presented with orbital floor fractures from October 2007 to October 2015.

RESULTS: 152 patients with 159 orbital floor fractures were included. 122 (80.3%) patients were male, and the mean age was 12.2 years. Twelve patients (7.9%) sustained orbital floor fractures with tissue entrapment. At presentation extraocular movement (EOM) restriction, diplopia, nausea, and vomiting were all associated with tissue entrapment (P<0.001). Amongst patients with trapdoor fractures, the presence of nausea and/or vomiting was predictive of tissue entrapment: positive predictive value 80%, negative predictive value 100%. For patients with tissue entrapment, poorer ocular outcomes (persistent EOM restriction and diplopia) were significantly associated with the length of operation (P=0.007), but not with the time interval to operation (P=0.146).

CONCLUSION: Nausea and vomiting are valuable predictors of tissues entrapment, particularly when EOM restriction and diplopia are equivocal. In our study, radiological findings were predictive of entrapment, but a lack of consistent language in this area limits the external validity of these results. Our study draws attention to the relationship between operation length and poorer ocular outcomes, suggesting that case severity/complexity and surgeon technique/experience may influence ocular outcomes.

38.

ATYPICAL PROLIFERATIVE LESIONS AFTER REDUCTION MAMMAPLASTY: INCIDENCE AND IMPLICATIONS IN 993 REDUCTIONS

Amy S. Colwell, M.D., Melissa Mastroianni, M.D., Alex Lin, M.S., William G. Austen, Jr., M.D.

Massachusetts General Hospital, Boston, MA, USA.

PURPOSE: Reduction mammoplasty occasionally reveals unsuspected proliferative lesions or carcinoma. Few studies examine incidence, risk factors, and outcomes in this population.

METHODS: Retrospective review was performed between 2000 and 2012. Pathology was categorized as benign, proliferative, or cancer (DCIS or invasive).

RESULTS: Five hundred seventy-three patients had 993 reduction mammoplasties (85% bilateral, 15% unilateral). Cancer was detected in 23 (2.3%) specimens and proliferative lesions in 148 (14.9%). Compared to patients with benign pathology, patients with proliferative lesions or cancer were older (p<0.001), with larger BMI (p<0.001), increased unilateral procedures (p<0.001) and more had a history of cancer (p<0.001). On multivariate regression analysis, age and prior breast cancer were independent risk factors for proliferative lesions (OR 1.057, CI 1.039–1.075, p<0.001 and OR 2.201, CI 1.291–3.752, p=0.004) and age significantly predicted cancer (OR 1.050, CI 1.009–1.093, p=0.015). There was no association with resection weight (p>0.5). Fifty-four percent of patients with proliferative lesions and no history of cancer had a change in management with increased surveillance, hormones, radiation, chemotherapy, or surgery. If there was a history of cancer, 31% had a change in management. Of patients with DCIS or cancer, all required treatment.

CONCLUSION: Proliferative lesions of the breast may be more common than previously reported. Age and a history of breast cancer increase risk for proliferative lesions. All should be referred to oncology.

39.

A COMPARISON OF OPEN VERSUS ENDOSCOPIC CARPAL TUNNEL RELEASE WITHIN THE SAME PATIENT

Kavita T. Vakharia, M.D., Brett F. Michelotti, M.D., Diane Romanowsky, P.A-C, Randy M. Hauck, M.D.

Penn State Hershey Medical Center/College of Medicine, Hershey, PA, USA.

PURPOSE: Several studies have shown less postoperative pain and faster improvement in grip and pinch strength with the endoscopic technique. The goal of this study was to prospectively examine subjective and functional outcomes, satisfaction, and complications after both ECTR and OCTR in the opposite hands of the same patient.

METHODS: This was a prospective, randomized study in which patients with bilateral carpal tunnel syndrome underwent surgical release with both endoscopic and open techniques. The initial operative approach utilized was randomly assigned to the more symptomatic hand. Demographic data
and functional outcomes were recorded pre- and post-operatively, including pain, 2-point discrimination, Semmes-Weinstein monofilament testing, thenar strength testing, grip strength, the carpal tunnel syndrome functional status and symptom severity scores, and overall satisfaction.

RESULTS: In the 30 patients that completed the study, there were no significant differences in any measure at any of the postoperative time points. Symptom severity and functional status scores were not significantly different between groups. Subjectively, 24/30 patients did state they preferred the ECTR, mostly citing less pain as their primary reason, although pain scores were not objectively different. Differences in overall satisfaction also lost significance at the study conclusion. There were no complications with either technique.

CONCLUSION: Both techniques are well tolerated with no differences in outcomes. The added cost and equipment without added benefit makes ECTR usefulness questionable. The ability to perform OCTR wide-awake and outside of the operating room has lead the senior author to go back to OCTR in the majority of patients.

40.

RARE DISEASES ON THE PLASTIC SURGERY IN-SERVICE EXAMINATION

Nishant Ganesh Kumar, BS1, Brian C. Drolet, M.D.2, Sean Bidic, M.D.3, Scott D. Lifchez, M.D., F.A.C.S.4

1Vanderbilt University School of Medicine, Nashville, TN, USA, 2Vanderbilt University Medical Center, Nashville, TN, USA, 3American Surgical Arts, Vineland, NJ, USA, 4Johns Hopkins Hospital, Baltimore, MD, USA.

PURPOSE: The Plastic Surgery In-Service Examination (PSITE) is administered annually by the American Society of Plastic Surgeons to comprehensively test residents’ knowledge. In addition, more than 80% of exam participants are practicing surgeons, who take the test as part of continuing medical education. The purpose of this study was to determine the representation of rare diseases tested as part of the comprehensive knowledge on the PSITE.

METHODS: All questions from the 2010 - 2016 In-Service Examinations were reviewed. For each question, the primary diagnosis in the question stem was identified. The diagnosis was defined as rare if it was included in the Genetic and Rare Diseases database produced by the National Institutes of Health.

RESULTS: In total, 1450 questions were analyzed and 159 unique rare diseases were identified. On average, 15.8% of questions from each examination tested a rare disease (range 12.4% - 19.0%). Parry-Romberg disease (n=12), Treacher-Collins Syndrome and compartment syndrome (n=11) appeared most frequently. On section breakdown, the Craniofacial section had the highest proportion of rare diseases (27.7%) while the Breast and Cosmetic section had the lowest (7.7%).

CONCLUSION: Plastic surgeons frequently encounter rare but important disease processes in clinical practice. Although uncommon, knowledge of such pathology is essential for managing many clinical conditions (e.g., compartment syndrome, necrotizing fasciitis). However, the PSITE may better test residents’ comprehensive knowledge if the proportion of ‘rare disease’ questions better reflects the relative incidence of pathology in clinical practice.

41.

AN ANALYSIS OF 53 CRANIOFACIAL CENTER WEBSITES: CRANIOSYNOSTOSIS FAMILIES ARE BEING GIVEN INACCURATE, VAGUE, AND INCONSISTENT INFORMATION

Jeffrey Goldstein, M.D., Vivian Buchanan, PA-C, Michael Lypka, DM.D./M.D., Amanda Johnston, APRN

Children’s Mercy Hospital, Kansas City, MO, USA.

PURPOSE: Craniofacial center websites are an early and significant source of education for parents. The aims of this presentation are to analyze the answers given by these websites to selected questions about craniosynostosis, and to assess the variability and accuracy of these answers.

METHODS: The internet search-phrases “craniosynostosis,” “craniofacial center,” and “craniosynostosis center” were employed. The first 30 teams for each search were