surgeons decreased 2.1% for rhinoplasty compared to otolaryngologists, 3.0% for skin cancer reconstruction compared to dermatologists, and 2.0% for eyelid procedures compared to ophthalmologists (p<0.001). Plastic surgeons were less likely to perform the procedure if the underlying diagnosis or preceding procedure drew from referral bases of “anatomic” specialists, such as sinonasal disease for otolaryngology (incidence rate ratio [IRR] 0.829), Mohs excision for dermatologists (IRR 0.381), and disorders of the eyelid or orbit for ophthalmologists (IRR 0.646) (p<0.001).

CONCLUSION: Plastic surgeons are losing ground on procedures historically performed by our specialty. Plastic surgeons must develop strategies to preserve specialty market share, which will require a critical evaluation of the gatekeeper effect that dictates referral patterns, professional and public perceptions, and economic forces.

13. SURGICAL ANATOMY OF THE LIGAMENTOUS ATTACHMENTS IN NECK: A CADÁVER STUDY

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PURPOSE: Release of the retaining ligaments of the upper, middle, and lower face play an integral part in facial rejuvenation procedures. While neck ligaments have received little attention in the literature, they may play a similar role. This study aimed to identify the variability in location, number, and dimensions of the neck retaining ligaments. Such identification might then assure more consistent release during surgery.

METHODS: Twenty cadaveric hemi-necks dissections were performed to identify the retaining ligaments in the neck in the supra and subplatysmal planes. The length and width of each ligament were recorded using Frankfort’s horizontal, the tragus, and the thyroid cartilage.

RESULTS: Fourteen distinct neck ligaments were identified. The most commonly found ligaments were the mandibular ligaments (100%), platysma mandibular ligament (100%), and the lateral sternomastoid-cutaneous ligaments (82%). The least commonly found ligaments were the mastoid-cutaneous ligaments (33%) and the submental ligaments (36%). The width of ligaments varied from 0.2 mm to 4.2 mm. Although some hemi-faces had few weak ligaments, others had dense and thick ones in multiple rows. The thickest ligament was the clavicular-cutaneous ligaments (1.64±0.81 mm), and the thinnest ligaments was the paramedian platysma retaining ligament (0.49±0.33 mm). The number of ligaments, their location, and density varied significantly. However, ligaments were consistent from cadaver side to side.

CONCLUSION: A topographical map and contour plot describing location and ligament density was developed. This may aid in identification and ligament release during facial surgery.

14. THE “DELTA” FACELIFT: OPTIMIZING FACIAL AND NECK REJUVENATION WITH SMAS Plication AND DEEP CERVICOPLASTY IN 281 PATIENTS

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PURPOSE: The senior author has developed a facial rejuvenation technique that combines a less-aggressive SMAS rotation-advancement plication with a more-aggressive approach two-vector platysmal plication and correction of the deep structures of the neck. This approach addresses the distinct and differential changes seen in facial and neck structures for optimal results.

METHODS: All patients who underwent Delta SMAS plication facelift from January 2012 to May 2021 were included in the study. Retrospective chart review was performed for demographic information, outcomes, and postoperative complications including nerve injuries, hematomas, infections, seromas and sialoceles, and re-operations.

RESULTS: The Delta facelift was performed on 281 patients (271 females, 10 males) with an average age of 60.7 years old at time of surgery. Most patients (99%) underwent a concurrent adjunctive procedure, the 3 most common procedure including facial fat grafting (93%), blepharoplasty (52%) and skin rejuvenation (36%). Only 9 patients experienced mild complications including 9 self-resolving neuropraxias, 6 hematomas drained at bedside,
and 6 mild infections. Only 9 patients underwent revision or repeat treatments for facial and/or neck rejuvenation after the Delta SMAS plication facelift within study timeline.

**CONCLUSION:** The Delta facelift offers a safe, efficient, and customizable approach to counter the effects of aging in the face and neck for harmonious and long-lasting rejuvenation.

**15. NONINVASIVE LOCALIZED ADIPOSE REDUCTION WITH THE PROSTAGLANDIN ANALOG LATANOPROST**

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**PURPOSE:** Unwanted focal adiposity in the face is a common patient complaint. While some indications are amenable to surgical intervention, not all patients want invasive procedures. Injectable alternatives are limited to deoxycholic acid (Kybella), a cytolytic FDA-approved drug for submental fat dissolution, though significant comorbid risks exist. In this study, we sought to determine if a prostaglandin analogue, Latanoprost, with known fat reducing iatrogenic effects can be safely used to diminish local fat in a mouse model.

**METHODS:** Human adipose obtained under IRB exemption was incubated for 14-days ex vivo with Kybella or variable Latanoprost concentrations. Mature adipocytes and the stromal vascular fractions were collected via enzymatic dissolution and size, count, morphology, and viability were assessed using Calcein-AM/PI imaging. Subsequently, single injections of Kybella and Latanoprost in mouse inguinal fat pads were investigated by measuring fat pad volume at 1 and 2 weeks after injection.

**RESULTS:** Incubation of lipoaspirate with Kybella resulted in total tissue dissolution and loss of viability. In contrast, latanoprost did not negatively affect viability of stromal cells or adipocytes. In vivo, both Kybella and Latanoprost reduced fat pad volume. H&E histology suggested Kybella was highly adipolytic and inflammatory while Latanoprost did not result in significant immunogenicity.

**CONCLUSION:** Single administration of soluble latanoprost safely reduced fat pad volume at two weeks post injection in vivo with no ex vivo loss of viability in human tissues. This supports a potential application for reduction in focal adiposity without undesirable cytologic injury. Additional mechanistic studies are underway.

**16. UNDER THE MICROSCOPE: A LOOK AT RELATIVE RISK OF MALIGNANCY IN TRANSGENDER MASTECTOMY**

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**PURPOSE:** Chest masculinization surgeries are one of the most common gender-affirming procedures performed. There is a need for better understanding of the risk of breast cancer and post-surgical screening in female to male (FtM) individuals. This study aimed to evaluate the incidence of high-risk pathologic findings in FtM trans-gender patients undergoing gender-affirming chest reconstructive surgery.

**METHODS:** Medical records were reviewed from all FtM patients undergoing gender-affirming chest reconstructive surgery from January 2010-February 2021 by three plastic surgeons at the University of Pittsburgh Medical Center. Relative risk of malignant progression was used to stratify pathologic data. Subsequent management of atypical, in situ, and invasive pathology were recorded.

**RESULTS:** A total of 318 patients were included in this study; the average age at surgery was 24.6 ± 8.1 years. Eighty-six patients (27%) had a family history of breast and/or ovarian cancer. Overall, 21 patients (6.6%) had some increased risk of breast cancer: 17 (5.3%) had proliferative lesions, mean age 38.2±12.4 years; 2 had atypical ductal hyperplasia, ages 33.4 and 38.3 years; and 2 had invasive ductal carcinoma, ages 35.4 and 40.6 years.

**CONCLUSION:** This is the largest study to date to look at high-risk pathologic findings in FtM patients undergoing gender-affirming chest reconstructive surgery. In this