fractures, Group 2: Le Fort-like, lacking 1 feature of Le Fort-type fractures and Group 3: Le Fort-type fracture patterns. Univariate methods were employed to compare groups.

RESULTS: Of the 24 patients identified, 75% were male, mean age was 8.6, mean ISS 23.7 and mean GCS 9.7. The two most common causes of these fractures patterns were MVA (67%) and pedestrian (25%). 60% were managed operatively. 58% patients had skull fractures, 45.8% intracranial trauma, and 17% developed meningitis. One patient had a C-Spine injury. Group 1 had 8, group 2 had 4 and group 3 had 12 patients. Significant differences were age 5.9 vs 10.4 between group 1 vs group 3 (p=0.004). No differences in ISS, operative repair, complications, LOS, presence of skull fractures or intracranial trauma were found between these groups.

CONCLUSION: We present the largest study of pediatric patients presenting with pterygoid fractures associated with facial trauma. We find Le Fort-type fractures present in older children but younger children rarely display Le Fort-like patterns.

P13.

OXY133, A NOVEL OSTEOGENIC AGENT, PROMOTES BONE REGENERATION IN THE RAT ALVEOLAR CLEFT MODEL

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PURPOSE: Bone morphogenetic proteins (BMPs) play a central role in the development of bone regeneration therapies in cleft surgery. However, the high cost and side effect profile, including significant inflammation, limits its broad application. Osteogenic oxysterols--naturally occurring products of cholesterol oxidation with osteogenic properties--are a promising alternative. In this study, we studied the impact of Oxy133, a specific oxysterol isoform, on in vivo bone regeneration in a rodent rat cleft model.

METHODS: Critical-sized alveolar defects were generated in Sprague-Dawley rats. Defects were reconstructed with either no treatment, a collagen sponge without additive, a collagen sponge containing BMP-2, or a collagen sponge containing 1, 10, or 20 mg of Oxy133. Alveolar segments were harvested after 8 weeks for histologic and radiographic analyses. Peripheral blood was collected at the various time points before euthanasia to assess inflammatory markers.

RESULTS: Defects treated with BMP-2 and 20 mg of Oxy133 showed the greatest amount of new bone formation. Treatment with the lower doses Oxy 133 demonstrated significant increases in bone formation compared with untreated defects. Histologically, bone regeneration was characterized by architecturally mature bone and near complete bridging of the alveolar defect. Animals treated with Oxy133 showed no evidence of upregulation of local or systemic inflammatory responses.

CONCLUSION: Oxy 133 is able to promote bone regeneration in an alveolar cleft model. It has the capacity to heal alveolar defects without a severe immune response. These observations demonstrate that Oxy133 has strong clinical potential as a viable alternative to BMP-2 in bone tissue engineering.

P14.

CLEFT PALATE WIDTH: DOES IT CORRELATE WITH VEAU CLASSIFICATION AND OUTCOME?

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PURPOSE: Wider cleft palates are thought to be associated with increased complications and inferior outcomes following repair. Objective cleft palate photographic measurement and assessment of complications has not been previously performed. Our purpose is to quantitatively characterize a series of cleft palate dimensions and to investigate possible correlations with Veau classification and intra-, peri-, and post-operative outcomes.

METHODS: Primary cleft palate repairs performed by the senior author over a two-year period were reviewed. Standard photographs taken at the time of repair were analyzed using Image-J software. Width measurements were correlated with Veau classification, intra- and peri-operative
variables, and adverse outcomes. Statistical tests performed included simple regression analyses and multiple regression analysis.

RESULTS: 50 patients had adequate photographic documentation for inclusion in the study. 44% of patients were classified as Veau I (mean cleft width [MW] 5.4 mm), 28% Veau II (MW 8.9 mm), 16% Veau III (MW 11.3 mm), and 12% Veau IV (MW 10.0 mm). No patients exhibited post-operative bleeding, dehiscence, airway problems, infection, fistula formation, or return to the operating room. We found that increasing cleft width significantly predicts higher Veau classification (p<0.01), increasing operating time (p<0.05), increased hypernasality (p<0.05), and speech delay (p<0.001). The presence of an intentional alveolar fistula (Veau III or Veau IV clefts) significantly predicts fluid emission (p<0.001). Cleft width did not predict fluid emission, or length of stay.

CONCLUSION: Our data demonstrate that wider pre-operative cleft palates correlate with higher Veau classification, increased operating time and slightly worsened post-operative sequelae, including hypernasality and speech delay.

P15.

ANALYSIS OF FEMALE PLASTIC SURGERY AUTHORSHIP

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PURPOSE: Authorship in a peer-reviewed journal is highly regarded in both the academic and private sectors of plastic surgery. Recently, several articles have cited an increased contribution from females in plastic surgery literature; however, none to date have analyzed the demographic trends of these female authors. The purpose of this study is to conduct an analysis of female authors in three well-known plastic surgery journals.

METHODS: Articles published in Plastic and Reconstructive Surgery, Annals of Plastic Surgery, and Aesthetic Surgery were reviewed between January and December 2015. Supplemental journals, review, and CME articles were excluded. First, second, and last authors were reviewed and stratified by a number of categories including gender, geographic location, and title. Due to differences in training and academic title appointments worldwide, titles were only reviewed for authors residing in the United States.

RESULTS: 2050 authors were reviewed. 20% of first authors, 24% of second authors, and 15% of last authors were female. Female representation was fairly equal amongst the journals. 39% of female authors were international. Overall, 16% of graduated plastic surgeons and 25% of residents published in these articles were female, compared to 14.2% graduated plastic surgeons and 32.4% residents.

CONCLUSION: Faculty on par with national percentages of female plastic surgeons; however, female residents have lower representation in literature than in the community as a whole. Residents and faculty must promote productivity of the younger generation of female plastic surgeons to continue increasing contributions of females to the specialty.

P16.

TRENDS IN OPERATIVE PERFORMANCE FOR INDEPENDENT AND INTEGRATED PLASTIC SURGERY RESIDENTS: HOW SOON DO INDEPENDENT RESIDENTS CATCH UP?

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PURPOSE: This study aimed to differentiate between integrated (PGY4-PGY6) and independent (PGY1-PGY3) plastic surgery residents regarding their operative competency and evaluate whether any discrepancy exists between these groups during plastic surgery training.

METHODS: We compared independent and integrated plastic surgery residents at our institution using