CONCLUSION: Breast implant-associated ALCL is a very real disease entity that is not merely a spectrum of inflammation. Data remains elusive and lends itself to poor regulatory guidelines and recommendations for breast augmentation/reconstruction risk. Here we describe the first data set of patients representing the lowest possible incidence based on implant insertion rates in a defined population. Our findings illustrate and consolidate long held theories of causation and describe an epidemiologically significant result.

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Prospective Analysis of Breast Revision-Augmentation on Body Image Using the BREAST-Q in More Than 2000 Women: Results from a Nationwide Study

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PURPOSE: A large, 10-year, prospective, multicenter study was conducted to acquire post-approval data on Natrelle® round silicone-filled breast implants. This analysis evaluated changes in body image over time in subjects who had undergone revision-augmentation with these silicone implants.

MATERIALS AND METHODS: Adult revision-augmentation subjects received 2 validated BREAST-Q scales measuring body image (satisfaction with breasts and psychosocial well-being) as a Web-based survey. Surveys were completed preoperatively and postoperatively at year 1 and year 4. Scores were transformed to a 100-point scale, with higher scores indicating better outcomes. Effect size and z-test P values were calculated.

RESULTS: Preoperatively, 2198 subjects with silicone implants completed the satisfaction with breasts questionnaire and 2225 subjects completed the psychosocial well-being questionnaire. The satisfaction with breasts and the psychosocial well-being questionnaires were completed postoperatively by 2011 (91.5%) and 1996 (89.7%) subjects, respectively, at year 1, and by 1996 (90.8%) and 1580 (71%) subjects, respectively, at year 4. Significant improvements in body image as assessed by the 2 BREAST-Q scales were observed at year 1 and were maintained through year 4. Mean satisfaction with breasts scores increased from 51.8 preoperatively to 84.4 at year 1 (P<0.0001; mean change from baseline, 32.4) and 81.7 at year 4 (P<0.0001; mean change from baseline, 29.8). Effect sizes for satisfaction with breasts were large at year 1 (1.26) and at year 4 (1.16). Mean psychosocial well-being scores increased from 68.9 preoperatively to 87.4 at year 1 (P<0.0001; mean change, 18.4) and to 84.5 at year 4 (P<0.0001; mean change, 15.2). Effect sizes for psychosocial well-being were large at year 1 (0.82) and medium at year 4 (0.68).

CONCLUSIONS: Women who have undergone revision-augmentation with Natrelle silicone breast implants experienced significant improvements in body image that were stable over time. These data from a large number of subjects support the effectiveness of revision-augmentation with Natrelle silicone implants for improving women’s quality of life.

Autologous Breast Reconstruction and Post-Mastectomy Radiation: Is Delayed Reconstruction a Thing of the Past?

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BACKGROUND: In women who require post-mastectomy radiation therapy (PMRT), immediate autologous breast reconstruction is often discouraged with concerns for flap compromise. We aim to prospectively evaluate the postoperative morbidity and satisfaction reported by women undergoing delayed or immediate autologous breast reconstruction in the setting of PMRT.

METHODS: Patients enrolled in the Mastectomy Reconstruction Outcomes Consortium Study, who received PMRT and had free abdominally-based autologous breast
reconstruction were identified. Immediate reconstructions were performed prior to PMRT, and delayed reconstructions were performed after PMRT. Postoperative complications at one and two years after reconstruction were assessed. Patient reported outcomes were evaluated using the BREAST-Q questionnaire preoperatively, at one and two-years postoperatively. Univariate and mixed effects logistic regression analyses were performed to assess relationships among demographic, clinical variables, and outcomes of interest.

RESULTS: A total of 175 patients met our inclusion criteria. Immediate reconstructions were performed in 108 patients and delayed reconstructions in 67 patients. Overall complication rates were similar based on reconstructive timing (25.9% immediate and 26.9% delayed; p=0.54). Patients with delayed reconstruction report significantly lower preoperative (pre-reconstruction) scores (p<0.0001) for satisfaction with breast, psychosocial and sexual well-being than did patients with immediate reconstruction. At one and two years postoperatively, both groups of patients reported comparable levels of satisfaction with breast and in all other evaluated BREAST-Q domains.

CONCLUSIONS: Breast aesthetics and quality of life do not appear to be compromised by flap exposure to PMRT. Furthermore, immediate autologous breast reconstruction in the setting of PMRT appears to be as safe as delayed autologous breast reconstruction.

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Thin Patients are at Higher Risk for Venous Congestion During DIEP Reconstruction

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INTRODUCTION: Venous congestion occurs in 2–15% of deep inferior epigastric perforator (DIEP) flaps and often requires superficial inferior epigastric vein (SIEV) salvage.

RESULTS: 94 patients underwent 164 DIEP flaps. Mean suprascapular fat pad thickness less than 18mm (<18mm) occurred in flaps with suprascapular fat pad thickness less than 18mm (p=0.041). Five (3.0%) flaps exhibited venous congestion, with three (1.8%) requiring intra-operative SIEV salvage. All four cases of venous congestion in patients with pre-operative CTA occurred in flaps with suprascapular fat pad thickness less than 18mm (p=0.041).

CONCLUSIONS: There is a significantly increased risk of venous congestion with thinner suprascapular fat pads (<18mm), suggesting that venous congestion is not related to superficial draining system dominance or increased SIEV caliber. We recommend SIEV dissection with suprascapular fat pad thickness <18mm.

DISCLOSURE/FINANCIAL SUPPORT: None of the Authors has a financial interest in any of the products, devices or drugs mentioned in the manuscript.

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