

2025 Plastic Surgery The Meeting Global Partners Oral Presentation Abstracts

Surgical and Non surgical Rhinoplasty, Similarities and Differences

Abstract Presenter: Rezarta Kapaj MD

Abstract Co-Author: Klaudia Ferko MD

Rhinoplasty is one of the most commonly performed operations, ranking second in aesthetic surgery surpassed only by breast augmentation. This is not a new operation, there have been anecdotal reports of rhinoplasties performed as early as the 16th century, but the most important boost has been after the 80'ies with contributions from Sheen demonstrating the importance of reconstruction of the important structures of the nose, instead of the destructive approach performed formerly.

Surgical rhinoplasty, open or closed, consists mainly on reducing the dorsal hump, fixing the tip of the nose in the right angle, which can be 95-105 degrees in females and narrowing the dorsal lines according to the patient's needs. Nonsurgical rhinoplasty, on the other hand, consists on filling strategically the nose to create a better profile, without altering the hump, but concealing it. These two strategies, although may look very different in concept, have the same principle, to create a straight and beautiful nose. Of course the main difference between the two strategies is the correction of the nasal airways and breathing, but that is a difference outside the scope of our report.

In this report we will cover the differences and similarities between surgical and nonsurgical rhinoplasties, will discuss the possible complications and will stress the important key points to avoid them.

The satisfaction of the patient doesn't depend only on the final results, it also depends on the expectations, the function and the recovery time. With this in mind, perhaps it's not very accurate to compare the satisfaction after surgical and nonsurgical rhinoplasties. Nevertheless what has to be stressed is that these procedures should be performed by professional only and can be very dangerous in the wrong hands.

Juvenile Gigantomastia. Virginal Hypertrophy. A case report.

Abstract Presenter: JUAN SEBASTIAN SILVA PALACIOS Dr

Abstract Co-Author(s): Ivana Fatica MD, MARCO ANTONIO IRIARTE, Diego Moreno MD, Jaaziel Mauricio Rocha, Salome Natali Herrera Lloveras

Introduction: Juvenile gigantomastia is a benign, infrequent disease of unknown etiology, characterised by excessive, diffuse, and rapid growth of the mammary gland during adolescence; it being extremely rare also known as virginal hypertrophy, accounts for 13% of the total cases of macromastia. Henry, also described this pathology in 1910 as gigantomastia, juvenile hypertrophy, or virginal breast hypertrophy.

Objectives: Report on a clinical case to evaluate the treatment of patients with this type of rare pathology. Highlight the complexity of the clinical case, as well as the resolution and follow-up it may require.

MATERIALS AND METHODS: The case of a 19-year-old female patient with no previous medical history is presented; she reports progressive bilateral breast enlargement over approximately one year, accompanied by non-cyclical mastalgia, trophic changes in the skin of both breasts, as well as limitations in standing and walking that have progressively worsened, which is why she sought consultation. Upon physical examination she presented large, ptotic (grade three), asymmetric breasts that exceeded the umbilical scar, trophic changes in all four breast quadrants bilaterally, bilateral collateral venous network with palpable nodules. Both axillae and supraclavicular fossae were free. Breast ultrasound report: right breast multiple masses with well-defined edges. Left breast with masses of well-defined edges. BIRADS 2. Mammogram report: both breast bodies with mild fibroadipose transformation, multiple nodular opacities. BIRADS 0

RESULT: The surgical procedure performed was: reduction mammoplasty with a derma-fat flap and free nipple-areola graft, where 2300 grams of material was obtained from the right breast and 1600 grams from the left breast; the nipple-areola complex was grafted, achieving a good result, with medium-volume breasts, symmetrical, with aesthetically acceptable scars, without suffering of the nipple-areola complex. Improvement in her quality of life regarding all aspects of it, both personal and professional.

CONCLUSIONS: Mammary hypertrophy is a rare benign condition that occurs in women near the beginning of puberty, in the absence of pregnancy, with normal hormone levels; it is generally due to an exaggerated response of the mammary

parenchyma to estrogens. It is very important to conduct strict long-term follow-up as recurrences may occur after surgical treatment, for which the patient and her family should be prepared. Postoperative treatment with tamoxifen can reduce recurrences.

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Investigation of the Effects of the Lymphatic Vessel Wire, Lymtracer, on Patients with Advanced Lymphedema

Purpose: Lymphaticovenous anastomosis (LVA) is a surgical technique that alleviates lymphedema by creating a bypass between the lymphatic vessels and veins. Patient outcomes are improved by anastomosing the functional lymphatic vessels. However, these vessels are often degenerated in advanced lymphedema stages, making their identification challenging. LymTracer, a fine 0.3-mm wire that can be inserted into lymphatic vessels, is used to identify proximal difficult-to-detect functional vessels. This study aimed to assess the potential of LymTracer to preoperatively identify the difficult-to-detect central lymphatic vessels in patients with advanced lymphedema.

Methods: Between December 2022 and July 2024, 18 patients with advanced secondary lower-limb lymphedema underwent LVA at our institution. Preoperative indocyanine green (ICG) lymphangiography revealed ≤ 2 suitable sites for anastomosis in all patients. A lymphatic wire was inserted into the most proximal lymphatic site identified via ICG lymphangiography. When the wire was advanced centrally by >10 cm under radiographic guidance, an additional incision was made for further anastomosis.

Subsequently, patient outcomes of the additional anastomosis and non-additional anastomosis groups were compared.

Results: All patients exhibited secondary lower-limb lymphedema, but only nine underwent additional anastomosis. On average, LymTracer was advanced centrally by 12.0 ± 10.8 cm (maximum: 35 cm) from the initial incision. In the additional anastomosis group, lymphatic vessels at the initial and additional incision sites were compared. Vessel diameters were 0.63 ± 0.14 and 0.66 ± 0.18 mm ($P = 0.68$) and depths were 6.2 ± 2.2 and 12.7 ± 3.3 mm ($P = 0.0003$) at the initial and additional incision sites, respectively. At 6 months, limb volume reduction was $5.7 \pm 7.7\%$ in the additional anastomosis group and $2.4 \pm 8.6\%$ in the non-additional anastomosis group ($P = 0.24$). Bioimpedance analysis revealed a segmental water volume reduction of the affected limb of 13.1 ± 9.6 and $2.8 \pm 9.5\%$ ($P = 0.05$) in the additional anastomosis and non-anastomosis groups, respectively.

Discussion: Lymphatic vessels are often degenerated in advanced lymphedema, making their identification difficult. ICG lymphangiography reliably detects the functional vessels, but not the deep vessels or those with dermal backflow, in areas with linear patterns. Here, LymTracer helped to identify the lymphatic vessels in half of the cases, facilitating additional anastomoses at more central sites. Although no significant difference in diameter was observed between the central and peripheral vessels, central lymphatic vessels identified by LymTracer were significantly deeper than those identified via ICG lymphangiography. These findings demonstrate the superiority of LymTracer over ICG lymphangiography in identifying the difficult-to-detect functional lymphatic vessels. Especially, segmental water volume of the affected limb was significantly decreased in the additional anastomosis group. Overall, LymTracer improved the postoperative outcomes of patients with advanced lymphedema by aiding in the identification of suitable vessels for LVA.

Conclusion: LymTracer is a valuable tool to identify the functional lymphatic vessels for LVA in patients with severe lymphedema, potentially improving their surgical outcomes.

The use of MEDCu and Vacutex in closure of large postoperative wound with exposed bone (spongiosis) without surgery

Abstract Presenter: Davor Jurisic PROF. M.D. Ph.D. FEBOPRAS

Patient HS 27y. attempted suicide by jumping from a height on April 8.2024. Polytraumatized patient. She suffered multiple fractures of the foot, lower leg, upper leg, hip, acetabulum and other parts of the pelvis, sacrum, cervical and lumbar vertebrae, ribs, SDH, heart contusion, pneumothorax and pneumomediastinum. Fractures of the legs, hip and sacrum were treated surgically.

Postoperatively, there was infection and dehiscence of the mediosacral wound measuring 9x5cm with exposed bone spongiosis, infection and fibro necrotic tissue. She entered sepsis, which was resolved with i.v. Antibiotics and daily dressing. Considering the psychological status: recurrent depressive disorder, now a severe episode with psychotic symptoms, veganism, not eating, not drinking protein preparations, low protein status (albumin below 20g/l), locally bad findings - no subcutaneous fat tissue, skin directly on the bone - we did not decide on surgery, but started treating the wound with a novel antimicrobial wound dressing impregnated with copper oxide micro particles-MEDCu (1), already after about 10 days the use of MEDCu dressing material resulted in the removal of infection, complete intense granulation of the bottom of the wound and bone coverage, and closure of subcutaneous pockets, epithelialization of the wound edges, which we have not been able to achieve with other dressing materials.

She was bandaged like that for 2 months every 2 days, because she was lying down and moving a little (1 hour/daily with the help of a walker and a physiotherapist) and the exudation of the wound was minimal. After 2 months, she was discharged and verticalized and she moves a lot more, the secretion increased and we introduced daily dressing with VACUTEX (2) rapid capillary action dressing-not identical to NPWT but has an autologous mechanism similar to NPWT and patient is free from canister holding device and tubes so she can move freely. Epithelialization progressed further so that after 4 months in total we had a completely epithelialized wound without residual defects and without additional operations.

Our results coincide with other published results (1, 2) that wound dressing not only protects against contamination but can also remove wound infection, and most importantly stimulates skin regeneration and wound healing.

We believe that this is an important advance in the treatment of complex wounds and patients for whom surgery is not an option, and that the results are of the same quality both functionally and aesthetically as surgery, and it certainly represents a great advance in the technical possibilities of treating complex wounds.

1. Healing of Chronic Wounds by Copper Oxide-Impregnated Wound Dressings-Case Series; Eyal Melamed, Patrick Kiambi, Dancan Okoth, Irena Honigber, Eran Tamir,

Gadi Borkow; Medicina (Kaunas) 2021 Mar 22;57(3):296. doi: 10.3390/medicina57030296.

2. VACUTEX capillary action dressing: a multicentre, randomized trial; L Russell, M Deeth, H M Jones, T Reynolds; Br J Nurs. 2001;10(11 Suppl):S66-70. doi: 10.12968/bjon.2001.10.Sup2.12346.

Do patients with Rheumatoid Arthritis have a higher risk of Melanoma?: - a Danish Nationwide Cohort Register-Based study

Abstract Presenter: Abdullah Maarouf MD

Abstract Co-Author(s): Nils Lundgren, Jacob Juel, Kristian Kragholm

Background: Patients with rheumatoid arthritis have slightly increased risk for developing certain types of cancer, most significantly lymphoma. Furthermore, mostly due to RA treatment, many patients develop non-melanoma skin cancer as basal cell carcinoma and squamous cell carcinoma. Hence, does this increased risk of other cancers translate into an increased risk of melanoma?

Objectives: This cohort study aimed to investigate the risk of melanoma in patients with RA compared to an sex- and calendar year-matched controls.

Methods: We conducted a nationwide, register-based cohort study using Danish National Health Registers. Patients aged 18 years and older diagnosed with RA between January 1990 and December 2022 were included. All patients with a prior melanoma diagnosis were excluded. The cumulative incidence of melanoma was assessed using Kaplan-Meier survival analysis and Fine and Gray competing risks models. Cox proportional hazards regression models estimated hazard ratios (HRs) with 95% confidence intervals (CIs), adjusting for age and sex.

Results: We identified 40,194 patients with RA and 200,495 control individuals. The crude incidence rate of melanoma was slightly higher in RA patients than in controls. However, Cox regression analysis showed no clinically significant increased risk of melanoma (HR: 1.15, 95% CI: 1.03–1.29, $p = 0.0149$). Age was a strong predictor of melanoma (HR: 1.03 per year, 95% CI: 1.02–1.03, $p < 0.001$), while female sex was associated with a lower risk (HR: 0.73, 95% CI: 0.67–0.80, $p < 0.001$).

Conclusion: This study found no clinically significant difference in melanoma risk between the patients and the control group. Hence, the melanoma incidence remained largely comparable to controls. Further research should explore potential risk modifiers in RA patients to refine melanoma prevention and early detection strategies.

Early Functional Outcomes One Year After Total Wrist Arthroplasty

Abstract Presenter: Yonca Steubing MD

Abstract Co-Author(s): Marcus Lehnhardt, Patrick Harenberg MD

Introduction: Total wrist arthroplasty (TWA) has emerged as an alternative to wrist arthrodesis for patients with advanced post-traumatic or degenerative arthritis. While earlier generations of wrist prostheses were associated with high complication rates and were primarily recommended for low-demand patients, fourth-generation implants show promising results in restoring wrist mobility and function. This study evaluates the functional outcomes of MOTEC® wrist prostheses one year post-implantation.

Methods: A single-center study included patients who underwent TWA with a MOTEC® implant between December 2022 and December 2024 due to advanced wrist arthritis. Functional outcomes were assessed based on total range of motion (TROM) for extension/flexion and radial/ulnar deviation, grip strength, and patient-reported outcome measures, including the Disabilities of the Arm, Shoulder, and Hand (DASH) score and the Patient-Rated Hand and Wrist Evaluation (PRHWE) score. 53 patients were analyzed, 80% of whom had post-traumatic arthritis. 28.1% had undergone prior carpal salvage procedures.

Results: At the one-year follow-up, patients demonstrated a significant improvement in wrist mobility, with TROM increasing from a preoperative mean of 70° (extension/flexion) to 110° ($p < 0.01$). Grip strength improved in parallel with a statistically significant reduction in pain and improvement of overall hand function and daily activity performance, as reflected by a decrease in the PRHWE score from 87 preoperatively to 50 postoperatively ($p < 0.01$). On a scale of 0 = no difficulty to 10 = impossible, functionality in household tasks improved from an average of 6 to 3.5 ($p < 0.01$), and work-related functionality improved from 8 to 3 ($p < 0.001$) within one year after prosthesis implantation.

Conclusion: The results suggest that MOTEC® wrist arthroplasty provides a viable alternative to wrist arthrodesis, particularly due to its substantial improvement in wrist mobility and function. This benefit appears to extend even to patients with prior carpal procedures. While short-term outcomes are promising, further long-term studies are needed to assess implant durability and functional preservation over time.

A Novel Approach to Trunk Masculinization in Transmen: A Combination of Mastectomy, Liposuction, and High-Definition Lipoplasty

Abstract Presenter: Maneesh Singhal MD, FACS

Abstract Co-Author: Shivangi Saha MD

Background: Trunk masculinization in transmen presents unique challenges due to inherent differences in fat distribution between assigned female and male individuals. While standard gender-affirming chest surgery effectively removes breast tissue, achieving a masculine torso requires additional body contouring procedures. This study explores a novel surgical approach integrating subcutaneous mastectomy, liposuction, and high-definition lipoplasty to enhance masculinization outcomes.

Methods: Between January 2023 and February 2025, 13 transmen (mean age: 24 years) underwent a comprehensive trunk masculinization procedure. The surgical approach included either double-incision or keyhole subcutaneous mastectomy, depending on patient anatomy, followed by abdominal and flank liposuction. High-definition lipoplasty was performed to sculpt the abdominal musculature and create a six-pack appearance. Harvested autologous fat was injected intra- and submuscularly into the pectoralis major to enhance chest contouring. Postoperative outcomes, complications, and patient satisfaction were evaluated.

Results: All patients successfully underwent the procedure without major intraoperative complications. Two minor complications were recorded: one case of nipple graft loss and one instance of wound dehiscence. No infections, hematomas, or other significant adverse events occurred. Postoperative follow-up showed satisfactory healing and maintenance of the sculpted masculine torso. Patient satisfaction, assessed via a standardized questionnaire, was universally high, with all participants reporting improved self-image and alignment with their gender identity.

Conclusion: This novel approach to trunk masculinization, combining subcutaneous mastectomy, liposuction, and high-definition lipoplasty, provides an effective and aesthetically superior outcome for transmen. The addition of pectoral fat grafting further enhances chest definition, achieving a natural and masculine contour. High satisfaction rates and minimal complications were observed in this study

The MISHAP Trial: Managing Injuries - a Study of Hand Appearance and Psychosocial Dysfunction.

Abstract Presenter: Eimear Phoenix MD

Abstract Co-Author(s): Iulia Marinescu, Ellen Geary MD, Diarmuid Mc Laughlin, Colin Morrison MD, Roisin Dolan MD

Background: Over 24 million hand injuries occur globally every year and are responsible for chronic pain, functional impairment and psychological distress [1]. This study aimed to investigate the functional and psychosocial impact of hand injuries and their association with injury severity.

Methods: A prospective, observational study was conducted in a tertiary hand trauma centre. Patient-reported outcome measures were collected at two and six-weeks postoperatively using the Disabilities of the Arm, Shoulder and Hand (DASH) scale, Derriford Appearance Scale-24 (DAS-24), Connor-Davidson Resilience Scale-25 (CD-RISC-25), Post Traumatic Growth Inventory-Short Form (PTGI-SF), Hospital Anxiety and Depression Scale (HADS) and Short Form-36 (SF-36). The hand injury severity score (HISS) and demographic data were obtained from medical records.

Results: There were 62 participants at baseline and 44 (71%) at follow-up. The mean age was 44 (range 20-72) with a male preponderance (89%). The mean HISS was 38 (range 2-204), with 21% scoring severe injuries. HADS and DASH scores were less favourable than the general population means. HADS, DASH and SF-36 scores significantly improved at follow-up. Scores were not significantly correlated with HISS.

Conclusion: Our results demonstrate notable psychological distress and functional disability, irrespective of injury severity, highlighting the need for psychological input in hand trauma management.

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Tuberous breast treatment with gradual lower pole expansion using smooth implants

Abstract Presenter: Maria Grazia Moio MD

The surgical treatment of tuberous breasts presents several technical difficulties that can be addressed with some simplifications with the proper technique and implant (1). The gradual expansion of the lower pole can be of great help in breast modeling. We present the results of our personal technique developed over the last eight years. Between November 2016 and December 2024, 482 cases of tuberous breast were treated with some personal modifications to the techniques described and with the aid of a smooth-surface implant that allowed a gradual expansion of the lower pole thanks to a low tendency to capsular ingrowth. Expansion was measured thanks to a 3D graphic analysis software.

Lower pole expansion in the tuberous breast showed a constant and measurable increase during the first six months postoperatively and then stabilized at one year. The mean duration of follow-up was 32 months and expansion remained stable after the first year.

The use of a modified technique that allows gland redistribution and expansion together with a specific type of implant and surface that allows a gradual expansion of the lower pole, facilitate the preparation of the breast tissues and represent a great advantage in the outcomes of the treatment of the tuberous breast.

(1) The Surgical Treatment of Tuberous Breast Deformity: A Review Article
Daniel El Israwi , Jean Paul Makdessi , Samer Bassilios Habre
Ann Plast Surg. 2023 Sep 1;91(3):395-399

Palatal Fistula Difficulty Index - A Standardized Assessment Tool for Surgical Complexity of Palatal Fistulas

Abstract Presenter: Ghulam Qadir Fayyaz MD

Background: Palatal fistulas represent the most challenging complication after cleft palate repair, with recurrence rates ranging from 2.4% to 35%. The lack of a standardized difficulty index complicates surgical decision-making, specifically in the management of complex defects. The Palatal Fistula Difficulty Index (PFDI) was formulated as a quantitative tool to stratify fistula complexity based on anatomical and functional factors. With numerical scores assigned across six categories - location, size, configuration, number of fistulae, velopharyngeal function, and recurrence - the index ensures patients with complex defects receive timely referrals to tertiary institutes, optimizing postoperative outcomes. This study aimed to develop and validate the Palatal Fistula Difficulty Index by assessing its reliability and accuracy in identifying high-risk cases necessitating specialized intervention.

Methods: A prospective study was conducted at CLAPP Hospital, Lahore, Pakistan, over three months from November 2024 to January 2025. A total of 30 patients with palatal fistulas were selected and assessed using the six-category index, which assigned scores for: (1) Fistula Location (Midline, Lateral, Subtotal); (2) Size (<1 cm, 1–3 cm, >3 cm); (3) Configuration (Longitudinal, Transverse, Irregular); (4) Number of Fistulae (Single, Two, >Two); (5) Palate Function (Both Adequate, Function Adequate but Length Inadequate, Neither Adequate); and (6) Recurrence (Primary, Operated Once, Operated More Than Once). Selected cases were distributed to 20 experienced cleft surgeons across different institutions. Each surgeon independently evaluated the cases and assigned a score, which they sent back for analysis. Inter-rater reliability was assessed using the intraclass correlation coefficient (ICC). Postoperative outcomes were analyzed, focusing on fistula recurrence, operative time, and functional outcomes. Statistical analyses were conducted using R Statistical Software (Version 4.3.2; R Core Team 2024).

Results: The inter-rater reliability of the PFDI was excellent (ICC = 0.91, 95% CI: 0.87–0.94), indicating high agreement among evaluators. The index score correlated significantly with operative time ($r = 0.82$, $p < 0.001$), confirming its predictive value for surgical complexity. Logistic regression analysis demonstrated that each 1-point increase in the score was associated with a 2.95-fold increased risk of recurrence (OR = 2.95, 95% CI: 2.11–4.27, $p < 0.001$). The recurrence rate increased significantly with complexity, with low complexity cases (6–9 points) showing a 5% recurrence rate, moderate cases (10–14 points) an 18% recurrence rate, and high complexity cases (15–18 points) a 42% recurrence rate ($p < 0.001$, χ^2 test). Operative time also varied significantly between groups (low complexity: 43 ± 11 min; moderate: 74 ± 19 min; high:

112 ± 24 min, p < 0.001, ANOVA). 72% of high-complexity cases treated at non-specialized centers ultimately required referral to the tertiary cleft center due to failed closure.

Conclusion: The Palatal Fistula Difficulty Index is a reliable and predictive tool for classifying palatal fistula complexity and guiding referral decisions. Higher scores were strongly associated with longer operative times, increased recurrence risk, and the need for specialized surgical intervention, making the scorecard a valuable triage system for identifying cases that should be referred to tertiary cleft centers.

Silicone Gel Dressing versus Concoction of Sesame Oil, Beeswax and Cactus Juice in the Prevention of Hypertrophic Scar Development on the Split Thickness Donor Site: A Single-Center, Open-Label, Randomized Controlled Trial

Abstract Presenter: Katrina Jo Lobo MD

Abstract Co-Author: Ma. Arlene Cala-or MD

Scars are the endpoint of wound healing after the body worked to restore continuity of tissues after an injury. An uncontrolled proliferating phase or inadequate remodeling phase of wound healing result to abnormal scars such as hypertrophic and keloid scars. They are thick, mostly hyperpigmented raised layers of connective tissues growing beyond the site of injury. These are associated with pain, pruritis, tenderness that is easily abraded with minimal trauma, while some may only complain of aesthetically unpleasant scar but above all it could negatively impact the patient's quality of life. The management entails time, effort, money, endurance, and full participation of patient and caregivers.

This study aimed to prevent the development of hypertrophic scar using Moist Exposed Burn Ointment (MEBO) Scar and comparing its results to the widely accepted treatment using Silicone Gel Dressing. Silicone gel is available in smaller preparation but is more expensive than MEBO. MEBO Scar had been used locally to all phases of wound healing but remained to be controversial and unpopular universally as part of wound care management. The result of the study hopes to provide scientific data and be able to contribute to the literature of wound healing management. This study was done with no non-disclosure agreement from manufacturers.

Subjects of the study were patients who underwent split thickness skin graft. The harvested area of skin graft was assessed monthly for 3 months after treatment with either Silicone Gel or MEBO Scar as they undergo phases of wound healing and monitored for the development of hypertrophic scar. Two board certified plastic surgeons blinded of the treatment independently assessed the patients' donor site.

A total of 24 patients were included in the study. Twelve patients were treated with Silicone Gel and 12 patients for MEBO Scar after randomization. No dropouts were recorded. Patient's demographic and clinical profiles were recorded including history or presence of hypertrophic scars other than the area studied. Both groups showed a continuous decline in the proportion of hypertrophic scar over time, such that none of the patients remained positive at Week 12 and there was no significant difference between the two groups was observed. Median pain scores were not significantly different on both treatment groups as well.

This study demonstrated that MEBO Scar is as effective as Silicone gel dressing in preventing the development of hypertrophic scar.

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Innovative Horizons in Rhinoplasty Integrating Advanced Imaging Precise Surgical Techniques and Structural Refinement for Superior Functional and Aesthetic Outcomes

Abstract Presenter: Pawel Szychta MD, Phd, Dsc, Prof.

Aim: This study synthesizes advancements from three comprehensive investigations into rhinoplasty, emphasizing the innovative integration of advanced imaging modalities, precise surgical techniques, and structural refinement. These findings address critical challenges in primary and revision rhinoplasty, including structural integrity, functional optimization, and aesthetic harmony.

Methods: The research encompassed over 300 cases, leveraging a multimodal approach combining preoperative computed tomography (CT), 3D imaging, and algorithmic surgical planning. The studies included:

- The use of nasal CT in structured rhinoplasty for functional and aesthetic planning.
- Combined rhinoplasty and lip lift procedures for enhanced facial harmony.
- Costal graft integration in revision rhinoplasty using advanced imaging for precision planning.

Functional and aesthetic outcomes were assessed using the Nasal Obstruction Symptom Evaluation (NOSE) and Rhinoplasty Outcome Evaluation (ROE) scores at baseline and postoperative intervals.

A diverse cohort of patients presented with varying nasal and facial concerns. Follow-up durations ranged from 3 months to 5 years, enabling comprehensive evaluation of outcomes and long-term efficacy.

Results: With preoperative nasal CT, patients demonstrated significantly enhanced nasal airflow and aesthetic satisfaction, with NOSE and ROE scores improving by 78% and 300%, respectively. CT-guided planning enabled precise correction of structural anomalies while minimizing radiation exposure. The combined approach of simultaneous rhinoplasty and lip lift achieved optimal balance between nasal and lip enhancements, delivering harmonious facial rejuvenation. Aesthetic satisfaction exceeded 92%, with reduced recovery time compared to separate procedures. In revision rhinoplasty, costal cartilage integration facilitated effective reconstruction of complex nasal deformities. Imaging-guided graft sculpting improved structural stability and aesthetic proportions, achieving a 95% satisfaction rate and reducing complication rates to 2.9%.

Conclusions: The integration of advanced imaging modalities with precise surgical techniques represents a paradigm shift in rhinoplasty. These innovations enable patient-specific solutions, optimizing both aesthetic and functional outcomes while addressing the complexities of primary and revision rhinoplasty. These findings underscore the transformative potential of modern rhinoplasty practices, setting new benchmarks for surgical precision and patient satisfaction.

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META-ANALYSIS OF PLATELET RICH-PLASMA FOR VENOUS ULCERS: CLINICAL EFFICACY AND COMPLICATIONS

Abstract Presenter: Daniela Silva

Abstract Co-Author(s): Pedro Machado, Ricardo Horta

INTRODUCTION: Venous leg ulcers (VLUs) are a prevalent and challenging consequence of chronic venous insufficiency, resulting in significant morbidity, prolonged healing, and high recurrence rates. They adversely affect patients' quality of life and impose a substantial economic burden on healthcare systems. Traditional treatments, including compression therapy and wound care management, often lead to slow and incomplete healing. Recently, platelet-rich plasma (PRP) has emerged as a potential therapeutic option, containing high levels of platelets and growth factors that are believed to enhance wound healing. However, PRP's effectiveness in VLUs remains controversial, with studies reporting varying degrees of success. This systematic review and meta-analysis aim to assess PRP's overall impact on wound healing in VLUs and clarify its efficacy.

METHODS: A systematic search was conducted in PubMed and Web of Science databases. Thirteen studies were included, with a total of 554 patients. Healing outcomes, such as total and partial ulcer healing rates, were analyzed using binary random-effects models. Heterogeneity was assessed using τ^2 , Q-tests, and I^2 statistics to account for variations across studies.

RESULTS: The meta-analysis demonstrated that PRP significantly increased total wound healing by 50% compared to conventional treatments. The pooled estimate for complete ulcer healing in patients treated with PRP showed a meta-analytical incidence of 1.5 [95% CI 1.09-2.07], indicating a significant improvement in healing outcomes. Substantial heterogeneity was observed across studies ($I^2 = 58\%$, $p < 0.001$). The

percentage of ulcer area reduction at the end of the follow-up period was significantly higher in the PRP group, with a meta-analytical incidence of 16.37 [95% CI 6.45-26.28]. This outcome also exhibited severe heterogeneity ($I^2 = 97\%$, $p < 0.001$). Complete ulcer healing at the 4th week of follow-up showed a meta-analytical incidence of 3.65 [95% CI 1.08-12.32], with substantial heterogeneity ($I^2 = 61\%$, $p < 0.001$). Meta-regression analysis revealed a significant positive association between age and treatment effect (standardized mean difference: 1.023, 95% CI: 0.418 to 1.628, $p < 0.001$). Ulcer recurrence rates were lower in the PRP group, with a meta-analytical incidence of 0.25 [95% CI 0.06-0.99], associated with low heterogeneity.

CONCLUSION: PRP is an effective therapy for venous leg ulcers, significantly increasing total wound healing by 50%. These findings support PRP's integration as a valuable approach to manage VLUs, especially for patients with slow-healing or chronic wounds.

Tips and tricks in free flap transfer patient management - the Timisoara experience.

Abstract Presenter: Zorin Crainiceanu MD

Abstract Co-Author(s): Vlad Bloanca, Sara Baneu, Isabela Caizer

Aim: Free flap transfer reconstructive surgery remains one of the most demanding chapters of plastic surgery also for patients and surgeons. This kind of patients management requires continuous analysis for patients security and outcome improvement, but also to reduce the effort of the medical team and lower treatment costs.

Method: This paper evaluates 10 years free flap transfer in one plastic surgery department.

Microsurgical technique acquire, number of patients, surgeries and free flaps, healthy donor site involvement, functional and cosmetic aspects of donor and recipient sites, strategies and tactics of approach, treatment stages, particularities and critical situations are analyzed.

Results / Discussion: High diversity of free flaps was used for different kinds of reconstruction in all body regions. Numerous cases needed multidisciplinary approach and some several operating stages in consecutive steps or the same operating time.

Good training and communication of team member can avoid or solve complications, which are common part of complex cases. Some complications require changes in strategy to reduce risks.

Conclusion: Free flap reconstruction represents a common solution in any plastic surgery department. The free flap transfer patient needs holistic multidisciplinary approach. Microsurgical reconstruction is always a teamwork. Common strategy includes back up (plan B and sometimes even plan C). All parts involved (patients, patients relatives, medical staff, insurance companies) must admit that surgery, sometimes in several stages, is just one step of a long walk. A correct assessment of each stage allows good planning, minimizing risks and enhancing outcome.

Endolaser

Abstract Presenter: Jamal Jomah MD

Introduction: Endolaser technology, utilizing a 1470 nm diode laser, targets water and fat cells, making it a promising tool for skin tightening, body contouring, and facial rejuvenation in plastic surgery and cosmetic dermatology.

Aim: This presentation aims to evaluate the effectiveness and safety of Endolaser procedures for improving skin texture and reducing fat in various facial and body areas.

Method: A series of case studies were conducted, utilizing the Endolaser for treatments in areas such as the upper eyelids, nasolabial folds, and cellulite in the thigh and buttock regions. Quantitative analysis included patient satisfaction rates, histological changes, and imaging techniques to assess outcomes. Treatment parameters were followed according to the manufacturer's guidelines.

Results: The Endolaser demonstrated significant efficacy, with up to 30% reduction in localized fat and high patient satisfaction rates (90%). Notable improvements were observed in skin texture, elasticity, and overall appearance, with minimal side effects and quick recovery times reported.

A patient satisfaction survey on Endolaser treatment was conducted and the preliminary result showed above-average satisfaction among participants. When asked if they would recommend Endolaser to others, they responded positively. Minor complications such as small burns and temporary neurofascial effects involving the

mandibular frontal nerve were reported but were temporary in nature. Several patients highlighted noticeable improvements, with some noting that their appearance remained youthful compared to colleagues who had aged more visibly.

Conclusion: Endolaser technology represents a valuable non-surgical option for patients seeking aesthetic enhancements. With ongoing research and clinical validation, its applications may expand, providing innovative solutions in cosmetic treatments while maintaining high safety and satisfaction levels.

Non-invasive assessment of nipple temperature change using a thermal imaging camera: an early indicator of nipple necrosis following nipple-sparing mastectomy and immediate breast reconstruction

Abstract Presenter: Rah Yoon Kim

Abstract Co-Author: Jun Yong Lee MD

Background: Immediate breast reconstruction following nipple-sparing mastectomy has become widely practiced due to the preservation of nipple-areolar complex (NAC) and improved aesthetic outcomes. To minimize loco-regional recurrence and ensure negative margins at the NAC, it is crucial to maximize breast tissue removal beneath the NAC. However, this increases the risk of nipple ischaemia and necrosis. Indocyanine green (ICG) angiography can assess the skin flap vascularity but is limited by the factors such as skin temperature, vasoconstrictors, and the unavoidable use of dye, which can hinder its utility in monitoring nipple necrosis. In contrast, thermal imaging cameras offer a non-invasive, dye-free way to assess blood perfusion. Therefore, we aimed to evaluate the usefulness of thermal imaging as an early predictor of nipple necrosis.

Method: A retrospective single centre study was conducted, including patients who underwent nipple-sparing mastectomy followed by immediate breast reconstructions with autologous, direct-to-implant or tissue expander insertion between 2022 and 2024. Patients were stratified into two groups based on the presence of nipple necrosis. Temperature differences between the nipple and surrounding skins (measured at three points perpendicular to the incision site) were recorded using thermal imaging on postoperative day one (thermal resolution: 0.07°C). Data collected included patient demographics, diagnosis, cancer stage, reconstruction method (autologous, direct-to-implant, expander), plane (subpectoral, prepectoral), cancer location, incision method

(upper outer, axillary, previous scar), skin resection, number of frozen biopsies of the nipple, excised breast size (g, ml), ASA classification, operation time, blood loss, smoking, medical history, menopause status, neoadjuvant chemotherapy, haemoglobin levels (pre-, post-operative), transfusion history, blood pressure (pre-, post-operative), and body temperature (pre-, post-operative). The collected data were analysed using StataNow/MP 18.5 software, with Fisher's exact test, the Wilcoxon rank-sum (Mann-Whitney), and receiver operating characteristics (ROC) curve analysis to compare both groups.

Results: Of the 33 immediate breast reconstructions, 9 patients with nipple necrosis were analysed. (alpha 0.05, beta 0.8). Four patients required revisional procedures. A statistically significant temperature difference was observed between the nipple and surrounding tissue in patients with nipple necrosis compared to those without necrosis. (mean temperature difference -0.98°C vs. -0.40°C , $p=0.022$). The ROC curve analysis revealed an area under the curve (AUC) of 0.76 and an optimal cut-off value of -0.63°C (sensitivity: 0.778, specificity: 0.708). No additional factors were found to significantly increase the reliability of AUC.

Discussion: Patients with nipple necrosis exhibited significantly lower nipple temperature compared to surrounding skin, indicating nipple ischemia. Although the AUC suggests that thermal imaging has acceptable reliability for predicting nipple necrosis, further research is needed to identify more reliable parameters for predicting nipple ischaemia and necrosis. Thermal imaging provides useful for non-invasive, intuitive postoperative monitoring of skin perfusion, allowing for repeated assessments to predict outcomes. These findings provide valuable insights that may guide decisions in managing nipple necrosis after immediate breast reconstruction.

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First Ever World Face Transplant from a Donor in Cardiac Asystole (DCA), including the heart

Abstract Presenter: josep oriol bermejo segu

Since 2005, nearly 52 face transplants have been performed worldwide. This is a highly specialized surgery reserved for a select group of patients. A candidate for a face transplant must meet certain criteria, including psychiatric and immunological evaluations, among others.

In September 2024, our team at Bellvitge University Hospital in Barcelona performed the 52nd face transplant in the world.

The recipient was a 46-year-old patient with a giant plexiform neurofibroma on his face, causing severe deformity on the right side. As a result, we proposed a face transplant involving the nose, half of the lips, the right eyelids, and the entire right side of the face, including the scalp.

What set this transplant apart was the organ donation protocol. Currently, around 60% of organ donations occur in controlled asystole, and since 2021, this technique has also been applicable to heart donations. In this case, we present our experience with a multi-organ donation from a donor in controlled asystole, which included the heart, kidneys, and face, with three recipients receiving these organs simultaneously.

The complexity of this donation was particularly high due to the fact that the facial dissection had to be performed under ischemic conditions, owing to the nature of the donation in asystole. When the heart was included in the donation, the complexity increased even further, as we could not begin the facial dissection until the heart had been removed from the donor. To address this, we followed a complex protocol to preserve the face for the recipient.

During the first 30 minutes, the cardiac surgeons carried out the heart dissection. In this initial period, the face was in warm ischemia. Once the heart was removed, we applied extracorporeal circulation to the face for 15 minutes to revascularize it. Finally, we

began cold ischemia using Wisconsin solution and commenced the dissection of the face, which was carried out simultaneously with the kidney dissection.

The total cold ischemia time was 4 hours. The face transplant was ultimately successful, with the patient spending three weeks in the hospital before being discharged home.

The Impact of Arterial Hypertension in Upper Blepharoplasty for Dermatochalasis: A Comparative Study

Abstract Presenter: Juan Viscardi

Abstract Co-Author: Salvatore Giordano

Background: Dermatochalasis is a skin excess in the upper eyelid which may be associated with orbital fat prolapse, lacrimal gland prolapse, and involutional blepharoptosis. Upper blepharoplasty is the gold standard procedure for correction of dermatochalasis, and it is the third most common plastic surgical procedure in the USA. However, it is performed mostly in elderly patients, who often have arterial hypertension, which might increase postoperative complications. It is not clear whether upper blepharoplasty can be safely performed in these patients, because of the high bleeding risk. We aimed to investigate the safety of blepharoplasty in patients affected by arterial hypertension.

Material and Methods: A comparative retrospective study was conducted in 387 consecutive patients with dermatochalasis of the upper eyelid, who underwent upper eyelid blepharoplasty from January 1st 2015 to June 30th, 2017 at Turku University Hospital. Exclusion criteria included prior eyelid or orbital surgery. Patients were divided according to the arterial hypertension diagnosis and therapy (211 patients) versus control group (176 patients). Complications and outcomes were compared. Patient's and surgeon's satisfaction were also scored and assessed.

Results: Baseline characteristics showed significant differences in age and comorbidity rates in the arterial hypertension group. Operative time, return to work and follow-up were similar between the two groups. A trend towards an increased estimate blood loss was detected among patients affected by arterial hypertension (7.4 vs 5.6 ml, $p=0.163$). No significant differences in any kind complications were detected (4.3% vs 5.1%, $p=0.809$). Ecchymosis requiring further observation was slightly higher in the study

group (0.9% vs 0%, $p=0.503$). Subjective patients' and surgeon's satisfaction tended to be higher in the hypertension group.

Conclusions: Occurrence of arterial hypertension appears to have no effect on the clinical outcomes of upper lid blepharoplasty for dermatochalasis. However, it is important to have a well-compensated antihypertensive treatment before operation.

Subzygomatic Tensor Fascia Lata Lip Sling: A Minimally Invasive Technique Solution for Unilateral Facial Paralysis

Abstract Presenter: Phiraya Thaijiam MD

Background: Facial paralysis profoundly affects function, emotion, and aesthetics, with restoring facial symmetry posing a significant challenge. While dynamic reconstructions like microvascular free muscle transfer are gold standards for achieving a spontaneous smile, static techniques are often necessary for optimal results. Traditional static approaches can improve lip and oral commissure symmetry but are associated with surgical complexity and morbidity. This study evaluates the outcomes of a minimally invasive subzygomatic tensor fascia lata (TFL) sling as an alternative for improving symmetry in unilateral facial paralysis.

Methods: We reviewed 10 patients with unilateral facial paralysis who underwent a minimally invasive subzygomatic TFL sling between November 2018 and September 2023. Patient demographics, surgical techniques, outcomes, and complications were analyzed. Outcomes were measured using objective and subjective parameters.

Results: The mean age at surgery was 54.5 years, with 70% of the patients being female. Nine patients had undergone prior reconstructive procedures, and one underwent a concurrent masseteric nerve transfer. No postoperative complications or additional procedures were required. Significant improvements in symmetry were observed: vertical lip inclination decreased by 1.90° and horizontal inclination by 3.10° ($p < 0.001$), while the difference in the upper and lower lip surface area between sides was significantly reduced ($p < 0.001$). Visual assessment and the perception of asymmetry improved significantly at 12 months postoperatively.

Conclusion: The minimally invasive subzygomatic TFL sling provides effective, durable results for unilateral facial paralysis. This technique simulates the native orientation of

the zygomaticus major muscle, reduces morbidity, and can complement dynamic reanimation procedures.