combining a face and necklift procedure with fat grafting and full face deep plasma skin resurfacing. Patients ages range from 50-86, with 88 females and 2 males. The procedures were performed under IV sedation (88 patients) and 2 under general anesthesia (2 patients).

Once adequate general or IV sedation was administered, tumescent solution was infiltrated into the face and neck (average volume of 180 cc total). Rhytidectomy techniques performed included SMAS plication, SMAS imbrication or Deep plane techniques (surgeon choice depending on the patient's facial anatomy). A concurrent necklift and platysmaplasty was also performed. Next, full face resurfacing was performed with helium RF plasma in a majority of the patients (80), while nitrogen RF plasma was performed in 8 patients. Settings for the helium RF plasma were at 40% energy at 4 liter flow, single pass on the whole face, a second pass was performed on the chin and peri-oral areas. The energy was decreased to 20% at 4 liter flow on the areas of the rhytidectomy lateral elevated skin flaps. For the 8 patients treated with the nitrogen plasma, energy settings were at 4 kilojoules (kj), single pass, and was lowered to 3 kj over the areas of the lateral elevated skin flaps.

Finally, fat grafting was performed on the face via Coleman's technique. The patients were followed the next day, weekly, then monthly. Longest follow-up is at 7 years post-operative.

RESULTS/COMPLICATIONS: There were three complications. One patient experienced a late onset cellulitis on her forehead at 7 weeks post-operative, and this resolved with a one week course of oral antibiotics. Two patients had small areas of hypertrophic scarring on their chin areas that resolved completely with light C02 resurfacing combined with laser-assisted drug delivery of kenalog 40. There were no incidents of skin necrosis on the areas of the elevated rhytidectomy or necklift skin flaps. Aesthetic results showed very good correction of deep and superficial rhytids, photo damage and much improved overall quality of the skin.

CONCLUSION: This small series over the course of seven years shows the safety and efficacy of performing deep RF plasma resurfacing immediately after rhytidectomy procedures. The elevated skin flap can be treated effectively by lowering the energy settings of the plasma devices. Patients can appreciate a single session surgical procedure that results in comprehensive facial and neck rejuvenation, with less downtime when compared to a staged procedure.

The Impact of Facial Feminization Surgery on Appearance Satisfaction and Gender Dysphoria: A GENDER-Q and GPSQ Study

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PURPOSE: This study investigates facial satisfaction, gender dysphoria and their associated correlation in transgender patients before and after receiving feminizing gender-affirming surgery (FFS).

METHODS: Our institution participates in an international initiative to field-test the GENDER-Q survey, a novel instrument designed to measure the outcomes of gender-affirming care. In conjunction with the GENDER-Q, we utilized the Gender Preoccupation and Stability Questionnaire (GPSQ) to evaluate gender dysphoria. We collected data from patients both preoperatively and at a minimum of 6 months post-operatively. We compared the overall GPSQ score and GENDER-Q item responses using both unpaired and paired t-tests. Furthermore, Spearman's correlation coefficients to assess the relationship between individual GENDER-Q items and GPSQ scores were calculated.

RESULTS: Survey data from 35 transgender patients are included, with 8 patients providing data both pre- and post-operatively, resulting in 29 preoperative and 14 postoperative surveys. The mean follow-up time was 6.5 months (SD=1.5) All patients received FFS procedures in their upper, middle and lower face. The average age of patients was 33.0 years (SD= 8.2).

Unpaired analysis of the Gender Q for overall satisfaction showed significantly higher values post-operatively than pre-operatively for all parts of the face. The highest pre and post-operative difference in mean Likert scores (out of a maximum of 6) was observed for upper face by 2.6 points ($p<0.001$) and the lowest for cheeks by 1.12 ($p=0.02$).

This trend held for paired analysis with significant differences between pre and post-operative satisfaction scores; with largest and smallest pre and post-operative mean of differences belonging to upper face (2.8, p<0.001) and cheeks (0.11, p=0.85), respectively.

GPSQ scores (out of a maximum of 56) were significantly lower, indicating improved gender dysphoria, with both paired and unpaired comparisons showing a decrease of 7.12 points (p<0.05). The negative correlation between gender dysphoria interference with mental health and post-operative satisfaction was strongest for the upper face (r=-0.63, p=0.02) and eyebrows (r=-0.66, p=0.01). While age did not significantly correlate with pre- and post-operative facial satisfaction scores individually, it was positively correlated with an increase in eyebrow (r=0.77, p=0.03) and nose (r=0.84, p=0.01) scores after FFS.

CONCLUSION: The findings of this study underscore a significant enhancement in facial satisfaction and a concomitant reduction in gender dysphoria among transgender patients, post-facial feminization surgery. Notably, satisfaction with the upper face and eyebrows was closely linked to improvements in gender dysphoria, aligning with existing literature that emphasizes the importance of these features in perceptions of femininity. These results endorse the implementation of a comprehensive outcomes evaluation framework for facial feminization procedures and underscore the aesthetic and psychological benefits conferred by these surgeries to the transgender community.

AI Text-to-Image Generators and the Lack of Diversity in Hand Surgeon Demographic Representation

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PURPOSE: Artificial intelligence (AI) models are already being extensively applied in medicine; however, recent studies have revealed the existence of significant gender and racial gaps with the utilization of AI in the care and education of patients. Resultantly, there is a growing concern that these gaps may lead to unintended biases and inequalities in patient care (1). Furthermore, demographic disparities have been established in many surgical subspecialties, including hand surgery, with women and people of color often in the minority (2). This paper intends to analyze the demographic representation of hand surgeons in AI-generated visuals models in order to shed light on any disparities and analyze the consequential implications for both the medical community and broader society.

METHODS: We assessed three of the most popular and publicly available AI text-to-image generators, including DALL-E 3, Midjourney, and DreamStudio. Images were generated using the prompt "a photo of the face of a hand surgeon." Three reviewers independently evaluated over 300 AI-generated images, categorizing them according to gender (female and male) and race (non-White, defined as any race other than non-Hispanic White, and White). Inter-rater reliability was determined using Cohen's Kappa. Chi-square was performed to compare the distribution of female and non-White hand surgeons in the AI-generated images with current demographic data of hand surgeons in the United States. Statistical significance was established at alpha = 0.01.

RESULTS: Cohen's kappa for racial agreement across three AI platforms was 0.608 (moderate to substantial agreement), and for gender agreement was 1 (perfect agreement). Cohen's kappa did not differ when comparing each AI platform for gender or racial agreement. DALL-E 3 showed a significant difference between percentage of rater identified whites and non-whites when compared to the national average of PR (plastic and reconstructive) surgeons (76.6% white, p<0.01)-- image output showed 64% white PR surgeons. On the contrary, DALL-E 3 did not show a significant difference between image output percent males (91%) and the national average of PR male surgeons (83%, p=0.03). Midjourney image outputs favored white (100%), male (100%) PR surgeons, and this was significantly higher than the national average (p<0.01). DreamStudio showed outputs reflective of the national average of male PR surgeons (81%, p=0.59), but showed significantly more white PR surgeons (97%) than the national average.

CONCLUSION: As AI technologies continue to shape healthcare, our study aims to underscore the urgency of cultivating more inclusive AI datasets that accurately reflect the growing diversity within the hand surgery profession. Addressing this gap is crucial for fostering equitable