intraoperative IV dexmedetomidine and IV acetaminophen (Group 1) and those who did not (Group 2). Outcome variables included postoperative narcotic use by morphine milligram equivalents (MME), time to oral intake, need for supplemental oxygen, length of stay (LOS), and rate of complications (eg, bleeding requiring exploration or readmission) within the 30-day postoperative period. Baseline characteristics were compared in both groups. Continuous variables were compared using t test for normally distributed data and Mann-Whitney U test for skewed data, whereas categorical variables were compared using chi-square test or Fisher’s exact test. Multivariable linear regression was used to analyze continuous outcomes, and multivariable Poisson regression with robust variance estimation was used to analyze binary outcomes.

RESULTS: One hundred ninety-three patients met inclusion criteria (Group 1, N = 54; Group 2, N = 139). Median age at PP was 11.7 (interquartile range, 10.4–15.5) months for Group 1 and 11.3 (interquartile range, 9.8–14.2) months for Group 2 (P = 0.13). Baseline characteristics such as weight, gender, type of palatoplasty, Veau classification, syndromic diagnosis, and prior use of Latham device were consistent between groups. ASA scores were found significantly different (ASA 1: 11.1% versus 29.7%, ASA 2: 75.9% versus 61.6%, ASA 3: 13.0% versus 8.7%, for Groups 1 and 2, respectively; P = 0.02). Group 1 required significantly lower doses of postoperative acetaminophen (mean dose: 71.0 mg/kg, 95% CI: 57.8–84.3 versus 90.9 mg/kg, 95% CI: 82.7–99.1; P = 0.01), as well as lower fentanyl requirements in the recovery room (mean dose: 0.68 µg/kg, 95% CI: 0.48–0.88 versus 1.18 µg/kg, 95% CI: 1.06–1.31; P < 0.001). Although Group 1 patients had shorter LOS, shorter duration to oral intake, lower pain scores, less narcotic requirements for breakthrough pain, and less 30-day complication rates (1.8% versus 5.0%; P = 0.45), these differences did not reach statistical significance.

CONCLUSION: The addition of intraoperative IV dexmedetomidine and IV acetaminophen during PP provides effective perioperative pain control, resulting in statistically significant decreased need for postoperative pain medication. Our study also documents an overall trend for decrease in LOS, time to oral intake, pain scores, total narcotic requirements, and postoperative complications. These results warrant larger studies to confirm the statistical significance of some variables.

Does the Strengthen Opioid Misuse Prevention Act Reduce Opioid Prescriptions Associated With Hand Surgery?

Presenter: Chelsea Viscardi, MS

Co-Authors: Yifan Guo, MD; Richard S. Zeri, MD; Tom Reisler, MBChB, BSc(Hons), MRCSEd; Karen Buckley, MD; William Irish, PhD

Affiliation: Brody School of Medicine at East Carolina University, Greenville, NC

PURPOSE: The opioid epidemic has become a leading cause of death in America. Various states have put into effect legislation to limit the amount of opioids that can be prescribed. In North Carolina, The Strengthen Opioid Misuse Prevention (STOP) Act came into effect January 1, 2018, which outlined new limitations on prescribing opioids to no more than 7 days after surgery. However, the efficacy of state mandated opioid laws have not been evaluated in hand surgery.

METHODS AND MATERIALS: A single-center retrospective chart review was performed for patients who underwent hand surgery between January 2015 and December 2019. Patients were excluded if they were under 12 years of age, had a multisystem trauma, inpatient admission for more than 48 hours, or had incomplete records. A review of the North Carolina Controlled Substances Database (PMP Aware) was conducted to assess for preoperative and perioperative (within 30 days of surgery) prescriptions filled. The total amount of opioids filled was converted to morphine milligram equivalents (MME). The average MME was compared between those who underwent surgery prior to and after initiation of the STOP Act. Subgroup analysis was performed in patients who underwent different types of surgery including metacarpal, tendon, phalangeal, and amputation. Additional analysis was performed to evaluate the patients who received excessive amount of opioids (>600 MME).

RESULTS: Of the 500 patients who met inclusion criteria for the study, 175 were in the before group and 325 were in the after group. The demographics, patient risk factors, and complications did not differ between groups. There was an overall 69.3% decrease in opioids dispensed per patient. This statistically significant decrease was also observed in metacarpal and tendon groups (84.2% and 60.9%, respectively). Although there was an observed decrease in the
Assessing Secondary Upper Extremity Lymphedema Patients for Surgical Intervention

Presenter: Itay Wiser, MD, PhD
Co-Authors: Babak J. Mehrara, MD; Michelle R. Coriddi, MD; Elizabeth Kenworthy, MD; Michelle Cavalli; Elizabeth Encarnacion; Joseph H. Dayan, MD
Affiliation: Columbia University, New York, NY

AIM: To evaluate preoperative assessment clinical tools for secondary upper extremity lymphedema surgical candidates.

METHODS: A prospective cohort study performed at a tertiary cancer center secondary lymphedema outpatient clinic. Lymphedema evaluation included limb volume measurements, bioimpedance, indocyanine green lymphography, lymphoscintigraphy, magnetic resonance angiography (MRA), lymphedema life impact scale, and upper limb lymphedema 27 (ULL-27) questionnaires.

RESULTS: A total of 118 patients were evaluated. Limb circumference difference underestimated lymphedema diagnosis compared to limb volume excess. Bioimpedance (L-Dex) scores highly correlated with limb volume excess ($r^2 = 0.714; P < 0.001$). L-Dex scores were highly sensitive and had a high positive predictive value for diagnosing lymphedema in patients with a volume excess of 10% or more. Indocyanine green was highly sensitive in identifying lymphedema. Lymphoscintigraphy had an overall low sensitivity and specificity for the diagnosis of lymphedema. MRA was highly sensitive in diagnosing lymphedema and adipose hypertrophy as well as useful in identifying axillary vein obstruction and occult metastasis. Patients with minimal limb volume difference still demonstrated significantly impaired quality of life.

CONCLUSION: Preoperative assessment of lymphedema is complex and requires multimodal assessment. MRA, L-Dex, ICG, and PROMs are all valuable components of preoperative assessment. Lymphedema clinicians can use these tools findings accordingly to tailor an optimal surgical plan for each patient.

Is There a Gap? Examining Gender Disparities in Industry Payments and Their Geographic Distribution Among Plastic Surgeons

Presenter: Jessica R. Cunning, MD, MBA
Co-Authors: Arturo R. Diaz, MD; Sammy Othman, BA; Gal Rappaport, BS; John P. Gaughan, PhD; Martha S. Matthews, MD
Affiliation: Drexel University College of Medicine, Philadelphia, PA

PURPOSE: Various medical specialties have demonstrated gender disparities involving industry-supported payments. We sought to determine if such gender disparities exist within plastic surgery across all practice settings over a multiyear time period and to characterize such discrepancies by payment category and geographical location.

METHODS: Industry contributions to plastic surgeons practicing in the United States were extracted from the Centers for Medicare and Medicaid Services Open Payments 2013–2017 databases. Specialists’ gender was obtained through online searches. Kruskal-Wallis tests compared payments (USD) by gender, both overall payments and by payment category. Linear regression estimated the independent association of female gender with increased/reduced payments while controlling for state-level variations.

RESULTS: Of 1,518 plastic surgeons across private and academic settings, 13.4% were female. Out of $44.4M total payments from the industry, $3.35M were made to females ($P < 0.01$). During the study period, female plastic surgeons received lower overall payments than males (median [interquartile range (IQR)], $3,500 [800–9,500] versus $4,160.60 [1,000–19,728.20]; $P < 0.01$). This trend persisted nationwide after normalizing for year (median [IQR], $2,562.50/y [770–5,916.25] versus $3,200/y