

P01 – Withdrew From The Meeting

Defining Facial Beauty Standards in Asian Indian Women

Debraj Shome, MD, FRCS, FACS, MBA

Covid-19 Induced Telogen Effluvium And The Role Of A Novel Biomimetic Peptide Hair Growth Formulation In The Management Of Telogen Effluvium

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AMERICAN ACADEMY OF COSMETIC SURGERY

Financial Disclosure

- The authors have been one of the founding members of the Research team behind patent of QR678 Neo® hair growth formulation.
- The Novel biomimetic peptide molecule called QR678 Neo® has been used in this study for Covid-19 induced persistent Telogen Effluvium.

About QR678

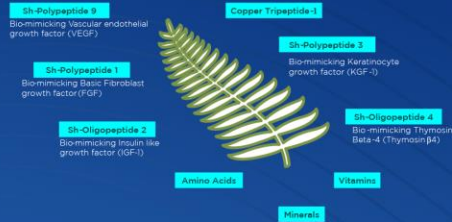
OVERCOMING THE BARRIERS, CHALLENGES AND UNCERTAINTIES

- Patented in USA
- Patented in India
- FDA approved in 10+ countries



The QR678 Neo Formulation

PLANT DERIVED BIOMIMETIC POLYPEPTIDES (Ubiquitous, Upregulated, Upscaled)



Background

Telogen Effluvium in a post Covid-19 patient causes excessive shedding of hair. No definite treatment is available till now. Past studies suggest that QR678Neo® has shown promising results in various types of Alopecia.

Introduction

- Nonspecific reaction pattern of hair loss with increased shedding of telogen hair that developed after 3-4 months of the causing event.
- Covid-19 is known to cause physiological and psychological stress.

Material & Method

Prospective clinical, single-blind study was conducted from September 2020 to May 2021 after seeking approval from the Institutional Ethics Committee.

Inclusion Criteria

- Patient presenting between the ages of 20- 50 years after recovery from RT-PCR proven Covid-19 infection with sustained hair fall even after 6 months.
- Patients having noticeable increased hair loss, and loosing hair in bulk.

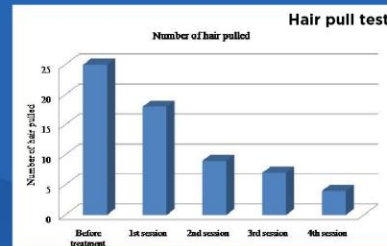
Exclusion Criteria

- Hair loss from before suffering with Covid 19 infection.
- Any other type of alopecia other than telogen Effluvium.
- Females who are pregnant or lactating.
- Patients on consumption of oral Finasteride/spironolactone, Minoxidil and/or oral contraceptives.
- Patients with medical disease or on drugs which affect hair loss.

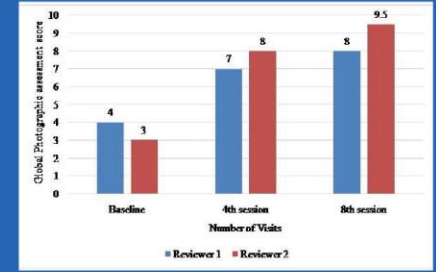
Injection Technique

- At each visit, 1.5 mL of QR678Neo® solution was administered into the scalp.
- Using a 31-G needle and the nappage technique.
- Total 8 sessions.

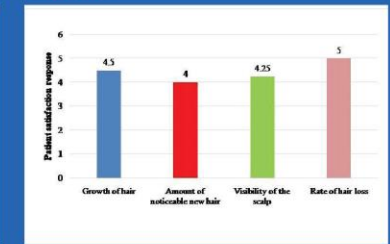
Results



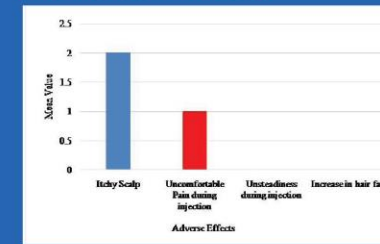
Global photographic assessment



Patient Satisfaction Score



Adverse Effects



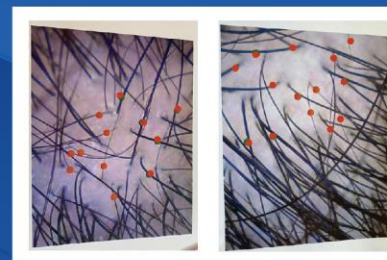
Conclusion

- The Covid-19 stress induced persistent Telogen Effluvium can be daunting on the patients post Covid -19.
- Treatment modalities currently present, fail to give justice to this new onset factor of excessive hair loss due to Covid-19.
- Present study suggests a definitive and quantifiable role of QR678Neo® hair growth formulation in the Covid-19 induced persistent Telogen Effluvium patients for significant improvement in hair density and hair count, and also reduces the hair fall.

References

- Grover C, Khurana A. Telogen effluvium. Indian Journal of Dermatology, Venereology, and Leprology. 2013;79:591.
- Rebora A. Telogen Effluvium: A Comprehensive Review. Clinical, Cosmetic and Investigational Dermatology. 2019;12:583-590.
- Kapoor R, Shome D. Intradermal injections of a hair growth factor formulation for enhancement of human hair regrowth – safety and efficacy evaluation in a first-in-man pilot clinical study. J Cosmet Laser Ther. 2018;20:593-599.

Videomicroscopic Assessment



Published Research Papers

Introduction

- Cosmetic Surgery (CS) is a **multi-specialty** multi-disciplinary field that is not exclusive to a certain medical specialty.
- Adding Cosmetic Surgery to a current practice involves multiple steps that can be implemented in an organized and structured way to provide patients with proper care meeting the acceptable standards.
- Many Physicians, from Different specialties, recognize cosmetic surgery as complimentary to their current practice.
- OB/GYN physicians performing abdominoplasty after pregnancy and delivery.
- Bariatric surgeons performing body contouring after massive weight loss.
- Breast surgeons performing a breast augmentation and reconstruction after mastectomies.
- Different types of CS represent the continued care for patient's and fall naturally in place in the physician's practice.
- Implementation needs to be properly done to provide patients with quality care.

Steps to add cosmetic surgery to current practice:

Join the AACS
*"The AACS is committed to advancing the **multi-specialty**, global discipline of cosmetic surgery and medicine for the benefit of patients and practitioners".*

If the goal is limited procedures, then courses and proctoring might suffice

If the goal is a wide range of CS procedures → AACS fellowship → Board certification by the American Board of Cosmetic Surgery (ABCS) and/or the American Board of Facial Cosmetic Surgery (ABFCS)

Steps to add cosmetic surgery to current practice:

- 1- Start with **internal marketing** to extend your services to your already established patients
- 2- Procedures are more cost effective in an **office-based surgery center** or **free-standing ambulatory surgery center** compared to hospital setting
- 3- Check your **State regulations** for office based and ambulatory Surgery centers in terms of sedation personnel (for example, RNs can administer Propofol in most of the States while a few States consider this as out of the RN scope of practice)
- 4- Operate in an **ACCREDITED** facility (AAAHC, AAAASF, JC, etc)
- 5- Check if **Certificate of Need (CON)** is required in your State and the extent it would affect your practice
- 6- Utilize the **different options** to perform CS **SAFELY** (Awake, oral sedation, IV sedation, general anesthesia)
- 7- Hemodynamic monitoring, pulse oximetry should be used. We also recommend BIS monitor if IV sedation is utilized. emergency cart should be available.

Utilize your supporting institutions:

Cosmetic surgery is NOT exclusive to a certain specialty

- Since its formation in 1985, the **AACS** has grown to become the leading representative of CS practitioners from a diverse array of original medical disciplines
- The **ABCS** accepts only those who have completed the most extensive, in-depth and focused CS training programs.
- By limiting candidacy to those who have completed a full year (or more) of training concentrated solely in CS, the ABCS reinforces its commitment to public safety and aesthetic surgery.



AMERICAN ACADEMY
OF COSMETIC SURGERY



AMERICAN BOARD
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We need More

If you have not joined already, I strongly encourage you to join the American Medical Association (AMA) and participate by helping to amplify AACS's voice in their House of Delegates (HOD), on which AACS has a seat.

[Register your Cosmetic Surgery specialty on your AMA profile](#)



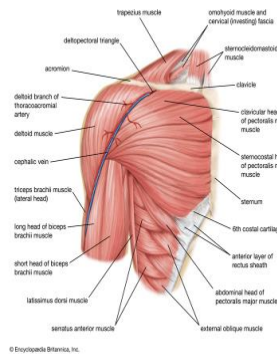
Introduction

- TUBA involves placement of saline breast implants above or below the pectoralis major muscle through the umbilicus.
- TUBA requires a different skill set including endoscopic skills, tactile feedback and intermittent blind, yet safe, dissection.

Operative technique

- Proper tumescence anesthesia is key in performing a successful TUBA.
- The technique varies slightly based on subpectoral versus subglandular pocket creation.
- Tumescence: 1 L LR + 750 mg lidocaine + 1 mg of epi 1/1000.
- Tumescence is injected using 20 gauge spinal needle connected to tumescence infusion pump.
- Subglandular: 500 mL into each breast, Subpectoral: 250 mL into each breast
- 100 - 150 ml into each abdominal wall tunnel including the umbilicus.

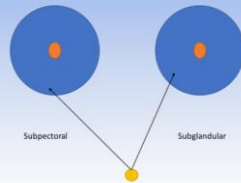
Pectoralis Major



Medial → Tight
Lateral → Loose

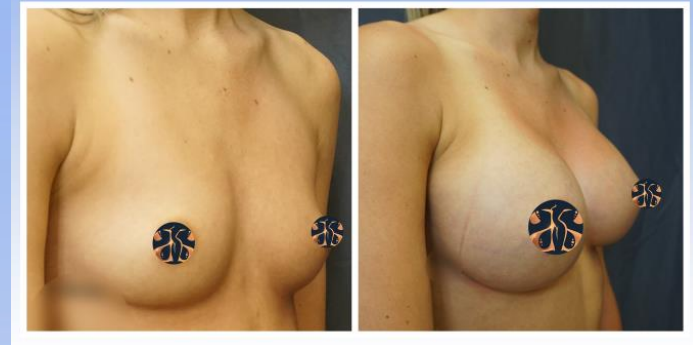


Tunnels & IMF access



Operative steps

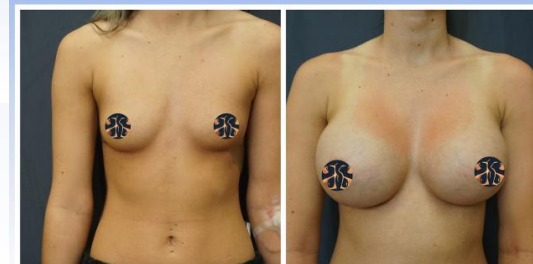
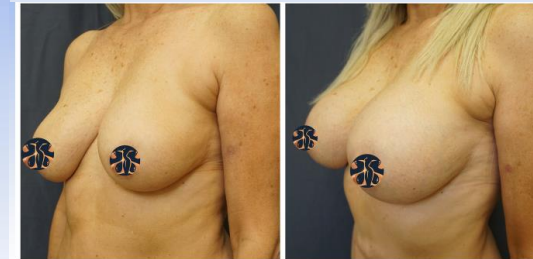
- For subglandular dissection: The IMF is incised medial to the NAC.
- For subpectoral dissection: The IMF is incised lateral to the NAC.



- A critical note when performing TUBA is to use this SAP consistently
- SAP = intersection of the tunnel mark with the IMF
- All instruments are kept parallel to the rib cage to avoid thoracic injury.
- A hockey stick dissector is used to take down the inferomedial attachments of the pectoralis major in subpectoral dissection and used to lower the IMF if needed.



- The tissue expander is then delivered into the pocket using the mammotube. It is then removed after confirming proper dissection.
- A 10/0 or 10/30 degree endoscope, placed in a mammotube, is used to examine the pocket during the different stages of the procedures.
- The pocket is irrigated with antibiotic irrigation flushed through mammotube that is placed in the pocket .
- Saline implants are placed into the pockets using the mammotube.
- The patient is sat up to confirm proper implant position.
- The fill tubes are disconnected and the umbilical incision is closed using 4-0 chromic interrupted subcuticular suture.



Introduction

Tumescent anesthesia has become tremendously popular in cosmetic surgery and other specialties. However, the field of general surgery has not widely adopted tumescent anesthesia.

Case Presentation

I] Emergency Department Course:

- 81-year-old male nursing home resident with very limited mobility
- A. fib, T2DM, diabetic neuropathy, hypertension, hyperlipidemia and history of CVA 4 years prior. The patient also had a chronic right inguinoscrotal hernia.
- Presented with strangulated hernia, sepsis, A fib rapid RVR, abd compartment, PVR

II] Pre-Operative Course:

- The surgical and anesthesia teams conducted a collaborative discussion
- ASA 4E status, hemodynamic instability, portal venous air, gangrenous bowel, strangulated hernia, poor functional status, and lung infiltrates on imaging.
- Spinal anesthesia was ruled out secondary to apixaban therapy.
- Plan → **Tumescent anesthesia with monitored IV sedation.**

III] Operative Surgical Course:

- Lidocaine 500mg + epinephrine 1mg in 1000 ml in 1 L LR
- Total tumescent volume infiltrated during the surgery was 1,700 ccs (850 mg lidocaine or 8.5 mg . kg,-1)
- The procedure was:
 1. Ex Lap
 2. Extensive LOA
 3. Repair of strangulated large right inguinoscrotal hernia
 4. SB Rsnx
 5. Double Barrell Ileostomy
 6. Complex abdominal wall closure

IV] Operative anesthesia course:

- Operative time was 6 hours and 2 minutes.
- 2 boluses of midazolam 1mg.
- Intermittent boluses of fentanyl 25 mcg throughout for a total of 500 mcg.
- Propofol 10 - 20 mcg . kg . min-1
- Boluses of ketamine 10mg, for a total of 50 mg
- Diltiazem at 5 mg . hr,-1, esmolol boluses totaling 170 mg.
- Boluses of vasopressin 1mg (total 6mg), and a phenylephrine drip was started and titrated as needed keeping MAP above 65 mmHg.

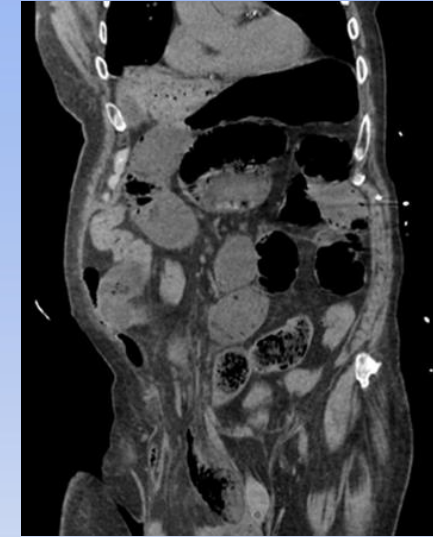
V] Postoperative Course:

- PACU: alert and oriented x 4.
- Within a few hours, the patient was taken off the phenylephrine drip.
- NG tube was removed on POD 3.
- His right IJ central venous catheter was removed, and a PICC line was placed on POD 4.
- Intermittent diltiazem infusions were required through POD 11, but he was eventually transitioned to oral metoprolol and digoxin. HR was controlled in the 80s to 100s at the time of discharge.
- At the time of discharge, he was tolerating a regular diet, and having regular bowel movements through his ileostomy. He maintained normal oxygen saturation on room air, and he was transferred to the floor on POD 12. He was then discharged back to the nursing home on POD 13.

Discussion

- Gangrenous bowel → very poor prognosis.
- Literature review shows a mortality rate higher than 95% if the condition is not treated appropriately.
- Operative intervention reduces the mortality rate to approximately 70%.
- In our case, General anesthesia would have posed a very high risk in this patient with an expected prolonged postoperative course, prolonged ICU stay, and the possible need for a tracheostomy eventually if he survived general anesthesia.

- Tumescent anesthesia is used routinely in cosmetic surgery, and general anesthesia is commonly used in general surgery. Here, we implemented what can be described as a crossover between specialties where tumescent anesthesia was used in an extremely critical general surgery patient.
- Limited literature (all elective)
- Local anesthesia is not a common approach for bowel cases, nor is there an expectation for it to become common in the near future.
- It is another potential tool in our armamentarium that we should keep in mind and use if the need arises.



Conclusion

- Tumescent anesthesia with MAC is here reported as an alternative to general anesthesia in the care of a moribund patient with multiple comorbidities requiring open abdominal surgery.
- Close cooperation between the surgeon and the anesthesiologist made the successful conduct of this case possible.

Abstract

Purpose: Abdominoplasty is a safely performed procedure to restore the abdominal contour of women after childbirth. Women routinely inquire about contraception at the time of cosmetic surgery consultations and we offer permanent sterilization as part of our protocol, if the patient desires. Bilateral tubal ligation is a safe and effective form of permanent birth control for women. Normally, tubal ligation is performed as an adjunct to cesarean delivery or as a laparoscopic outpatient elective procedure. We sought to establish the safety of transabdominal bilateral tubal ligation at the time of abdominoplasty surgery.

Methods: We obtained medical records from RGV Cosmetic Surgery and Vein Clinic over the past 10 years and identified 10 patients that underwent bilateral tubal ligation concurrent with their abdominoplasty. All cases were performed under general anesthesia along with local and tumescence analgesia. The average age of the patients were 36.5 (range) years and the average BMI was 28.25 (range). All patients received 5000 units of heparin and sequential compression devices were placed bilaterally prior to induction of anesthesia to prevent deep venous thrombosis (DVT). The procedure was performed with the patient in trendelenberg as part of the abdominal flap exposure to the costal margin using the modified Avelar technique. Prior to plication of the diastasis recti, a vertical fascial incision was performed from the umbilicus to the symphysis pubis to expose the fallopian tubes. Sterilization was performed using the modified Pomeroy method. Closure of the vertical laparotomy incision was performed with 0-vicryl sutures in a continuous fashion. This closure was then imbricated during plication of the diastasis recti with 0-ethibond suture. Mid-isthmus tubal segments were sent to pathology for identification. All tubal ligations were performed by a board-certified OB/GYN and all abdominoplasty procedures were performed by a board certified cosmetic surgeon.

Results: Patients were seen as per protocol on post-op day 1, 1-week, 2-weeks and then at 6 weeks. Recovery proceeded as normal with no additional complications noted from the bilateral tubal ligation. Drains were removed at normal time intervals.

Conclusion: Based on these limited data, we conclude that transabdominal tubal ligation can be safely performed at the time of abdominoplasty surgery.

Background

We encountered several women during consultation, who were of child-bearing age, about to undergo a major body transformation and were without any reliable means of contraception. Our goal was to counsel these women on the effects of pregnancy as it related to their future investment in cosmetic surgery body contouring. The thought was to protect this investment with a secure method of birth control and provide a bilateral tubal ligation at the time of abdominoplasty due to of the ease and safety of the procedure via this route.

Methods

Our normal protocol for patient selection was to perform a detailed history and physical examination. We ensured that patients did not have any medical conditions or scars that would prevent safe liposuction and abdominoplasty surgery. Once patients were deemed candidates for surgery and bilateral tubal ligations were consented for and completed, we were able to obtain records from RGV Cosmetic Surgery and Vein Center over the course of 10 years to identify patients who underwent abdominoplasty surgery with bilateral tubal ligations. We were able to evaluate post-operative recovery and post-operative drain removal across age and body mass index (BMI) and assess whether adding bilateral tubal ligations affected these milestones.

Results

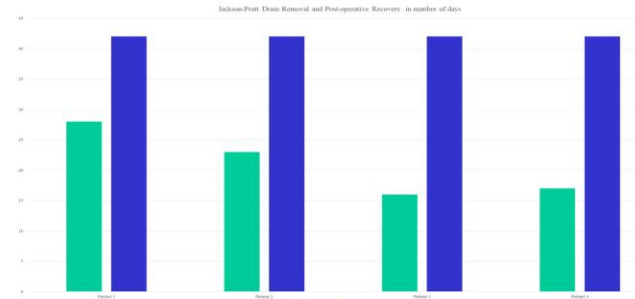


Figure 1: JP drain removal compared with length of post operative recovery

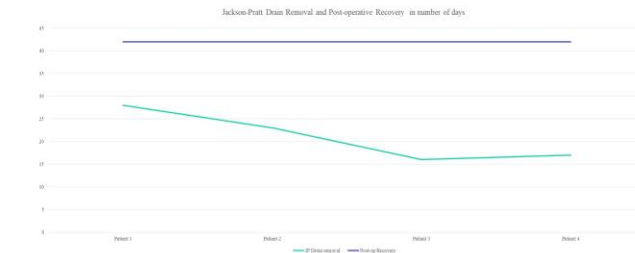


Figure 2: JP drain removal compared with post-operative recovery length

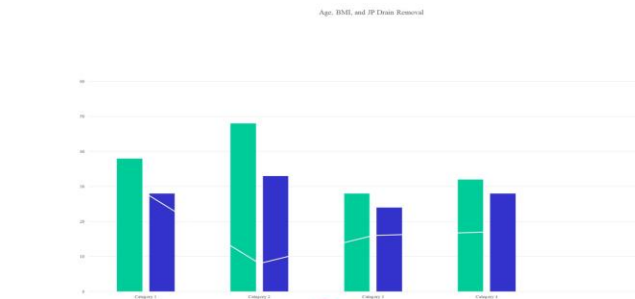


Figure 3: Age, BMI, and JP drain removal comparisons



Figure 3: Photo of the abdominal fascia prior to incision for bilateral tubal ligation

Conclusions

The limited data available shows that bilateral tubal ligation performed at the time of abdominoplasty did not increase morbidity of the procedure when evaluated based on age, BMI, and length of post-operative recovery.

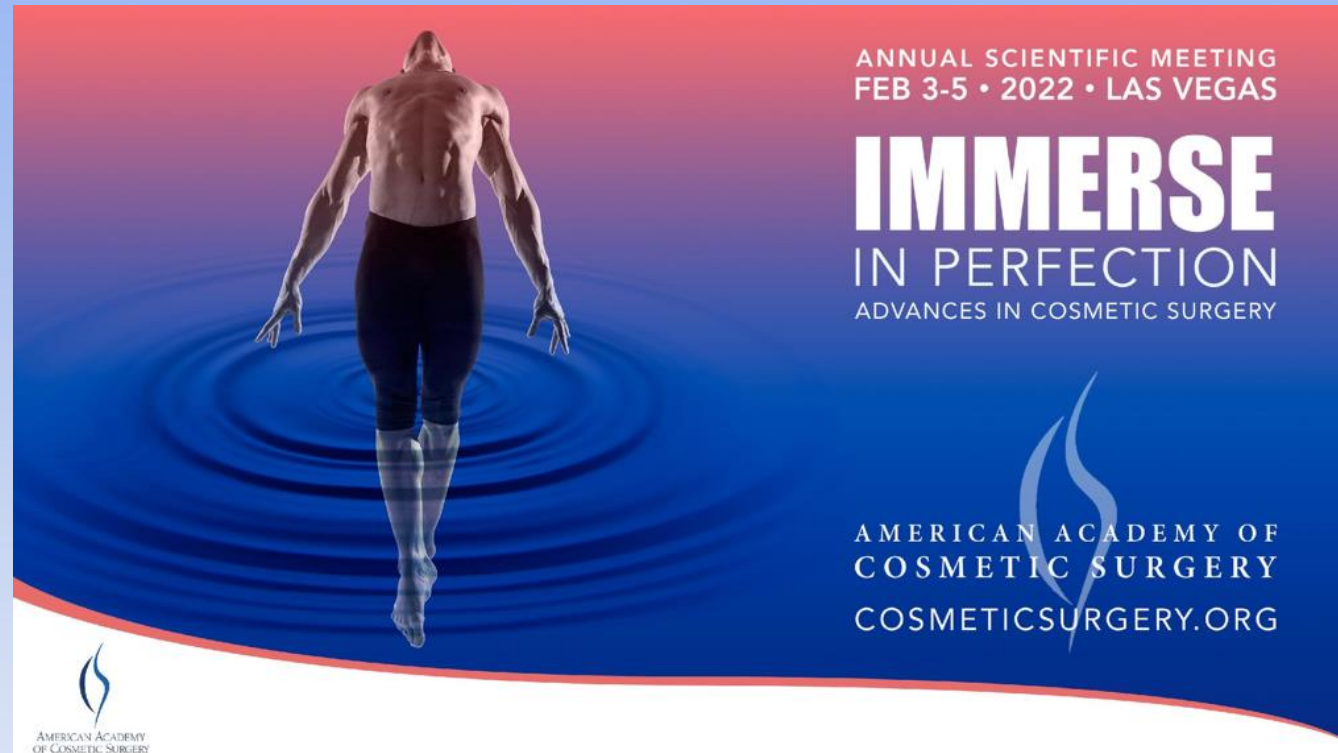
The sample size of this study was limited and more research needs to be performed in order to definitively make the association that bilateral tubal ligation has a high safety profile when performed along with abdominoplasty. Currently, the results are promising.

Acknowledgements

❖ The entire staff at RGV Cosmetic Surgery

Disclosures

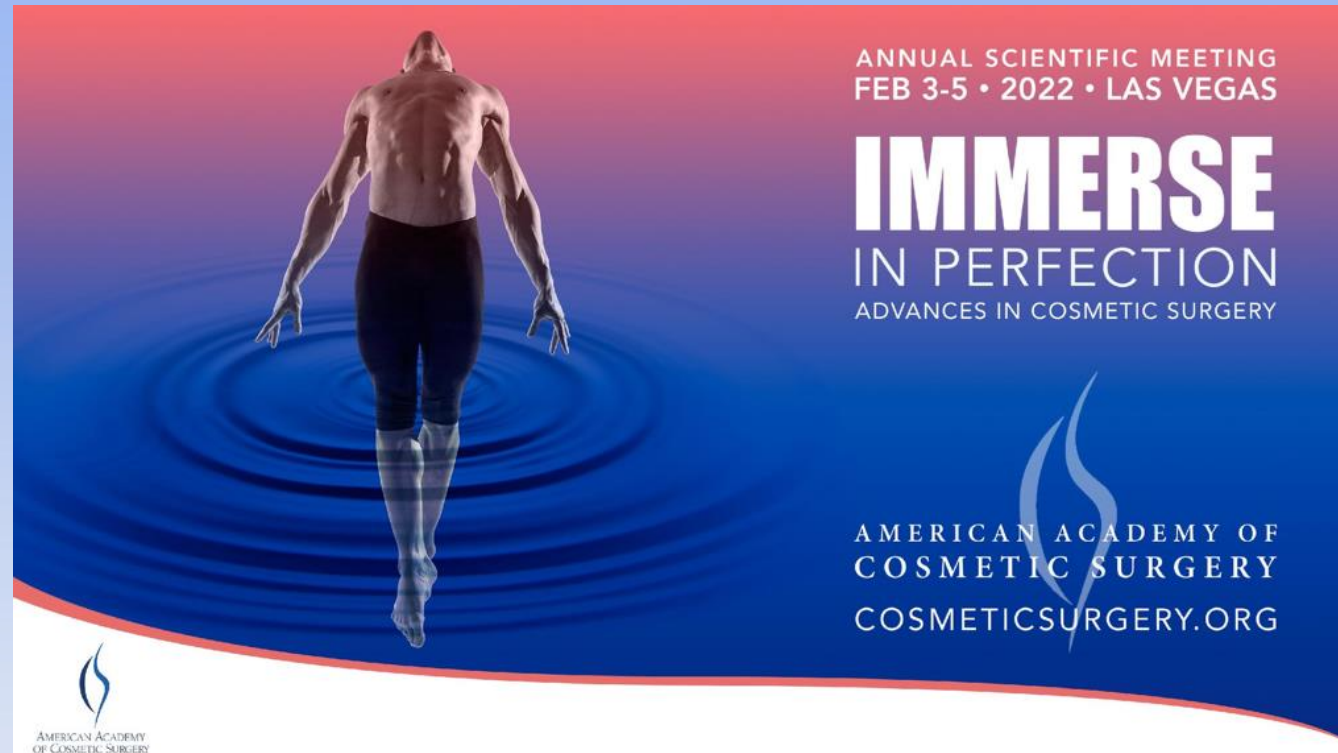
❖ Relevant to the educational content, I have no financial relationships with ineligible companies to disclose.



P07 – Withdrew From The Meeting

Gaining Market Share in 2022:
Advanced Growth Concepts for Leading Practices

Jon Hoffenberg



P08 – Withdrew From The Meeting

The Marketing Ladder: Prioritization in a World of Confusion

Jon Hoffenberg

Effect of the Klotho Protein on the Expression of a Panel of Telomere Relative Genes

Gail Humble MD, Reiana Mendiola

Introduction

- In mice, the over-expression of the Klotho gene extends the life span, whereas mutations to the Klotho gene shorten the life span. The human Klotho gene encodes the α -Klotho protein.
- It is known that telomeres regulate the cellular aging process.
- This study was designed to interpret the function of the Klotho protein and how it may play a critical role in cellular life extension by regulating telomere length and activity. The theory is that other significant genes which are relative to telomere life may be affected and either an increased or decreased in the expression of other relevant genes.

Process

- Construct a klotho containing plasmid vector with mammalian selection markers
- Transfect the primary adult mesenchymal stem cell lines from adipose tissue with the gene promoter to upregulate the Klotho gene.
- Generate a skin cell line that both expresses and secretes the klotho protein in the cell conditioned medium
- Detect and quantify the Klotho protein in the cell conditioned medium produced by the Klotho expressing cell lines. This cell conditioned medium is Advicell K

Development of Klotho overexpressed mesenchymal stem cell in their cell conditioned medium (Advicell K)



Figure 4: Construction of Klotho plasmid vector by Klotho cDNA. (from plasmid NC241332) insertion in the pLenti-P2A-Puro Cloning Plasmid vector (PS120209; Origene)

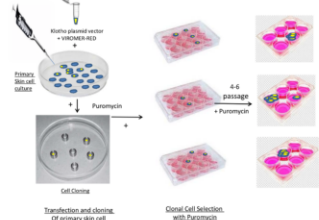


Figure 5: Klotho cell line generation: Transfection of Klotho plasmid DNA in primary cells & Klotho cell line selection

Figure 6: Screening of conditioned media for Klotho Protein by ELISA

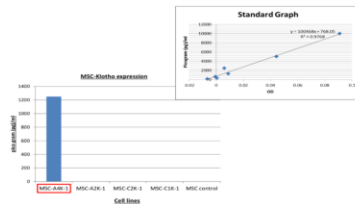


Figure 7: Conditioned media produced by MSC-A4K-1 cell line contain high level of Klotho protein

The objective of this study was to measure the effect of the test material listed in Table II on the expression of a panel of genes of interest, using quantitative PCR.

GENE	AdviCell K 4%		AdviCell K 0.8%		AdviCell K 0.04%	
	p value	Fold change vs. water	p value	Fold change vs. water	p value	Fold change vs. water
MMP1	0.000	10.2	0.010	1.9	0.561	1.1
SIRT1	0.230	-1.2	0.336	1.2	0.783	-1.0
PTGS2	0.438	-1.2	0.813	1.1	0.901	-1.0
MMP9	0.017	-1.3	0.015	1.3	0.979	-1.0
SIRT6	0.388	-1.2	0.280	1.3	0.057	1.7
TLR6	0.040	-2.2	0.332	-1.3	0.638	-1.1
VEGFA	0.684	1.1	0.429	1.3	0.600	1.2
hTERT	0.091	-1.5	0.194	1.5	0.170	1.5

Table II. Effect of the different experimental conditions on the expression of a panel of genes of interest in aHDF cells. Modulatory conditions are labeled in bold characters.

Materials & Methods

Preliminary Experiment

- The effect of the test substance on cell viability being unknown, normal adult human dermal fibroblasts were incubated with the non-diluted (100%) AdviCell K, as well as with its 20%, 4% and 0.8% aqueous dilutions.
- After an overnight incubation, cells were observed and the selection of doses for the principal experiment was made based on the assessment of cell morphology under different experimental conditions.

The highest tested concentration of AdviCell K (4%) induced a strong expression of the matrix metalloproteinase MMP1. Although MMPs are required for recycling of old and damaged components of cells and the extracellular matrix (ECM), the upregulation of MMP1 is not generally viewed as beneficial in the cosmetic industry.

- Two other genes, coding for TLR6 and hTERT, have been downregulated by the highest tested dose of AdviCellK. TLR6 is a transmembrane receptor important for innate immunity. hTERT is a catalytic subunit of the enzyme telomerase, responsible for the maintenance of chromosome terminal sequences (telomeres). It protects telomeres from damage, fusion with neighboring chromosomes and from shortening leading to cellular senescence.

The medium concentration of AdviCell K (0.8%) also increased MMP1 expression but to a much lesser extent than the highest dose (2 times vs. 10 times). hTERT was not repressed, but, to the contrary, the expression of this gene was moderately increased. Taken together, these data indicate a positive trend, making the analysis of the expression profile of the lowest tested dose particularly interesting

The lowest tested concentration of AdviCell K (0.04%) showed the continuation of the trend observed with the two higher doses. The expression of MMP1 was totally normalized, while the heightened expression of the telomerase reverse transcriptase was maintained, with slightly improved value.

Furthermore, the dilution of AdviCellK to 0.04% unmasked the upregulation of another important gene – SIRT6. Sirtuin 6 is a stress-responsive protein implicated in telomere maintenance, caloric restriction, and life span expansion

Conclusion This project allowed to uncover valuable potential properties of-AdviCellK towards telomere protection and cellular life extension – two activities at the forefront of cosmetic sciences.

Effect of the Klotho Protein (AdviCell-K) on the Output of Prostaglandin E2, Type I and IV Collagen by the Human Dermal Fibroblasts

Gail Humble MD, Reiana Mendiola

Introduction

- The Klotho gene is an age suppressor gene originally discovered in a mouse strain. A defect in the Klotho gene expression in mice results in a syndrome resembling early ageing. Whereas overexpression of the Klotho gene extends the life span of this mouse strain by 31%. In the mouse model, The Klotho gene has been documented to effect many systems, including the integumentary system. In this model, upregulation of the klotho gene delays or reverses skin atrophy. The same results seem to hold true with our human model. Skin atrophy occurs naturally with ageing but is accelerated with UV damage.
- In this study, we evaluated the protective effects of the klotho protein and growth factors harvested from klotho overexpressed mesenchymal stem cell in their cell conditioned medium (Advicell K) against ultraviolet radiation B (UVB)-induced photoaging in neonatal human dermal fibroblasts.

Development of Klotho overexpressed mesenchymal stem cell in their cell conditioned medium (AdviCell K)

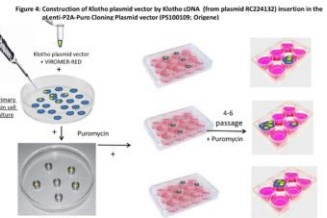
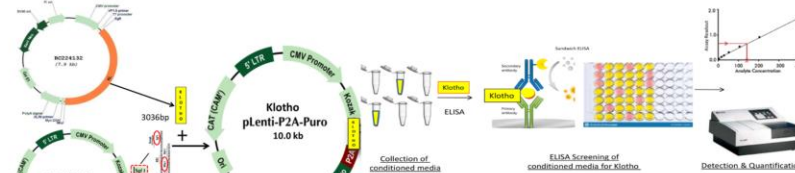


Figure 5: Klotho cell line generation: Transfection of Klotho plasmid DNA in primary cells & Klotho cell line selection

Method

The objective of this project was to explore the effect of the test material listed in Table I on the output of prostaglandin E2 (PGE2), type I and type IV collagen by human dermal fibroblasts. Samples of non-cytotoxic concentrations of K-Advicell k were added in three repeats to exponentially growing neonatal human dermal fibroblasts. Cultures were pursued overnight. The following day, half of each experimental condition was UVB-irradiated (according to Ochiai and coll., 2006) while the other half was kept in the dark. At the end of the experiment (24h post UVB irradiation), the target antigens were quantified in formalin-fixed cultures (type IV collagen) or in the cell culture-conditioned medium (type I collagen and PGE2) by ELISA assays using reagents listed in Table II. MAP was the positive control for type I collagen. The negative control was sterile distilled water.

Figure 6: Screening of conditioned media for Klotho Protein by ELISA

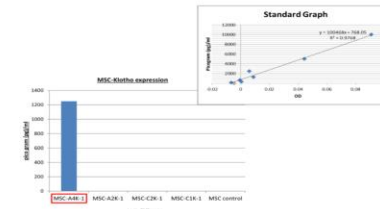


Figure 7: Conditioned media produced by MSC-A4K-1 cell line contain high level of Klotho protein

Test Material	Type I Collagen (% Water Control)	p value
H2O	100	1
AdviCell K 1%	97	0.650
AdviCell K 0.2%	105	0.524
Advicell K 0.04%	96	0.628
MAP 50µg/ml	301	0.000
MAP 100µg/ml	268	0.000
H2O+UVB	100	1
AdviCell K 1%+UVB	107	0.441
AdviCell K 0.2%+UVB	89	0.267
Advicell K 0.04%+UVB	88	0.227
MAP 50µg/ml+UVB	285	0.000
MAP 100µg/ml+UVB	310	0.000

Table II. Effect of different experimental conditions on type I collagen output with or without UVB irradiation, expressed as % of water control.

Test Material	Type IV Collagen (% Water Control)	p value
H2O	100	1
AdviCell K 1%	131	0.027
AdviCell K 0.2%	151	0.046
Advicell K 0.04%	99	0.974
H2O+UVB	100	1
AdviCell K 1%+UVB	100	0.995
AdviCell K 0.2%+UVB	116	0.619
Advicell K 0.04%+UVB	85	0.712

Table III. Effect of different experimental conditions on type IV collagen output with or without UVB irradiation, expressed as % of water control.

Test Material	Type IV Collagen (% Water Control)	p value
H2O	100	1
AdviCell K 1%	117	0.190
AdviCell K 0.2%	123	0.148
Advicell K 0.04%	96	0.631
H2O+UVB	100	1
AdviCell K 1%+UVB	86	0.017
AdviCell K 0.2%+UVB	93	0.197
Advicell K 0.04%+UVB	102	1.000

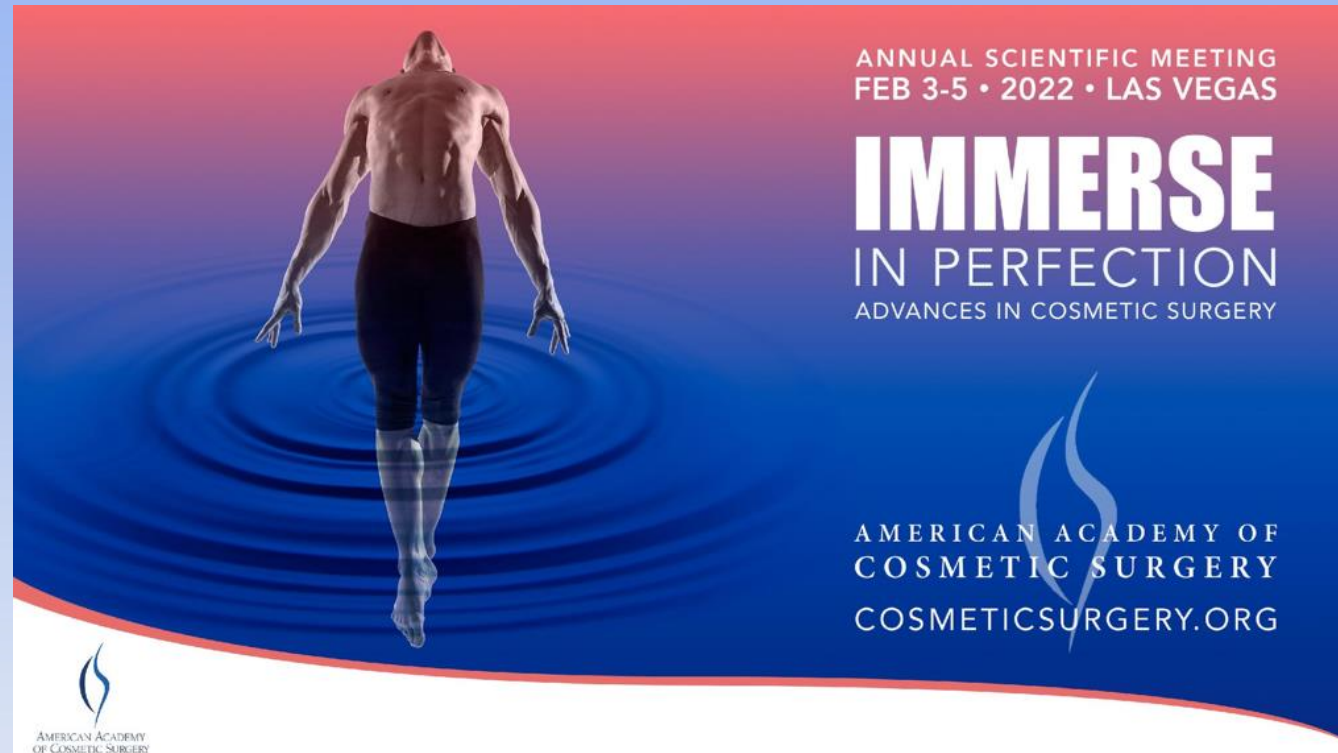
Table IV. Effect of different experimental conditions on PGE2 output with or without UVB irradiation, expressed as % of water control.

Results

Table II and IV showed that compared to water, AdviCell K had no statistically significant modulatory effect on type I collagen and prostaglandin E2 secretion by human dermal fibroblasts therefore not really increasing or decreasing inflammatory markers, however, it did significantly increase type IV collagen output by these cells.

Conclusion

Collagen IV is the primary collagen found in the extracellular basement membranes separating a variety of epithelial and endothelial cells. It is a major component of the dermal-epidermal junction, where it is mostly found in the lamina densa. Collagen IV is also of importance in wound healing and it is essential for skin repair due to photo-ageing. This leads us to believe the Klotho protein is highly effective in reversing the damages of photo-ageing



P11 – Withdrew From The Meeting

Digital Workflow from Gummy Smile

Islam Kasseem, BDS, MD, FDS RCS

Skin only / Minimal tissue excision using superomedial pedicle in larger breast mastopexy

Presented at the American Academy of Cosmetic Surgery meeting, Las Vegas, February 2022

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We demonstrate a selection of cases exhibiting minimal tissue excision mastopexy where the aim in the mastopexy is to conserve breast tissue to maintain volume whilst still achieving significant elevation of the nipple areolar complex.

Data of 10 recent superomedial pedicle mastopexy patients

Name	Age at Operation	Tissue L	Tissue R	Total Tissue	L Base Width	R Base Width	L - SN to NAC	R - SN to NAC	L - N to IMF	R - N to IMF
Patient 1	42yo	270g	150g	420g	270mm	270mm	24cm	24cm	150mm	135mm
Patient 2	36yo	24g	10g	34g	225mm	225mm	26cm	24.5cm	60mm	65mm
Patient 3	52yo	358g	278g	636g	280mm	295mm	29.5cm	28cm	115mm	110mm
Patient 4	50yo	154g	197g	351g	270mm	270mm	28.5 cm	31cm	80mm	80mm
Patient 5	57yo	300g	260g	560g	290mm	300mm	30cm	28cm	130mm	130mm
Patient 6	40yo	180g	222g	402g	250mm	250mm	31cm	33cm	100mm	100mm
Patient 7	51yo	476g	524g	1000g	300mm	290mm	32cm	32cm	135mm	135mm
Patient 8	44yo	90g	81g	171g	240mm	240mm	27cm	28cm	80mm	80mm
Patient 9	49yo	525g	400g	925g	280mm	290mm	34.5cm	33.5cm	150mm	140mm
Patient 10	47yo	90g	150g	240g	280mm	285mm	32cm	31.5cm	130mm	130mm



Large Sternal notch-NAC distances can be accommodated in this technique. In cases 4, 6, 8 and 10, the distances are around 30cm. Larger volume resections can also be resected which are demonstrated in the table as required in the superomedial pedicle technique, where the emphasis is on attempting to conserve as much tissue as possible, or reducing cup size.



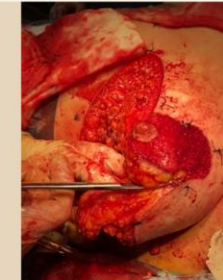
The technique - Wise pattern skin only resection superomedial pedicle shown in a similar patient.



Keel type dissection, undermining whole breast bluntly. Incise keel producing medial and lateral poles.



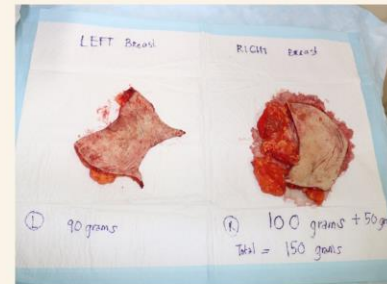
Continue the keel incision laterally and superiorly around superomedial pedicle, up to 12 o'clock position if necessary in order to mobilise NAC.



Appose the medial and lateral elements and rotate the NAC into position using tension sutures to approximate. At this stage, excess tissue can be resected if required or the extension of the keel excision around the peri areolar NAC /pedicle can be extended (as seen above) to enable rotation of the pedicle.



Patient number 10 has had a concomitant radical abdominoplasty, breast closure seen left, above and right.



Note that essentially in this case that there has been a skin only resection with 90 grams resected in the left breast and 150 grams in the right breast to give a mastopexy with minimal tissue excision.





Classification of Massive Weight loss Skin Excess and Laxity: The Stokes Scale



Erik Nuveen, MD, DMD, FAACS; Jamie Stokes, APRN, FNP-C; Sonia Abarzak, BS, MA

Introduction

In recent years, there has been an increase in demand for cosmetic surgeries in patients with a history of massive weight loss (MWL). To assist in the assessment and surgical treatment plan process, this study proposes the Stokes Scale.

This scale seeks to classify severity of excess skin and skin laxity in the body after massive weight loss on a 5 point scale. The Stokes Scale is intended to be used for physical assessment and communication between medical professionals. Previous studies have been limited by small patient selection (n=36) and inclusion of female patients only (Song et al., 2005).

Scale

0	Normal which is defined as no ptosis and/or no skin laxity
1	Mild laxity; Ideal skin position not requiring surgery
2	Moderate skin laxity with mild excess skin
3	Severe skin laxity with moderate excess skin with redundancy
4	Extreme skin excess and redundancy requiring extensive undermining, advancement and resection throughout the anatomical region.

Methods

Patient photo selection
100 patients were selected for evaluation with the proposed rating scale. Selected patients included male and female individuals with a history of massive weight loss (weight loss of 50% or greater of excess weight through lifestyle modification or bariatric surgical intervention) from a single office based surgery facility from 12/2014-09/2020.

Stokes Scale
The scale included 9 body areas that were common concerns of the patients; male chest/female chest, axilla, arms, abdomen, flank, back, buttocks, mons, and thighs. Areas were ranked on a likert scale from 0-4 and a visual rating scale. Scales were customized to specific body regions.

Validation of the scale
Five medical professionals reviewed photographs of the 100 patients and assigned a grade of 0, 1, 2, 3, or 4 based on severity. Five observers were utilized: 3 Board Certified and fellowship trained cosmetic surgeons, one Advanced Practice Registered Nurse and one Medical Assistant associated with consultation and follow care specific to MWL patients. Each was provided a photographic anthology of 9 body regions and asked to rank the severity of skin laxity and excess based purely on the photos presented. No further information was provided to the medical professional.

Statistical analysis
Interobserver validity was determined using Kappa Analysis.

Results

All anatomical areas resulted in a mean kappa value of 0.426. According to the Landis and Koch, 1977, Guidelines for interpreting Kappa values, this corresponds to moderate inter-rater agreement. Each anatomical region was evaluated for inter-rater variance and revealed the thigh region as highest in agreement. The back region analysis revealed the lowest level of agreement in this photographic analysis. Physician inter-rater variance was 0.19725, or slight, while non-physician inter-rater agreement was 0.309, or fair. Male subject analysis revealed higher subject agreement.

Discussion

Classification systems seek to objectify the subjective. This allows for more consistent communication between medical professionals and stratification of risks and complications in medical research on the massive weight loss patients. Past classification systems have utilized females only and in limited numbers. Our study was developed to improve statistical power through larger case numbers and test interobserver reliability, with the addition of male MWL patients. Past studies have had limited power and have lacked male subjects. Our findings support the Stokes Scale as consistent and with high interobserver reliability in this study of 100 patients. This study is the largest of its kind ever published and adds to the ability of practitioners to communicate and plan surgical intervention for the massive weight loss patient. Our inter-rater variance analysis revealed significant variation in classification. Lowest agreement was found between physicians. This may result from physician education and clinical experience level, frequency of exposure to the MWL patients, gender bias. Application of these findings may devalue alternative care providers from classification and the associated corrective action/surgery required specifically in the MWL patient population. This suggests that the operating surgeon may be best served to evaluate his/her own patients in order to determine ideal treatment. The delegation of classification and associated surgical correction may be inappropriate. There is a very high variance among physicians who rate photographs of MWL patients. Further study is indicated to determine a correlation to physical examination.



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Plastic Surgery Utilization and Access in the Elderly

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Background

Plastic surgery has an important role in treating elderly patients. This includes various operations such as breast reconstruction post-mastectomy, cosmetic procedures, and hand surgery. Previous studies have examined the anatomical changes the body goes through as we age.

As the aging population of the United States increases, it is important to investigate the accessibility of plastic surgery for the elderly. Some studies have shown that plastic surgeons are asymmetrically distributed across the United States. Plastic surgeons are more likely to be concentrated in populations with younger than 65 years, female, and residing in urban areas.⁽¹⁾ Furthermore, it studies show that race and insurance status can affect reconstruction rates across populations. ^(2, 3)

Although studies show distribution of plastic surgeons, there have been few studies evaluating access and utilization of plastic surgery in the elderly.

The availability of CMS Medicare data by US county represents a valuable resource to investigate the demographics of elderly patients with respect to plastic surgery.

Objectives

1. Assess geographic trends in access to plastic surgery in the elderly
2. Assess the characteristics of regions that had a mismatch between access and utilization
3. Analyze socioeconomic factors that correlated with utilization of plastic surgeons.

Methods

We reviewed multiple county-level national databases:

- CMS Demographic Data
- Medicare billing data
- CMS chronic disease data, US Census demographics,
- USDA Atlas of Rural and Small-Town America

The analysis was conducted using the average of all Medicare billing information from 2014-2018.

Office visit billing was tracked to determine access. Specifically, *CPT billing codes 99202, 99203, 99204, 99205, 99212, 99213, 99214, and 99215* were aggregated to obtain the total number of plastic surgery office visits per county.

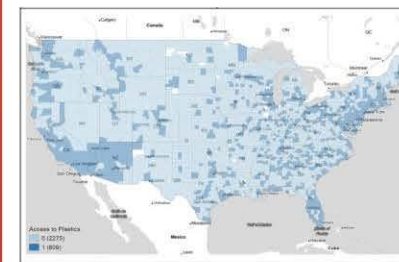
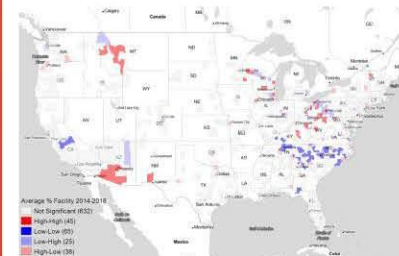
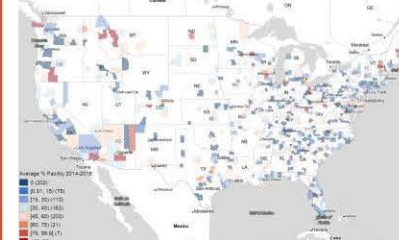
We utilized a Python-based script for database building and GeoDa (a statistical map-based graphing software) to chart demographic, geographic, and socioeconomic trends.

We used Moran's I clustering coefficient for the statistical evaluation of geospatial clusters.

We used factorial ANOVA to evaluate statistically significant demographic components that contributed to the formation of these clusters.

Cluster	High-High		Low-Low		Low-High		High-Low		P-value
	Count	% of Counties	Count	% of Counties	Count	% of Counties	Count	% of Counties	
Count of Plastic Surgery Office Visits	227	100%	4	1.8%	100	44%	407	180%	
Demographic Variables	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Age	71.78	1.48	70.75	2.58	71.09	1.37	70.9	1.38	0.308<02
% Male	44.61	1.69	45.66	2.92	46.74	1.69	45.49	1.75	0.356<04
% White	79.95	15.05	82.02	9.66	87.66	10.05	85.05	12.29	0.656<07
% Black	9.62	10.91	10.28	12.05	5.96	7.51	8.21	9.11	0.0198<47
% Hispanic	5.7	9.3	4.27	4.81	3.42	6.24	3.96	6.09	0.01325<1
% Other Race	4.7	3.98	2.63	1.07	3.08	3.62	3.18	4.13	0.338<05
Medicare Population (%)	225.11	4917.2	19.98	24.87	36.76	91.24	41.81	66.29	1.816<14
Total Population (Million)	1611.92	3664.93	117.94	143.68	218.09	149.14	252.93	313.82	1.875<12
HCC Score	1	0.09	0.93	0.19	0.97	0.09	0.97	0.09	6.736<05
Standardized Medicare Cost/Enrollee	9892.14	1116.25	9399.46	3093.9	9194.05	1130.79	9276.13	1224.85	0.0001<92
Metropolitan rate (0-1)	0.98	0.32	0.5	0.65	0.51	0.5	0.71	0.45	1.256<12
Unemployed	4.98	1.91	4.8	1.83	5.36	1.33	4.79	1.31	0.0094<43
Uninsured	9.92	4.42	13.87	3.29	11.35	5	11.45	4.67	0.0001<21
% Without OED	10.95	4.99	12.65	4.92	13.31	5.59	11.25	4.91	0.0000<99
% With Day Care	27.89	7.19	31.5	3.91	36.33	7.91	30.08	6.8	5.006<17
% Some College	25.1	4.84	32.22	5.41	29.56	4.29	31.1	4.73	2.556<13
% College Degree	33.37	11.83	23.62	3.68	21.7	9.81	27.54	9.12	1.576<19
% Median Breast Cancer	3.08	0.45	2.05	0.72	2.91	0.47	2.73	0.49	1.526<18

Results



High utilization clusters were found in the **Northeast and Southwest regions** of the United States, as well as throughout Florida. There were relatively few low utilization clusters identified, and they did not adhere to any particular geographic distribution.

Further evaluation of these clusters demonstrates that the majority of plastic surgery utilization was in **urban centers surrounded by rural counties**. Factorial ANOVA revealed that plastic surgery office visits were higher in patients with a GED and/or college degrees. A small portion of the population was unemployed (5%) or uninsured (9-14%). A small fraction (2-3%) had a history of breast cancer.

Conclusions

- Statistically significant geographic trends in access and utilization of plastic surgery in the elderly are present
- Socioeconomic factors remain key considerations in the utilization of plastic surgery.
- There are statistically significant geospatial clusters in the utilization of plastic surgery by the elderly in the United States
- These are high-utilization clusters that appear in the Northeast, Southwest, and Florida
- There are relatively few low-utilization clusters that do not conform to a particular geographic distribution
- Educational background, employment, and medical history are statistically significant contributors to the formation of these clusters.

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Acknowledgements

None to report.

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Purpose

- Gender disparities persist amongst surgical specialties in compensation, leadership roles, and career advancement opportunities.¹⁻⁶
- Disparity is evident in ophthalmology: in 2021 female ophthalmologists performed fewer cataract surgeries on average than males, even controlling for clinical volume and physician experience.¹
- In this study, we surveyed the surgical volume of male and female surgeons performing upper blepharoplasty on Medicare beneficiaries to determine if a similar inequality exists in the United States.

Methods

- The 2018 Medicare Provider Utilization and Payment Data: Physician and Other Provider dataset, specifically narrowed by provider and service, was queried for blepharoplasty surgeries utilizing the Current Procedural Terminology Code 15283.
 - All Medicare claims filed under ambulatory surgical services and centers were excluded, so as only to include claims filed under individual providers.
- Surgeons were identified by their National Provider Identification numbers and subsequently matched to the Physician Compare National Downloadable File, from which physician gender was determined.
- Gender differences in regards to total surgical volume were assessed.
- Welch two-sample t-tests were performed to determine significance between the number of blepharoplasties performed by male and female surgeons.
 - All analyses were performed in R version 4.0.3 (R Foundation for Statistical Computing, Vienna, Austria).
- This study was exempted by the University of Texas at Austin Dell Medical School Institutional Review Board and adhered to the Declaration of Helsinki.

Results

Gender	Count	Mean Blephs Done	Standard Deviation	Minimum	Maximum
Male	834	36.3	34.9	11	298
Female	251	33.3	25.5	11	163

Table 1. Number of functional upper blepharoplasties performed by male and female surgeons.

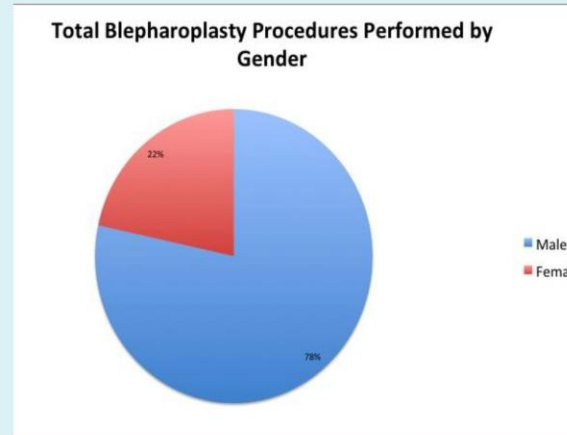


Figure 1: Total upper blepharoplasty procedures by gender

- 38,611 blepharoplasties performed by 1,085 surgeons were assessed.
- 834 (76.9%) male surgeons performed 30,248 (78.3%) blepharoplasties as compared to 251 (23.1%) female surgeons who performed 8,347 (21.6%) blepharoplasties.
- On average, blepharoplasties per surgeon were 36.3 for men, versus 33.3 for women (95% confidence interval [CI] -6.97 - 0.94, p = 0.135).

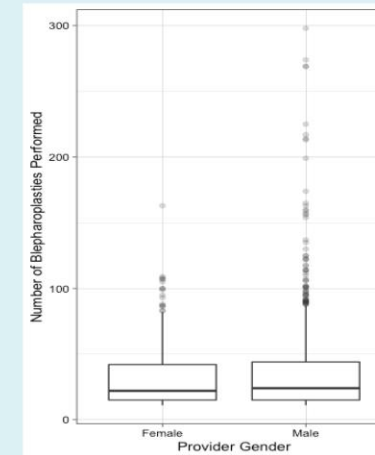


Figure 2. Boxplot comparing number of blepharoplasty procedures performed by gender.

Conclusions

- In the United States, males performed more upper blepharoplasty as compared to female surgeons.
- However, when analyzing procedures performed per surgeon, no statistically significant gender difference was noted.
- While this parity data across blepharoplasty surgeons is reassuring, continued awareness and analysis of gender disparity across surgical specialties is recommended.

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Upper Blepharoplasty Skin Closure: Analysis of Outcomes of Subcuticular vs. Running and Absorbable vs. Nonabsorbable Suture

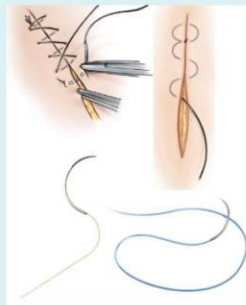
Donovan Reed, MD¹; Monica Ray, MD¹; Aliza Epstein, MD¹; Marie Somogyi, MD, FACS^{1,2}; Tanuj Nakra, MD, FACS^{1,2}
1. TOC Eye and Face, Austin, TX; 2. The University of Texas at Austin Dell Medical School, Austin, TX

Purpose

- Technique choice for closure of upper blepharoplasty incisions includes sutured and sutureless techniques.¹⁻⁷
- The utility of subcuticular closure of upper eyelid blepharoplasty incisions has been previously validated as a safe and effective closure technique.^{1,7}
- However, compared to running closure, subcuticular technique has a learning curve, requires increased surgical time, and removal can be a more challenging suture removal procedure.
- **The purpose of this analysis was to compare the aesthetic and functional outcomes of subcuticular closure to running approximation of upper eyelid blepharoplasty incisions, utilizing both permanent and absorbable sutures.**

Methods

- This is a retrospective analysis of patients who underwent upper eyelid blepharoplasty incision site closure with subcuticular or running approximation with either 6-0 polypropylene suture (prolene) or 6-0 plain gut suture.
- Medical records of 20 consecutive patients who underwent subcuticular closure were compared to 20 consecutive patients who underwent running approximation.
- Each group had a 50:50 ratio of absorbing vs. nonabsorbing sutures.



- Patient charts were reviewed for objective outcomes including postoperative discomfort and aesthetic surgical site healing.
- Postoperative complications such as wound dehiscence or soft tissue infection were also assessed.

Results



Figure 1: External color photograph at postoperative week one following upper eyelid blepharoplasty with absorbable suture closure in a running fashion demonstrating appropriate early healing with moderately visible surgical incision site associated with hyperemia and nodularity



Figure 2: External color photograph at postoperative week one following upper eyelid blepharoplasty with nonabsorbable suture closure in a subcuticular fashion demonstrating excellent early healing with minimally visible surgical incision site.

- Subcuticular closure offered earlier and less noticeable incision site scarring than running approximation.
- There were no cases of dehiscence or infection in this patient cohort.
- Running closure with absorbing suture produced the most cases of epidermal inclusion cysts, followed by running closure with absorbing suture.
- There was no significant difference in regards to postoperative pain.
- The surgical site scar was more noticeable to both the patient and surgeon when running approximation was utilized.

Conclusions

- In this series, the outcomes of subcuticular closure of upper blepharoplasty incisions with either 6-0 polypropylene or 6-0 plain gut sutures were superior to running approximation, with no difference in safety or efficacy of closure.
- Utilization of subcuticular approximation with absorbable sutures offers surgeons versatility and avoids the need for suture removal during the postoperative period, while providing similar aesthetic results to nonabsorbable suture techniques.

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Upper Blepharoplasty Technique to Address Lateral Eyelid Hooding

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Introduction

Blepharoplasty is the third most common cosmetic procedure performed in the United States. So, it is not surprising that the approach to surgical eyelid rejuvenation has seen considerable changes over the centuries that it has been performed. The modern blepharoplasty technique was developed and coined by Salvador Castaneres in 1951, marking a new era for the procedure which now addressed both the skin laxity and the fat herniation: the two culprits behind eyelid aging.

When it comes to upper eyelid blepharoplasty, the technique behind this procedure has seen far fewer developments than that of the lower eyelid. The biggest and most inevitable-seeming problem with upper lid blepharoplasty is lateral hooding of the eyelid. This issue is the result of removal of excess skin from the anterior lamella portion of the eyelid without adequate skin subtraction from the area superior to the lateral canthus.

One of the techniques developed to remedy this unesthetic result is a lateral brow lift while another is extension of the incision laterally in order to excise the problematic hooding. Both of these methods often yield unsatisfactory results and increased morbidity in the recovery period. The former modification requires an additional incision which with time stretches inferiorly to regenerate some of the previously addressed lateral hooding and the latter leaves a noticeable scar due to its extension outside of the orbital rim, also known as the eyelid cosmetic unit.

Conventional methods of addressing lateral hooding: A.) brow lift B & C.) lateral extension



Brody, G. S., & Wood, D. L. (2006). Salvader Castaneres, M.D., 1908 to 2005: Plastic and Reconstructive surgery. doi:10.1097/01.prs.0b00228075.1f390.8a

Bellavia, G., Klinge, F.M., Maitone, L., & Bellavia, P. (2013). Upper lid blepharoplasty, eyebrow ptosis, and lateral hooding. *aesthetic surgery journal*, 33 (1), 24-30.

Objectives

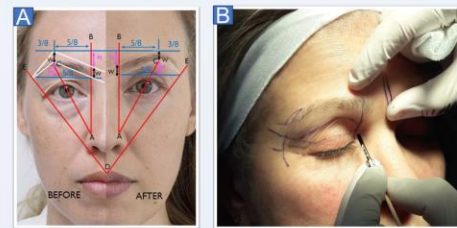
We developed a new technique, which utilizes lateral upper eyelid periosteal tacking sutures with either permanent or absorbable sutures, to address lateral hooding without extended incisions and unesthetic scars.

Description of Surgical Technique

The new technique for upper eyelid blepharoplasty requires two incisions for each eye. The first is a triangular incision that begins at the upward slope of the lateral brow measuring approximately 1.5 cm in length. The upper eyelid blepharoplasty skin and fat excision is carried out in the usual fashion.

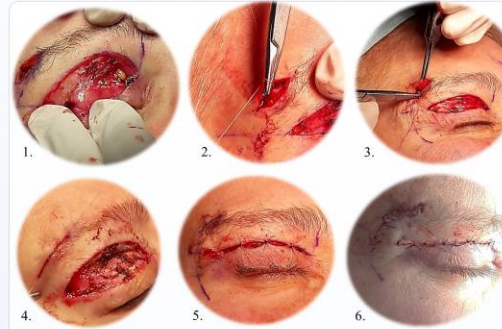
After the appropriate amount of skin and fat have been removed, it is important to compare the eyelids for symmetry and if necessary, make the proper adjustments. It is vital to avoid removing excess skin and muscle, which can lead to *lag ophthalmus* and to be cautious not to remove so much fat that the eyelid assumes a hollowed-out appearance. Closure of the eyebrow begins with the periosteal tacking sutures. One or two absorbable 4-0 vicryl or permanent 4-0 prolene tacking sutures are used to fix the eyebrow to its new desired position that had been previously marked and discussed with the patient. Next, two 4-0 vicryl dermal sutures are applied and lastly the skin is closed using a 5-0 ethilon running suture.

Since there is more tension placed on the lateral skin of the eyelid with the new elevated brow position, it is important to use a periosteal tacking suture for the lateral eyelid incision as well. This is achieved with one or two absorbable 4-0 vicryl sutures, depending on the degree of tension. An additional dermal suture is placed laterally. Although an initial puckering of the lateral skin may be visible, this is temporary and allows for reduced tension on the incision line until the epidermal sutures are removed in 5-7 days. Reduced incisional tension makes for more effective wound healing and a less visible scar. The skin is approximated with interrupted or running 5-0 ethilon suture.



A.) 5:8-3:8 rule for periosteal tacking location

B.) Marking the lateral brow and eyelid



Results



Side-by-side comparison

Side-by-side comparison

Conclusions

Our technique for upper blepharoplasty is a safe and effective new variation on an age-old procedure and is a less-invasive approach to correcting the bane of the blepharoplasty procedure: the lateral eyelid hooding and the often-visible lateral eyelid scar. By performing a lateral eyebrow skin excision, we reduce the weight exerted by the brow on the lateral upper eyelid skin. By using a periosteal tacking suture we can secure the brow position and reduce the skin stretch that invariably occurs after the epidermal sutures are removed. Periosteal tacking obviates the need for visible brow incisions or extension of the elliptical eyelid incision outside of the orbital cosmetic unit, where scarring is known to be significantly more noticeable. We will continue to follow our patients prospectively and further study the long-term outcomes of what we believe is an improved upper blepharoplasty procedure.

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Acknowledgements and Correspondence

Thank you to our wonderful patients who lent us their trust and allowed us to share their process and results with the cosmetic surgery community. And thank you to our talented staff for their help in photographically documenting our work.

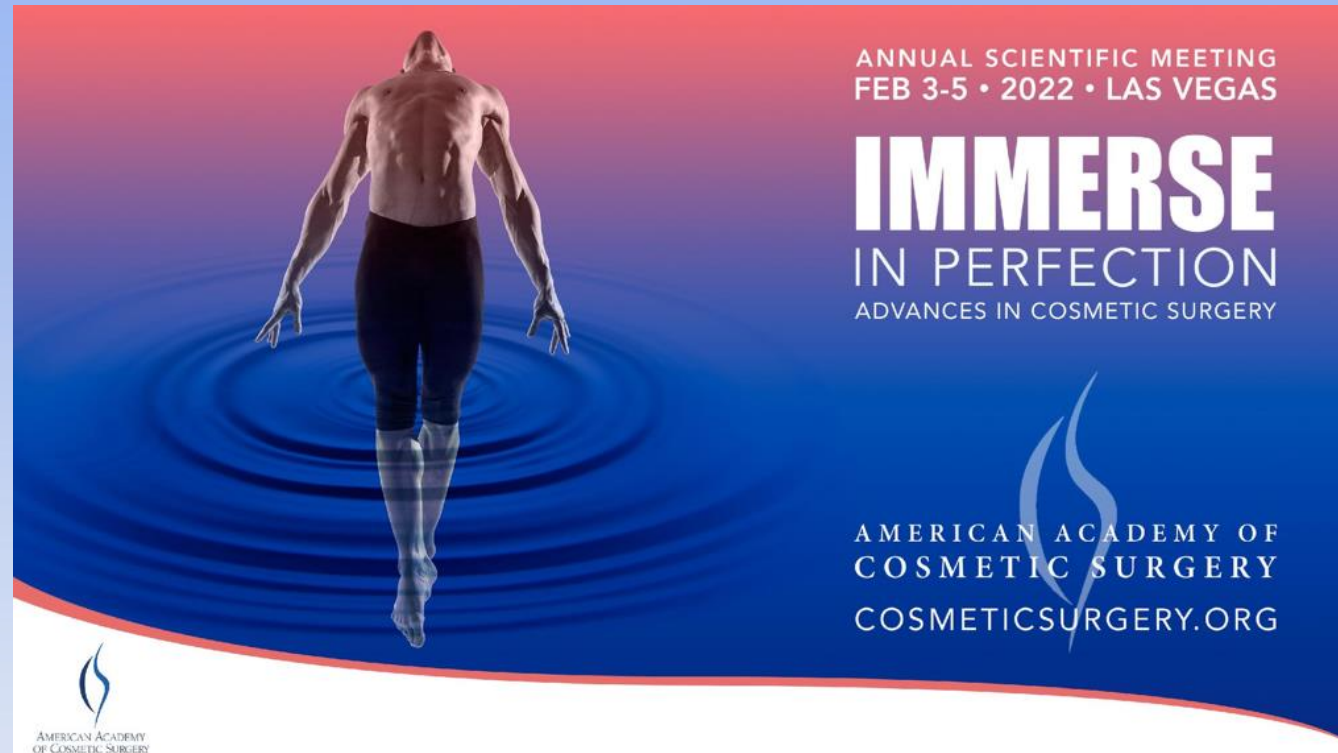
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P18 – Withdrew From The Meeting

Can Body Contouring Surgery Improve Mild to Moderate Stress Incontinence

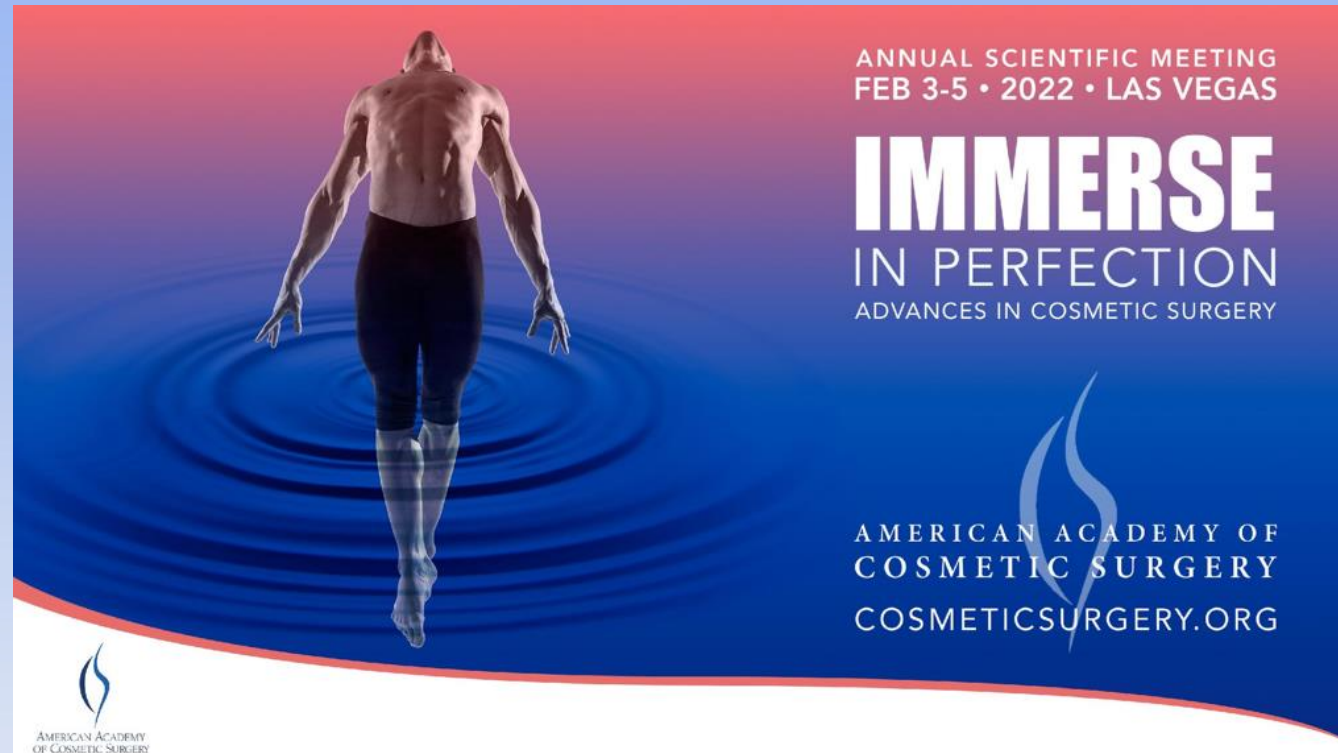
Mohan Thomas, MD, DDS



P19 – Withdrew From The Meeting

Use of Muscle Blocks to Relieve Pain After Breast Surgery

Mohan Thomas, MD, DDS



P20 – Not Received

Leveraging Patient Relationship Management
Software for Patient Engagement Success

Jason W. Tuschman, JD, MBA



Reorienting Lower lateral cartilages with Lateral crural struts: Aesthetic and functional benefits.

Rishal Ambaram MD¹, DDS; Abby Duplechain²; Kevin Duplechain MD³

BACKGROUND

- We will explore reorienting cephalically positioned lower lateral cartilages with LCSG.
- Tip shape and position play a major role in the aesthetic appearance of the nose. The normal angle between the caudal margin of the LLC and the midline septum is 45 degrees or greater. In cephalically oriented LLC, the angle is 30 degrees or less.
- This can create a boxy tip and lobular fullness that results in a parenthesis deformity.

OBJECTIVE

- We'll discuss the rationale for reorienting the alar cartilages to a more favorable angle to improve tip shape and contour, thus obviating the need to over-resect and disrupt the integrity of tip supporting structures.
- This powerful technique is also used to correct retracted alae and alar base asymmetries, tip rotation, nasal length, and tip projection.

SURGICAL TECHNIQUE

An open approach is initiated. A dorsal hump is resected, if needed, at this time, followed by osteotomies to close the open roof defect. Exposure of the septum and cartilage harvest is performed.

The lower lateral cartilages (LLC) are examined with a goniometer to confirm their orientation. An angle of 30 degrees or less from the midline to the caudal aspect of the LLC defines cephalic orientation. The LLC are then carefully dissected from the vestibular mucosa and then mobilized from their lateral attachments to the accessory cartilages, allowing complete control of the tip. Cephalic trims may be performed as well.

Lateral crural strut grafts (LCSG) are then fashioned from the harvested cartilage and secured to deep surface of each wing of the LLC, shaping and further strengthening the lateral crura. Precise pockets are then created in bilateral nasal sidewalls; using the tips of sharp scissors, undermining is initiated anterior to the caudal accessory cartilages and directed towards the lateral canthus. The lateral crura are passively placed in these pockets. In cases of severe alar retraction or valve collapse, the strut grafts can extend beyond the piriform aperture. The new dome angle can be determined by placing horizontal mattress hemi-transdomal sutures between the medial and lateral crus. A columellar strut graft can be secured at this time. Septal-columellar sutures are then performed to secure the desired rotation and projection. Finally, additional tip suturing and tip grafting is performed to achieve the desired aesthetic result.

Cases



LCSG are generally 3-4mm wide and 15-25mm long, and are secured with 3-4 sutures of 5-0 PDS or vicryl.

CONCLUSIONS

Reorienting cephalically oriented LLC is quite a versatile approach to reshaping the nasal tip. It is a technically demanding maneuver that, when delivered precisely, corrects multiple issues associated with malpositioned alar cartilages. We have used this approach in many cases involving a boxy nasal tip with long ptotic tips and poorly supported external valves.

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