psychologic burden. The most common current reconstruction is a two-stage free gracilis muscle transfer (FGMT) after cross face nerve graft (CFNG). This methodology requires a prolonged period (~1.5–2 years) from the time of first surgery to smile. New techniques in using both a CFNG and motor nerve to masseter (MNM) as dual power sources in a single stage surgery have been described in adults. Here we examine our experience for this technique in children.

METHODS: A retrospective study was performed examining all patients who had undergone a dual innervated single stage FGMT at two pediatric hospitals from 2016 to 2019 by the senior surgeon. Demographics, etiology, perioperative characteristics, time to smile (mandibular and emotional), and Sunnybrook scores were recorded.

RESULTS: Five patients were identified who met inclusion criteria with a mean age of 11.8 (range 8–20). Two patients had congenital unilateral facial palsy while three had acquired facial palsy. Four (80%) patients received dual end:end neural coaptations of the CFNG and MNM to the obturator nerve, whereas 1 (20%) had an end:side coaptation of the CFNG to the obturator nerve and end:end of the MNM to the obturator nerve. The average time to mandibular smile was 103 ± 15.4 days (3.4 months), and the average time to spontaneous emotional smile was 245 ± 48.1 days (8.2 months). Preoperative Sunnybrook scale was 32 ± 7.5 and improved to 55.3 ± 20.6 at 8 months postoperative.

CONCLUSIONS: Dual-innervated FGMT is effective in the pediatric population for restoring facial motion for patients with unilateral facial palsy. Patients are able to harness the advantages of a stronger motor source (MNM) as well as the component of an emotional stimulus (CFNG). Given the need for sustainable longevity of reconstruction and the context of psychosocial burden at this age, this dual-innervated approach may be considered to supplant the standard 2-stage CFNG-FGMT as a first line reconstructive option.

An Early Experience with Gender-affirming Facial Feminization Surgery at a Public, Safety-net Hospital

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PURPOSE: Facial feminization surgery (FFS) improves quality of life and reduces the risk of mental health disorders in trans women.1 However, the prohibitive cost and poor insurance coverage make FFS inaccessible for many patients. Zuckerberg San Francisco General Hospital (ZSF) was among the first public, safety net hospitals nationwide to provide gender-affirming care, including FFS. We sought to examine the postoperative course of patients who underwent FFS at ZSF and describe barriers to providing FFS in a public hospital setting.

METHODS: A retrospective review identified patients who underwent facial feminization surgery at ZSF. All patients had at least 1 year of follow up. Demographic data, comorbidity profiles, and postoperative complications were collected from the medical record. FACE-Q modules (scored 0–100) were used to survey patients at least 1 year postoperatively to assess their quality of life and satisfaction with surgery. Hospital capacity data were generated from an internal review of gender-affirming care services.

RESULTS: Between 2017 and 2019, 17 patients underwent comprehensive FFS surgery at ZSF. The median age was 41 years (IQR 38–55), and 9 patients (53%) racially identified as nonWhite. All patients were uninsured. FFS consisted of a median of 9 procedures, the most common of which were frontal cranioplasty (n = 13, 77%), open brow lift (n = 13, 77%), rhinoplasty (n = 12, 71%), and mandible contouring (n = 12, 71%). There were no complications, readmissions, or reoperations within 30 days. Five patients (29%) underwent revision procedures, the most common of which was revision rhinoplasty (n = 3). The postoperative survey, with 47% of patients responding, found high satisfaction with the surgical outcome (median 90, IQR 50–100), excellent postoperative psychological functioning (median 88, IQR 77–100), and low levels of appearance-related distress (median 19, IQR 0–46). The primary challenge to scheduling and performing FFS at ZSF during the study period was operating room and hospital capacity, as an estimated 243 operating room hours and 45 inpatient bed days were required to cover all FFS procedures. Several patients had their surgery rescheduled because emergent trauma cases took precedence, which posed a hardship for patients who had previously made arrangements for their postoperative recovery.

CONCLUSIONS: Performing FFS for trans women in a public hospital setting was associated with low rates of
postoperative complications and excellent patient satisfaction. The hospital resources required to provide comprehensive gender-affirming care, and scheduling conflicts with emergent procedures, negatively affected efficient care delivery. Ultimately, a financial assessment led the ZSFG administration to outsource comprehensive FFS to a nearby academic hospital. Future efforts should continue to expand access to gender-affirming surgery for underserved populations, with an eye toward sustainability from a cost and healthcare utilization perspective.

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The Implications of Same-day Discharge after Primary Unilateral Cleft Lip Repair: An NSQIP-based Study

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INTRODUCTION: Orofacial clefts are the most common craniofacial anomaly observed in the United States. Permitted by recent advancements in anesthesia and multimodal pain management, there has been a trend toward outpatient cleft lip repair to alleviate hospital burden and minimize healthcare costs. The purpose of this study was to compare complication rates between outpatient and inpatient cleft lip repair from large national samples as well as identify preoperative factors that predicted discharge status.

METHODS: The NSQIP database for pediatrics was used to analyze 30-day outcomes for all patients undergoing cleft lip repair (CPT code 40701) from 2012 to 2019. Complication rates were compared across three groups: same day discharge, next day discharge, and later discharge. Preoperative factors, including comorbidities and demographics, were analyzed to determine the impact of discharge date on complications as well as identify independent predictors of discharge timing and perioperative complications.

RESULTS: A total of 6689 patients underwent primary cleft lip repair, with 16.8% discharging on day of surgery, and 72.4% discharging 1 day after surgery. Complication rates were statistically equivalent between same day and next day discharge. Preoperative factors predicting complication and postoperative admission included age less than 6 months and weight less than 10 pounds at the time of surgery. Patients discharged after more than one day in the hospital had higher rates of complications as well as more preoperative comorbidities.

CONCLUSIONS: Complication rates between same day and next day discharge are equivalent, suggesting that same day discharge is a safe option in select patients. Clinical judgment is critical in making these decisions.

Endoscopic Strip Craniectomy for Metopic and Sagittal Craniosynostosis: Does Helmeting Time Matter?

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BACKGROUND: Craniosynostosis is the premature fusion of one or more cranial sutures, leading to restriction of craniofacial growth. The most common types of craniosynostosis are metopic (MC) and sagittal (SC), leading to trigonocephaly and scaphocephaly, respectively. As a result, disproportionate changes occur in cranial vault asymmetry index and cranial index, which are expected to trend toward normalization after cranial vault reconstruction or endoscopic strip craniectomy (ESC) with postoperative helmet therapy. ESC when compared with cranial vault reconstruction has been shown to decrease operative/anesthesia time, blood loss, blood transfusion, and length of hospital stay as well as earlier onset of surgical intervention. For ESC, however, the postoperative duration and compliance of helmet therapy is crucial to correct MC and SC asymmetry. There are no studies to our knowledge comparing helmet therapy duration for MC and SC. The purpose of this study was to assess the period of postoperative helmet therapy and determine differences, if any, between MC and SC.

METHODS: A single institution retrospective review was performed from 2015 to 2019 for patients with MC and