The remaining ears underwent combination procedures, again with low associated complication rates. For all patients, satisfaction based on an objective questionnaire was found to be 96% postoperatively.

CONCLUSIONS: Otoplasty with anterior scoring is a safe procedure, and overall, our results highlight it to be a reliable, reproducible technique with high patient satisfaction. We feel that our institution presents results that are comparable to other studies that rely only on suture correction otoplasty, with a complication rate that is similar if not superior to this technique.

Contemporary Analysis of Rhytidectomy Using TOPS Outcomes Registry With 13,346 Patients

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BACKGROUND: Rhytidectomy is a popular procedure for facial rejuvenation, but a comprehensive and up-to-date appraisal is lacking. This study reports current practices, safety profile, and complications following rhytidectomy in a large, prospective, multicenter database.

METHODS: A prospective cohort of patients undergoing rhytidectomy between 2008 and 2016 was identified from the TOPS database. Perioperative data and patient characteristics were extracted and analyzed with respect to adverse events. Multivariate logistic regression evaluated for risk factors including age, gender, body mass index, smoking, diabetes mellitus, duration, multiple procedures, type of surgical facility, anesthesia type, and provider.

RESULTS: A total of 13,346 patients with a mean age of 60 years underwent rhytidectomies and a total of 31,206 Current Procedural Terminology procedures. Most were healthy females with an American Society of Anesthesiologists class <3 (98%). On average, 2.3 Current Procedural Terminology procedures were performed in 3.8 hours per patient, and blepharoplasty was the most common adjunctive procedure. Fifty percentage of operations were performed in office-based settings, with an anesthesiologist present in 60.5% and hematoma (1.9%) and infection (0.8%) were the most frequent surgical complications. Male gender (odds ratio [OR], 1.6), obesity (OR, 1.7), smoking status (OR, 1.6), duration (OR, 1.1), combined procedures (OR, 1.3), general anesthesia (OR, 1.7), and office-based surgery (OR, 1.3) were associated with an increased odds of adverse events.

CONCLUSION: This is the largest analysis of rhytidectomy in a representative population. Rhytidectomy is a very safe procedure when performed by board-certified plastic surgeons. The study provides a standard reference for professionals when counseling patients and in guiding clinical practices.

Anatomically Based Breast Augmentation: A 6-plane Autologous Approach

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PURPOSE: With concerns about the high rate of breast implant complications, surgeons and patients increasingly seek alternative options. A general belief that fat transfer provides less volume than many patients may need for augmentation led us to expand previously published concepts into a multiplanar anatomic approach to consistently permit transfer of larger volumes. Avoiding breast parenchyma itself, there are 6 distinct anatomic planes in the breast. We proposed that by grafting each of these separately, greater volumes could be added without overwhelming the capacity for neovascularization. Also, by modulating volumes placed in each plane, specific shapes, better symmetry, and increased central projection might be achieved.

METHODS: Preoperatively, patients are marked when vertical, creating contour maps outlining each anatomic plane to be grafted. Augmentation planes and graft harvest sites were infiltrated with nondistorting volumes of 1:500,000 epinephrine; 30 minutes were awaited for vasoconstriction. Gold-plated, multiholed 2.4- and 3.0-mm cannulas (1 mm orifices) facilitated harvest of particulate fat. Preferential harvest of accessory breast mounds would improve peripheral contours of the breasts and decrease chest circumference. Harvest syringes were heparinized to prevent fibrin formation and potentiate growth factors. All harvested fat was commingled, creating a confluent “mosaic graft” mass with consistent physiologic properties. Cannulas (1.5 mm; 1 mm holes) on 10-ml syringes were used to graft each anatomic plane using 2-mm incisions and cross-tunneling. Cannulas were kept tangential to the chest wall to avoid intrathoracic penetration. Volumes were transferred to create desired shape and size. Compression wear was used for harvest sites, but not on breasts themselves. The 6 anatomic planes are listed below, with expected enhancements and potential transfer volumes noted:

1. Superficial Plane: Augmentation
2. Medial Plane: Augmentation
3. Lateral Plane: Augmentation
4. Lower Plane: Augmentation
5. Upper Plane: Augmentation
6. Deep Plane: Augmentation
• Subpectoral/preperiosteal (projection of entire breast mound), 50 ml
• Intrapectoral (central and superior fill), 30 ml
• Prepectoral (central and superior fill), 50 ml
• Deep subglandular (inferior enhancement and central projection), 60 ml
• Superficial/subcutaneous (inferior fullness and medial cleavage), 30 ml
• Subareolar/intra-nipple (youthful projection of nipple-areolar complex), 24 ml

EXPERIENCE: Over 5 years, in 3 dozen cases (average 2-year follow-up), there were no significant complications, no fat necrosis nodules, and no secondary revisions. Skin expansion was not needed. Enhancements ranged from 120 to 300 ml per breast.

RESULTS: Natural appearing breasts were consistently produced, indistinguishable from unoperated breasts by visual inspection and palpation. Scarring was negligible. Patients reported no issues with subsequent mammograms.

CONCLUSIONS: Breast augmentation with up to 300 ml of fat graft bilaterally can be accomplished using a 6-plane, anatomically based technique. This approach can also be applied for reconstructive care, postexplant augmentation, asymmetry correction, and for reconfiguration of post-pregnancy and postmenopausal concerns. Further work is needed to determine fat survival in each grafted plane.

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Combined Abdominoplasty With Umbilical Hernia Repair and Umbilicoplasty (CARP) Technique: A Tension-free, Pedicle-preserving, Umbilical Hernia Repair Technique

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BACKGROUND: Ventral and umbilical hernias present a unique challenge to surgeons caring for postpartum patients with diastasis of the rectus abdominis muscle (DRAM) who are undergoing abdominoplasty. Midline umbilical hernia repair without DRAM plication increases the risk of recurrence, whereas traditional open hernia techniques, especially in combination with abdominoplasty, undermine both peripheral and central umbilical vascular supplies. We review our experience with this novel, tension-free, pedicle-preserving, umbilical hernia repair and umbilicoplasty technique used during abdominoplasty.

METHODS: Patients undergoing combined abdominoplasty, DRAM plications, and umbilical hernia repair (CARP) were reviewed from 2010 to 2019 at a 2-surgeon, esthetic practice. Hernia repairs were performed in conjunction with our colleagues in general surgery (I.G.). Demographic, operative, and outcomes data were assessed. Steps of the technique include: (1) raising the abdominal flap with circumferential umbilical stalk dissection; (2) a 6-cm vertical celiotomy is made caudal or cephalad to the umbilicus; (3) hernia reduction is performed; (4) intraperitoneal hernia repair with running polydioxanone suture, incorporating the base of the umbilical stalk; (5) closure of the celiotomy site; (6) plication of the DRAM with running or interrupted polydioxanone suture which removes tension from the repair; and (7) completion of abdominoplasty.

RESULTS: A total of n = 72 patients were included. The average patient demographic was a 39.1- ± 10.5-year-old multiparous female, body mass index 20.9 ± 7.0, with ≥1 previous abdominal/pelvic surgery (57.0%). The most common previous abdominal surgery was cesarean delivery (43.1%). Five patients had prior umbilical/ventral hernia repairs who presented with recurrence. At 5 years of follow-up, postoperatively, no hernia recurrences occurred. Other complications included 2 (2.7%) cases of delayed healing along the abdominoplasty incision line treated with local wound, 1 (1.4%) case of cellulitis treated with antibiotics, and 1 (1.4%) case of pulmonary embolism treated with anticoagulation. The addition of hernia repair and umbilicoplasty added an average of 14 minutes to our traditional abdominoplasty with DRAM plication procedure time.

CONCLUSION: The CARP procedure is a safe alternative to traditional umbilical/ventral hernia repair and can be performed during standard abdominoplasties with DRAM plication. It adds minimal additional time to traditional abdominoplasty procedures and has a low complication profile complimented by its tension-free design without requiring a mesh.

A Novel Approach to Assessing Patient-reported Outcomes After Female Cosmetic Genital Surgery