operated by the senior author (L.G.P.) to identify independent predictive factors for breast resection weight. A new prediction scale was created. Established prediction scales and the new Galveston scale were then applied to patients operated by different surgeons, excluding the patients that were operated by the senior author, and compared for accuracy of prediction of resection weight. Results were analyzed through linear regression analysis and p-values <0.05 were considered statistically significant.

RESULTS: A total of 184 patients were used for the initial single-surgeon analysis. The new Galveston scale included BMI, breast measurements and age as independent predictive values. 130 patients were included in the multiple-surgeon group for validation of the new scale. There was no overlap in patients between the single- and multiple-surgeon groups. The mean age was 39.2 years, mean BMI 34.5 and the average resection weight was 907 grams. 62.3% of the patients underwent inferior pedicle wise pattern reduction, 26.9% medial or superiomedial pedicle and 10.8% amputation style with free nipple grafting. Galveston scale demonstrated the best predictive value ($R^2 = 0.71$). Appel and Descamps performed worse with $R^2=0.69$ and $R^2=0.68$ respectively. Schnur scale demonstrated the poorest prediction value with $R^2=0.28$.

CONCLUSION: Prediction of resection weight in RM remains important for patient counseling and as an adjunct tool for the plastic surgeon preoperatively and intraoperatively, as a guide to estimate the amount of tissue to be resected. We recommend a patient-specific and surgeon-specific approach, instead of the "one-scale-fits-all" paradigm. We propose the Galveston scale for older patients with higher BMI and breasts requiring large resections. Symptomatic relief does not correlate with amount of tissue removed and medical necessity should be based on patient symptoms, physical examination and the physician's clinical judgment.

"Facial Regeneration" By Nanofat. A Randomized Case-Control Study

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PURPOSE: The promising applications of nanofat in regenerative and aesthetic surgery have recently become "hot topics" in the international literature[1-3]. The purpose of this study was to investigate in a randomized case-control fashion the efficacy and safety of nanofat in facial rejuvenation.

METHODS: We enrolled 12 consecutive female patients, between 40 and 50 years of age, affected by moderate to severe facial rhytides at our private practice. Each patient face was vertically and symmetrically divided in case and control areas following randomization. Each patient was treated with nanofat on case area and saline on control area. Nanofat was obtained from the liposuction aspirate using the Tulip Nano™ kit device.

Each patient underwent blind assessment of the case and control areas and at baseline, and then 1, 3, and 6 months post treatment through the Wrinkle Severity Rating Scale (WSRS) and the Global Aesthetic Improvement Scale (GAIS). At the same time points patients underwent instrumental assessment by spectrophotometric examination (Antera 3D™) of a series of cutaneous parameters (vascularization, pigmentation, texture, etc). A patient satisfaction multi-item FACE-Q score was also recorded at the post-treatment visits. Adverse events were recorded at each follow up by physicians and by patient through the FACE-Q.

RESULTS: Each treated area in every patient showed an improvement in blinded WSRS and GAIS, as well as in spectrophotometric parameters, superior to the control area, starting at the 1 month follow up, peaking at 3 months, and persisting at 6 months. The patient case area FACE-Q score increased similarly, with max mean values at 6 months, significantly higher than control areas. Besides transient edema and erythema, no adverse events were reported.

DISCUSSION: The literature, just like the cosmetic market, is full of countless therapeutic options targeting facial rejuvenation and revitalization[4,5]. Most commercially available solutions lack the potential to provide tissue regeneration and thus true rejuvenation. Our experience indicates a significant and enduring response to treatment with a single session of nanofat in facial rejuvenating in females between 40 and 50 years of age with moderate to severe rhytides. At 6 months the results persisted in all cases, although to varying degrees. Considering that these patients were treated with a single session of nanofat and did not undergo any other rejuvenating treatment these results are significant. Only minor adverse effects were recorded during our

observation. This is a pilot study; further controlled experiences will be needed in order to validate our preliminary results.

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Treatment of Liponecrotic Pseudocysts Following Autologous Fat Transfer with Minimally Invasive Combination Therapy

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PURPOSE: Rejuvenation of midface have been treated with various methods including autologous fat injection. However, liponecrotic pseudocyst may occur after roughly performed fat injection.[1] The patients complain of subcutaneous nodules with abnormal symptoms such as tenderness, persistent swelling.[2] The current study describes the authors' experience to treat liponecrotic pseudocyst following fat transfer in the midface.

METHODS AND MATERIALS: We performed a retrospective review of management of 20 patients who presented with complications from injection of autologous fat for midface rejuvenation from October 2016 to November 2017. The procedure was performed under local anesthesia with intravenous sedation. About 3 cc of tumescent solution is injected subcutaneously around the cystic mass. Using 18 gauge blunt cannula, we tried to break the cystic wall mechanically and aspirate necrotic material while palpation and squeezing. The remnant chronic inflammation and fibrosis were reduced by intralesional injection of mixture of triamcinolone and verapamil. One 43 cm long U-shaped and three 9 cm long 1-0 absorbable face-lift sutures which are composed of polydioxanone (QTL, S.THEPHARM Inc., Seoul, Korea) were inserted each side through the subcutaneous plane to achieve superolateral and vertical elevation of the malar fat pad, respectively. The treatment outcomes were evaluated both objectively and subjectively. For objective assessment, two physicians who were not involved in the surgeries assessed surgical outcomes using serial photography. For subjective assessment, the results were evaluated by the patients based on post-operative satisfaction ratings on a five-point scale (excellent (5), very good (4), good (3), neutral (2) or poor (1)) 6 months after the operation by comparing the preoperative and postoperative clinical photos.

RESULTS: Of the 20 patients evaluated, all were women with a mean age of 35.9 (range, 24–46). The mean follow-up was 6 months (range, 3–12 months). Consensus ratings by the two independent physicians revealed that objective outcomes were divided between 'very much improved', 'significantly improved', and 'no change'. All plastic surgeons reconized that postoperative appearance was improved after treatment; twelve were considered very much improved (60 %) and eight were considered significantly improved (40 %). The overall patient satisfaction with aesthetic outcome was reported as follows: excellent, 12 patients (60 %); very good, 4 patients (20 %); and good, 4 patients (20 %). No patients had neutral or poor aesthetic outcome. Additional revisional surgery was needed in 2 cases. Two patients were corrected simply by liposuction for small remnant pseudocyst. No other severe complications were reported.

CONCLUSIONS: Undesirable complications of autologous fat injection such as liponecrotic pseudocyst and midface ptosis can be successfully treated by our minimally invasive combination therapy in mid-term follow-up. However, longer follow-up is mandatory to determine the benefits of the current technique in properly selected patients.

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