cohort and later analyzed using paired and unpaired t-tests and linear regressions to determine significant correlations.

RESULTS: Hundred and sixteen pre-and post-operative 3D photo data sets were included. The sample included 29 subjects. The facial volume was analyzed both overall and comparing each subgroup (orthognathic versus orthognathic + fat grafting group). Post-operative facial volume increase averaged 23.7% for the entire cohort (FG and nFG). By week twelve, the swelling decreased about 62% from baseline. In all patients, there was a statistically significant decrease in facial volume with time. In the fat-grafted group, despite adding volume, was equal to the non-fat grafted group at week 1, yet the rate of decrease was faster with fat grafting at week 12.

CONCLUSION: The majority of post-operative facial edema decreases by 12 weeks following orthognathic surgery. In this cohort of patients, despite the addition of volume, concurrent fat grafting lessens postoperative edema, and leads to a greater magnitude and speed of resolution.

9.

MORBIDITY AND QUALITY OF LIFE OUTCOMES OF BREAST RECONSTRUCTION FOR UNILATERAL MASTECTOMY VS. ADDITIONAL CONTRALATERAL PROPHYLACTIC MASTECTOMY: A COHORT STUDY OF 211 BREAST RECONSTRUCTION PATIENTS MORBIDITY AND QUALITY OF LIFE OUTCOMES OF BREAST RECONSTRUCTION FOR UNILATERAL MASTECTOMY VS. ADDITIONAL CONTRALATERAL PROPHYLACTIC MASTECTOMY: A COHORT STUDY OF 211 BREAST RECONSTRUCTION PATIENTS

Mohamad E. Sebai, MBBS, Ricardo J. Bello, M.D., MPH, Eric L. Wan, BS, Charalampos Siotos, M.D., Jeff Aston, BS, David Cui, NA, Julie Lee, NA, Sethly Davis, NA, Mehran Haibi, M.D., MBA, Justin M. Sacks, Sacks, Michele A. Manahan, M.D., Carisa M. Cooney, MPH, Gedge D. Rosson, M.D.

The Johns Hopkins Hospital, Baltimore, MD, USA.

PURPOSE: Contralateral prophylactic mastectomy at the time of therapeutic mastectomy for unilateral breast cancer rates have more than tripled in the past decade despite the lack of evidence for survival benefit. We investigated morbidity and patient-reported quality of life (QoL) outcomes of performing a contralateral prophylactic mastectomy followed by bilateral breast reconstruction (CBR) compared to unilateral mastectomy and breast reconstruction (UR).

METHODS: Using IRB-approved, prospectively collected breast reconstruction registry, we queried pre- and post-operative data from patients who underwent CBR or UR at our institution. We used simple and multiple linear regression to compare morbidity and QoL changes between study groups (CBR vs. UR).

RESULTS: Between 2010 and 2015, 211 patients underwent CBR (n=86, 40.8%) or UR (n=125, 59.2%). While the unadjusted surgical morbidity was significantly higher for the BR group at 60 days post-tissue expander placement (p<0.001), it was not significantly different between groups immediately before final reconstruction, at 60 days post-final reconstruction, or at 1 year post-final reconstruction. After adjusting for possible cofounders, CBR patients did not have a statistically significant difference in pre- to post-reconstruction changes of QoL when compared to UR in the domains of Satisfaction with Breast (p=0.62), Psychosocial Well-being (p=0.71), Sexual Well-being (p=0.85), and Chest Physical Well Being (p=0.09).

CONCLUSIONS: Our findings suggest that performing a CBR for unilateral breast cancer is not associated with higher QoL compared to UR. There was a higher rate of short-term complications for staged breast reconstruction following tissue expander placement for the CBR group but not at long-term.

10.

EVALUATING THE SAFETY OF ABDOMINALLY BASED BREAST RECONSTRUCTION FOLLOWING ABDOMINAL SURGERY

Rachel B. Lentz, M.D., Merisa Piper, M.D., William Hoffman, M.D., Hani Sbitany, M.D.

UCSF, San Francisco, CA, USA.
**PURPOSE:** The popularity of abdominally based free flap breast reconstruction has grown tremendously over the past decade. However, controversy persists regarding the safety of performing these operations in individuals with a prior history of abdominal surgery.

**METHODS:** We performed a retrospective review of all patients who underwent abdominally based free flap breast reconstruction between 2008 and 2016. Patient demographics, operative details, and postoperative outcomes were assessed. All patients had at least 3 months of follow up for study inclusion.

**RESULTS:** We identified 132 patients who underwent 186 abdominally based free flaps. 70 patients (104 breast reconstructions) had a prior history of abdominal surgery. 57 patients (73 breast reconstructions) had no prior abdominal surgeries. Five patients underwent simultaneous gynecologic surgery at the time of their free flap harvest; these patients were excluded from analysis. The groups were appropriately matched with respect to BMI, race/ethnicity, smoking status, and comorbidities. We found no difference in overall abdominal complications requiring surgical intervention (14.5% vs 15.8%, p=0.84). Incidence of abdominal bulge was greater in the study group (11.4% vs 3.5%, p = 0.099), however this was not statistically significant. Breast related complications were also similar between the two groups. There were no total flap losses in either group. Rates of fat necrosis requiring excision were 15.4% vs 15.1%, p = 0.954.

**CONCLUSION:** Prior history of abdominal surgery does not significantly increase complications in abdominally based free flap breast reconstruction, and should not preclude patients from undergoing these reconstructions.

---

**THE EFFECT OF NEOADJUVANT CHEMOTHERAPY COMPARED TO ADJUVANT CHEMOTHERAPY IN NIPPLE-SPARING MASTECTOMY**

*Jordan D. Frey, M.D., Mihye Choi, M.D., Ara A. Salibian, M.D., Nolan S. Karp, M.D.*

*NYU Medical Center, New York, NY, USA.*

**PURPOSE:** The impact of neoadjuvant and adjuvant chemotherapy on outcomes in nipple-sparing mastectomy (NSM) have not yet been established.

**METHODS:** Patients undergoing NSM from 2006 to June 2015 were identified. Results were analyzed for reconstructions receiving neoadjuvant or adjuvant chemotherapy.

**RESULTS:** Of 840 NSMs, 28 received neoadjuvant chemotherapy while 93 received adjuvant chemotherapy.

NSMs with neoadjuvant chemotherapy were significantly more likely to have implant explantation (p=0.0015) and complete nipple necrosis (p=0.0004) compared to those with no chemotherapy. Compared to NSMs with no chemotherapy, those with adjuvant chemotherapy were significantly more likely to have hematoma formation (p=0.0021). Those with neoadjuvant chemotherapy were significantly more likely to have explantation (p=0.0239) and complete nipple necrosis (p=0.0021) compared to those with adjuvant chemotherapy.

NSMs with both neoadjuvant and adjuvant chemotherapy were significantly more likely to have complete nipple necrosis compared to those with neoadjuvant chemotherapy only and adjuvant chemotherapy only (p<0.0001). No differences were observed in NSMs with neoadjuvant chemotherapy and adjuvant radiation compared to NSMs with neoadjuvant chemotherapy alone.

**CONCLUSIONS:** NSM is safe to perform in the setting of neoadjuvant and adjuvant chemotherapy. However, neoadjuvant chemotherapy appears to increase complications; a synergistic effect between neoadjuvant and adjuvant chemotherapy likely yields overall greatest risk.

---

**BILATERAL BREAST REDUCTION OUTCOMES IN PATIENTS WITH AUTOIMMUNE CONNECTIVE TISSUE DISEASE**

*Gustavo A. Rubio, M.D., Seth R. Thaller, M.D., DM.D.*

*University of Miami Leonard M. Miller School of Medicine, Miami, FL, USA.*

**PURPOSE:** Autoimmune connective tissue diseases (CTDs) are associated with a wide spectrum of soft tissue and systemic manifestations that may significantly impact outcomes in elective breast surgery. Purpose of this study was to evaluate whether CTDs are associated with an increased rate of complications following bilateral breast reductions.