
<th>Palliative patients (n=20, 6 deaths)</th>
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</thead>
<tbody>
<tr>
<td>1-y survival — 92% (95% CI: 79-100%)</td>
<td>2-y survival — 85% (95% CI: 67-100%)</td>
<td>1-y survival — 81% (95% CI: 64-100%)</td>
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<tr>
<td>2-y survival — 85% (95% CI: 67-100%)</td>
<td>3-y survival — 68% (95% CI: 46-100%)</td>
<td>2-y survival — 74% (95% CI: 54-100%)</td>
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<td>3-y survival — 66% (95% CI: 46-96%)</td>
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Figure 1. 15-year overall survival for men with Stage IV breast cancer by treatment modality received.
CONCLUSION: FTCWR was associated with low morbidity, mortality, recurrence rates, and good OS. FTCWR for curative and palliative intent by a multidisciplinary team at a tertiary center is an acceptable approach.

INTRODUCTION: Lymphedema (LE) is a serious complication without SLYMPHA. Univariate and multivariate analysis were included in the study. During follow-up visits, tape-measuring limb circumference method was used to detect clinical LE. The incidence of clinical LE was compared between patients with and without SLYMPHA. Univariate and multivariate analysis were used to assess the role of other factors in the appearance of clinical LE.

RESULTS: There were 580 patients included in the study; 35% of the cohort underwent SLYMPHA. Mean follow-up time was 44 ± 31.9 months. Patients who underwent SLYMPHA had a significantly lower LE rate (10% vs 26%; p=0.002; OR 0.4 [0.31-0.77]). Diabetes and removing ≥22 lymph nodes also correlated with increased LE; however, this effect disappeared on multivariate analysis.

CONCLUSION: SLYMPHA is a safe and relatively simple method, which continued its efficacy after longer-term follow-up. It should be considered as an adjunct procedure to ALND for all patients during initial surgery.

Long-Term Results of Simplified Lymphatic Microsurgical Preventing Healing Approach (SLYMPHA) for the Prevention of Breast Cancer-Related Clinical Lymphedema after Axillary Lymph Node Dissection

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INTRODUCTION: Lymphedema (LE) is a serious complication of axillary lymph node dissection (ALND), with an incidence rate of 16%. Simplified Lymphatic Microsurgical Preventing Healing Approach (SLYMPHA) is a safe and relatively simple method that decreases the incidence of LE dramatically. Our initial study showed an 88% decrease in clinical LE rate after a median follow-up of 15 months. The aim of this study was to confirm these results after a longer follow-up period.

METHODS: All patients undergoing ALND, with and without SLYMPHA, between January 2014 and November 2020, were included in the study. During follow-up visits, tape-measuring limb circumference method was used to detect clinical LE. The incidence of clinical LE was compared between patients with and without SLYMPHA. Univariate and multivariate analysis were used to assess the role of other factors in the appearance of clinical LE.

RESULTS: There were 580 patients included in the study; 35% of the cohort underwent SLYMPHA. Mean follow-up time was 44 ± 31.9 months. Patients who underwent SLYMPHA had a significantly lower LE rate (10% vs 26%; p=0.002; OR 0.4 [0.31-0.77]). Diabetes and removing ≥22 lymph nodes also correlated with increased LE; however, this effect disappeared on multivariate analysis.

CONCLUSION: SLYMPHA is a safe and relatively simple method, which continued its efficacy after longer-term follow-up. It should be considered as an adjunct procedure to ALND for all patients during initial surgery.

Masculinizing Chest Surgery for Gender Affirmation: a Retrospective Study of Outcomes and Patient Reported Satisfaction

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INTRODUCTION: Masculinizing chest surgery (top surgery) is the most common gender-affirming surgery. The objective of our study is to report the surgical and patient-reported outcomes after top surgery performed by a breast surgical oncology practice.

METHODS: Between June 1, 2017 and December 31, 2019, a total of 81 patients underwent top surgery at a single university-affiliated hospital. Patients were evaluated according to World Professional Association for Transgender Health (WPATH) guidelines. We performed a retrospective review of surgical outcomes and an anonymous survey was distributed to all patients.

RESULTS: Eighty-one patients underwent surgery during the study timeframe. Most patients underwent inframammary double incision mastectomies (75 [92.6%]), with 50 (61.7%) undergoing nipple reconstruction. Sixteen patients (19.8%) had a surgical complication including hematoma, seroma, nipple necrosis, and skin/scar complications (1.2%, 9.9%, 2.5%, 10.1%, respectively). There were 2 (2.5%) patients who underwent reoperation within 30 days of surgery and two (2.5%) who were readmitted postoperatively. The response rate for the anonymous survey was 47.2% (34/72). Patients were asked to rate their satisfaction with the cosmetic appearance after surgery on a numeric scale from 0-100, and the median score was 90 (IQR 81-100). Patients strongly agreed or agreed that surgery improved their mental health (76.5% and 17.6%, respectively) and overall quality of life (82.3% and 14.7%, respectively).

CONCLUSION: Masculinizing chest surgery performed by surgeons trained in breast surgical oncology had a low rate of surgical complications and positive patient-reported outcomes. Expanding the role of non-plastic surgeons in gender-affirming mastectomies can help improve access to gender-affirming surgery for transgender patients.

Quilting after Mastectomy Is Associated with Decreased Postoperative Seroma Rates in Patients with Breast Cancer: a Meta-analysis

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INTRODUCTION: There is no level 1a evidence as to whether quilting sutures allow preventing postoperative seroma in patients undergoing mastectomy for breast cancer. The aim of this study was to evaluate whether quilting sutures (QS) are associated with