diagnosis of diabetes or hypertension, radiation, or timing of reconstruction (all p>0.05).

CONCLUSION: Over half of our institution's flap losses occurred after patient discharge, greater than 48 hours post-operatively. This finding contradicts the notion that the vast majority of flap losses happen in the immediate post-operative period, most commonly as a result of vascular compromise. The advancement of microsurgical techniques is reducing the frequency of flap loss during this early period, when flaps are closely monitored and prompt revision is possible. We did not identify any specific risk factors for delayed flap loss, though all were left-sided reconstructions. More studies are needed to elucidate the etiology of late flap losses. With greater emphasis on early patient discharge, perhaps more detailed patient education on return precautions is indicated to increase flap salvage rate in this group of patients. <!--EndFragment-->

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QS42

Neo - Adjuvant Chemotherapy is Not Associated With Increased Risk of Complications in Immediate Autologous Breast Reconstruction

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PURPOSE: Neoadjuvant systemic approaches to breast cancer are increasingly being used for operable disease. Since surgery is generally performed at 2–4 weeks post completion of systemic therapy, the neutropenic window may not be completely overcome, resulting in the risk for increased complications. The purpose of this study is to evaluate the effect of neoadjuvant chemotherapy on post-operative complications in patients undergoing mastectomy with autologous flap reconstruction.

METHODS: All patients undergoing a mastectomy with immediate abdominal flap reconstruction from 2006 - 2016 were identified using the ACS NSQIP database. Demographics,

clinical characteristics, lab values and post-operative complications were extracted from the database. Both univariate and multivariate analysis were used to compare complication rates between the neoadjuvant and non-neoadjuvant population.

RESULTS: 1,833 patients were identified as having as mastectomy with immediate abdominal flap reconstruction. Of those, 89 patients received neo - adjuvant chemotherapy (NAC). The NAC cohort were more likely to be younger and have a lower pre - operative WBC, platelet and hematocrit. Multivariate analyses showed that the use of NAC was not associated with higher odds of returning to the OR [AOR (95% CI): 0.5 (0.3, 3.0)], surgical site infections [1.6 (0.7, 3.2)], need for transfusion [1.2 (0.2, 4.5)], wound dehiscence [1.6 (0.3, 6.1)] or development of serious complications [1.3 (0.1, 6.8)].

CONCLUSION: Neo - adjuvant chemotherapy is safe in women electing mastectomy with immediate autologous flap reconstruction despite lower pre-operative lab values.

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QS43

Blepharophimosis Ptosis Epicanthus Inversus Syndrome Caused by a ZC3H13 Gene Mutation

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PURPOSE: Blepharophimosis Ptosis Epicanthus Inversus Syndrome (BPES) is a rare craniofacial autosomal dominant disorder characterized by severe bilateral ptosis, telecanthus, epicanthus inverses, belpharophimosis and orbital dysmorphology. BPES type 1 is accompanied by ovarian

failure and attendant infertility, while type 2 manifests only eyelid and orbital involvement. While BPES is often associated with a dominantly inherited mutation in the forkhead transcription factor FOXL2 (3q23), we sought to capitalize on next generation whole exome sequencing to decipher the cause of BPES in a pedigree lacking a FOXL2 mutation.

METHODS: A male patient with BPES was identified at the Yale-New Haven Hospital. Following informed consent, clinical data and blood samples from both affected and unaffected family members were obtained. Genomic DNA was extracted from whole blood samples and subjected to exome capture followed by next generation sequencing. Sequence reads were mapped to the human reference genome. Variants with minor allele frequencies in reference databases were selected and annotated for impact on the encoded protein and for conservation of the reference base and amino acid residue among orthologs across phylogeny. Sanger sequencing was employed to verify candidate mutations. In addition, all FOXL2 exons were subjected to Sanger sequencing to verify sequence status.

RESULTS: A four-generation BPES pedigree was identified demonstrating autosomal dominant inheritance. In affected individuals, next generation whole exome sequencing identified a common non-sense mutation in ZC3H13 (13q14.13), which was confirmed by Sanger sequencing. A cytosine to thymine (C>T) alteration resulted in the conversion of arginine 1513 to a premature stop codon (R1513X). The variant 13:46538114 C / T was not found in dbSNP with an ExAC allele frequency of 1.651e-05. The amino acid residue arginine 1513 is evolutionarily conserved from Neurospora crassa (red bread mold) to Homo sapiens. All FOXL2 exons lacked disease-causing alterations. **Conclusions:** ZC3H13 is a putative tumor suppressor gene encoding a zinc finger CCCH-type containing protein. It localizes to nuclear speckles and is predicted to play a role in mRNA splicing and cell cycle progression. Our data suggest that ZC3H13 mutations represent an additional dominant subtype of BPES and point to a novel role for ZC3H13 in craniofacial development and disease pathogenesis.

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QS44

Characteristics of International Medical Graduates Who Successfully Matched in a U.S. Plastic Surgery Program. A National Survey

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PURPOSE: Top applicants from US medical schools compete for the few plastic surgery positions offered nationwide, making Plastic Surgery the most competitive specialty to match in. The specialty is even more competitive for international medical graduates (IMGs), with match rates being extremely low. In this study we aimed to identify the characteristics of the IMGs who successfully matched into a Plastic Surgery position.

METHODS: An anonymous, 28-question survey was sent to all US Plastic Surgery training programs to be distributed to the IMGs currently enrolled or recently graduated from each program. Questions to evaluate academic achievements, clinical background, number of publications/grants, years of research completed before applying and board scores were included. NRMP and SF official match data was used to validate the pool of applicants for the Integrated and Independent tracks respectively.

RESULTS: Response rates was 72% for IMGs matching into an integrated residency program (IMG-Int) and 18% for IMGs holding an independent position (IMG-Ind) within the last 7 years (2009–2016). Overall, 42% of IMG-Int, had another degree other than MD (PhD, Masters or other). In addition, 28% had >15 publications at the time of application, 28% between 10–15 and 22% between 5–10. Furthermore, 41% had completed three years of research prior to applying. The majority (33%) had USMLE step 1 scores in the range of 231–240 and Step 2 scores in the range of 231–240 where the most common (35%). Of all matched IMG-Int, 27% had already completed a surgical residency in their home country (plastic surgery: 60%; general surgery: 40%). All successful applicants matched in one of their top three choices, with 71% matching in their top choice. In regards to IMG-Ind, only two (18%) had another degree other than MD (PhD and Masters). Only 9% had >15 publications at the time of application, with the majority (45%) having between 3–5. More than half had completed two years of research prior to applying (57%). The majority (45%) had USMLE Step 1 and Step 2 scores in the range of 241–250. Only two (18%) had already completed a surgical residency in their home country (general surgery and obstetrics and gynecology). All