artery was 0.62±0.22 mm. The mean vertical distance from the pedicle to the maxillary tuberosity was 11.57±3.87 mm. Flap length was on average 67.51±8.82 mm and the neurovascular pedicle entered the flap 11.38±2.87 mm anterior to the PTM, located in the posterior 1:6 of the flap. Buccal artery and nerve advanced inside the flap as much as 66.8%±6.0% and 67.3%±5.8% of the total flap length. On average, the buccal artery started branching 3.8±0.8 mm distal to its entrance point. The mean number of main branches of buccal artery was 3.25±0.8. There were 2 collateral veins paralleling the Buccal artery in the main pedicle. ICG angiography showed that 84.8%±13.9% (mean±SD) of the flap length was instantly vascularized through the buccal arterial system.

**Conclusion:** Our results demonstrated a consistent presence of the buccal artery in all dissected flaps. Its relatively large diameter and extensive branching toward the corner of the mouth, evidenced by ICG angiography, would allow the harvest of an island flap based only on the buccal artery. This would avoid a second stage for the division of the pedicle of the flap after primary cleft palate repair.

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**Hepatitis B And C Is Associated With Greater Postoperative Complications Following Mastectomy And Breast Reconstruction**

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**Purpose:** Prior studies have analyzed the effects of Hepatitis B and C (HB and HC) on outcomes following hepatic surgeries. Fewer have investigated this association in plastic and reconstructive surgeries. We present a large-scale database analysis of outcomes following mastectomy and breast reconstruction in patients with HB/HC compared to patients without infectious hepatitis.

**Methods:** Data from the New York State Statewide Planning and Research Cooperative System (NYS SPARCS) from 2008-2013 was queried. Patients with confirmed HB and/or HC who underwent mastectomy and/or breast reconstruction procedures (identified using International Classification of Disease [ICD-9] codes) were compared to propensity-score matched patients without HB or HC who underwent these procedures to assess differences in postsurgical outcomes. Univariate analysis assessed differences in demographic information, baseline health characteristics, and perioperative factors as possible risk factors. Post-surgical outcomes were assessed by collecting infection rate, re-operation rate, postoperative complications, and length of hospital stay. Multivariate analysis revealed the effects of the possible risk factors on postoperative outcomes.

**Results:** 36,072 patients were identified. The majority (35,898) had no history of HB/HC infection, and 174 patients had documented history of HB/HC. There was no difference in age between the cohorts (56.3 vs. 56.6 years for non-HB/HC and HB/HC patients, respectively). The majority of patients were female (98.6% of non-HB/HC, 95.9% of HB/HC patients, p=0.005). There were significantly more Black/African American, Native American/Alaska Native, and Asian patients in the HB/HC cohort (p<0.001). Insurance types also differed with a larger proportion of HB/HC patients utilizing Medicaid (37.9% vs. 12.0%, p<0.001). Hepatitis patients had more frequent comorbid HIV/AIDS, deficiency anemias, chronic pulmonary disease, coagulopathies, depression, diabetes without complications, drug abuse, hypertension, fluid/electrolyte disorders, psychoses, and renal failure (p<0.04). These were used as covariates in the multivariate analysis. HB and HC patients had a higher incidence of postoperative hemorrhage (8.0% vs. 3.1%, p<0.01), urinary system complications (1.1% vs. 0.3%, p=0.030), death during hospitalization (0.6% vs. 0.1%, p=0.003), and a lengthier overall hospital stay (2.39 vs. 2.84 days, p=0.03). Other complication rates were comparable, including shock, infection, and cardiac, respiratory, and digestive complications. HB and HC patients were more likely to have any postoperative complication (10.3% vs. 5.4%, p=0.004), and to have two or more postoperative complications (1.7% vs. 0.4%, p=0.008). Multivariate analysis revealed that HB/HC patients had greater odds of postoperative hemorrhage (OR=2.45, 95% CI 1.39-4.32, p=0.002) and greater odds of having at least one postoperative complication (OR=1.72, 95% CI 1.04-2.87, p=0.03).

**Conclusion:** Patients with comorbid HB and/or HC had greater postoperative complications after undergoing mastectomy and breast reconstruction procedures compared to similar patients without HB and/or HC. They had greater odds of postoperative hemorrhage and of developing...
postoperative complications overall. They were more likely to be ethnic minorities and to be supported by Medicaid. Our results reveal that hepatitis infection may be an understudied contributor to historically demonstrated racial and insurance-based differences in operative complication rates.

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Improvement Of Pulmonary Function After Removal Of Breast Implant And Total Capsulectomy: An Objective Outcome Assessment In Breast Implant Illness

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Purpose: Breast Implant Illness (BII) after aesthetic breast augmentation remains a poorly defined syndrome. Patients attribute a spectrum of symptoms to breast implants. Previously published series have observed a subjective improvement in breathing following breast implant removal and total capsulectomy. We hypothesized that patients presenting with BII would have significant improvement in pulmonary function tests after removal of their breast implants and capsules (explantation).

Methods: A retrospective study of all patients presenting to a single-surgeon practice over 2 years who elected removal of breast implants and total capsulectomy due to a number of systemic complaints was conducted. Paired T-tests were used to compare PFTs before and after removal of breast implants and capsules. For patients with multiple post-op PFTs, highest post-op PFT scores were analyzed. Multivariate analyses and linear regression models were used examine the impact of patient- and implant-related factors on PFT changes.

Results: Sixty-nine (69) patients met inclusion criteria. Forced vital capacity (FVC) (mean pre: 3.67 +/- 0.61 L vs. post: 3.82 +/- 0.55 L), forced expiratory volume (FEV1) (2.78 +/- 0.44 L vs 2.89 +/- 0.39 L) and peak expiratory flow rate (PEFR) (5.91 +/- 1.43 L vs 6.56 +/- 0.96 L) were significantly improved post-operatively (p=0.004, 0.01, 0.0001, respectively). Forced expiratory volume at 25-75% of pulmonary volume (FEV25-75) and FEV1:FVC ratio were not significantly different (p=0.35, 0.78). Implant surface had a statistically significant impact on PFT change pre- to post-surgery, with textured implants showing a greater improvement in PFTs after their removal (p=0.009).

Conclusion: This study demonstrates that patients presenting with symptomatic implant BII had significant improvement in pulmonary function based on standard PFT evaluation after explantation. The results of our study indicate measurable restrictive effects of implants and their capsules on the chest wall particularly with textured implants. Further investigation is needed to elucidate the cellular mechanisms associated with the restrictive chest wall mechanics and inflammatory process associated with BII.

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Breast Implant Infections After Reconstruction: Clinical Characteristics Associated With Specific Microorganisms

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Purpose: Infection following implant-based breast reconstruction (IBR) remains a major cause of increased health care costs, morbidity and reconstruction failure. Rates of infection from 5% to 35% have been reported. While the microbiology of breast implant infections has been studied, however, associations of specific clinical variables with common pathogens are not well understood. The aim of this study is to identify clinical characteristics associated with specific microorganism in patients with breast implant infections, in order to better guide treatment and empirical antimicrobial therapy.

Methods: We retrospectively reviewed all patients who underwent IBR performed at our institution from 2007 to 2017 to identify cases of implant infection. Surgical site infection (SSI) was defined using the Centers for Disease Control and Prevention criteria. Demographic characteristics, comorbidities, surgical data, clinical presentation, laboratory, and microbiology data were collected. Comparative analysis of continuous variables and categorical variables were performed using the Mann-Whitney-Wilcoxon and Fisher’s exact tests, respectively. A value of p < 0.05 was considered significant.