

Beauty is in the Eye of the Beholder, Non-invasive & Cosmetic Optometric Procedures

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How Most are dealing with budget

- cuts!!!!





FINANCIAL DISCLOSURE

Neither Dr. Elliott nor Dr. Castillo have any financial interests or professional relationships with the manufacturer(s) of any commercial product(s) discussed in this educational presentation including grant/research support, employment, consulting and/or speakers bureau arrangements, or major stock ownership.





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Trends

- ODs looking for alternate sources of income
- competing with direct to consumer market
- Cosmetics
- Aesthetician
- Eyelash Extensions
- micropigmentation/permanent eyelid treatment
- eyebrow tinting
- facials
- overall skin care



RF Competitor Companies

- Ultherapy : Uses RF to treat neck, chin, brow, chest
- (not Peri ocular surface) Temp too hot, can melt orbital fat
- Thermage/Solta: same as above
- Polaris/Refirm: uses RF and Pulsed light, tissue arcing can cause scars
- Pelleve: uses lower temp and only unit currently safe for peri orbital areas

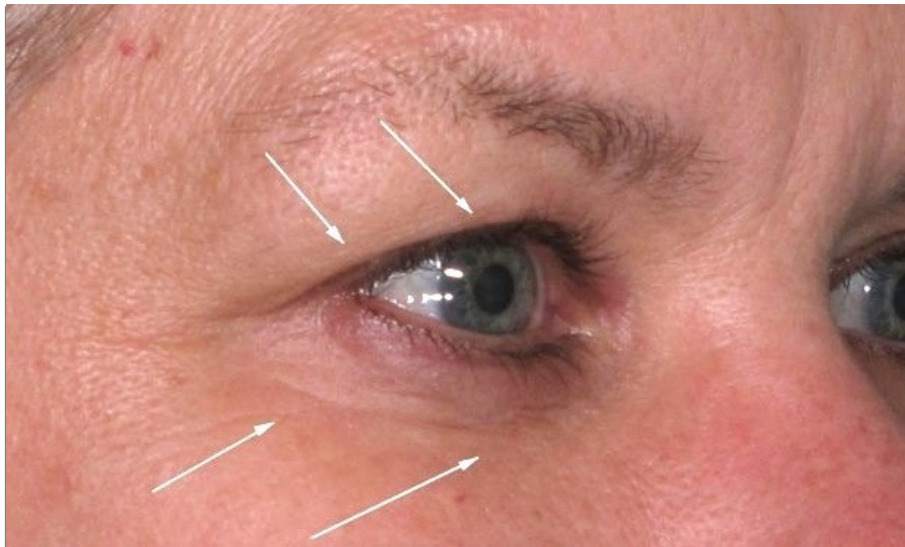


Emerging study MGD

- Use Corneal shield
- Ellman used for bleph surgery
- Pelleve (RF) used for pre/post treatment
- Lyses and slices at same time
- video of Ellman uses
- Pelleve vs Lipoflow



Introducing: Office-based Radiofrequency (RF) Skin Rejuvenation!



Dermatochalasis
(Skin touching upper lid lashes)



Normal lid crease restored
(Skin off lashes following RF treatment)





Key Points...

- Nonsurgical rejuvenation of the periorbital skin produces a profound improvement in overall facial appearance.
- It can reduce, or reverse the morbidity induced by facial aging and its pathological correlates:
 - skin laxity (dermatochalasis)
 - lid malposition (senile entropion)
 - poor lid/globe apposition mechanics
 - corneal wetting
 - dry eye symptoms
 - contact lens intolerance
 - visual field restrictions
 - decreased visual acuity



Understanding the Aging Face

- Aging contributes to:
 - Collagen and elastin loss
 - Loss of skin elasticity
 - Thinning of dermis (volume loss)
 - Wrinkles
 - Skin redundancy and laxity (e.g., around the eyes)
 - Sun damage
 - Texture changes
 - Veins
 - Redness
 - Age spots
 - Fat Atrophy
 - Loss of volume
 - Most noticeable around eyes, cheeks, temples, lips and around mouth.





Key Points...

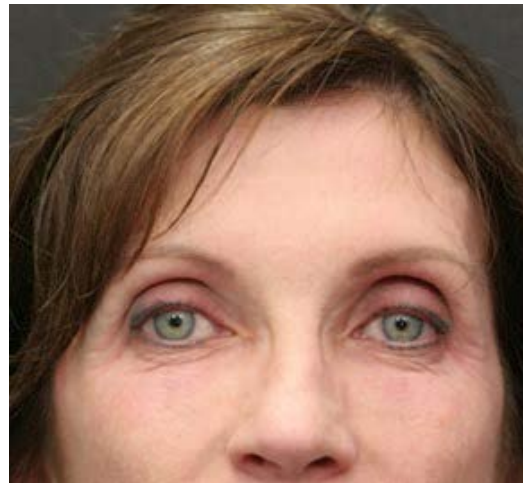
- Facial aging is characterized by volume loss from multiple tissue planes
 - bone
 - muscle
 - subcutaneous fat
 - skin
 - dermis
 - epidermis
- This volume loss coupled with loss of skin elasticity, actinic damage and gravity results in the "aging face."





Key Points...

- Periorbital aging changes result from multi-planar volume loss from the skin of the:
 - eyelids
 - periorbita
 - brow regions
- Identification, and treatment of age-related tissue volume loss is essential for the effective maintenance or restoration of the functional integrity of these tissues.



Lower lid skin laxity



Post-treatment



Key Points...

- Since volume loss is a cardinal feature of aging, adoption of a **predominantly volumetric** rather than an ablative approach to the periorbital skin may yield the best results.
- Radiofrequency technology offers a noninvasive approach to tissue volume augmentation.





Key Points...

- Skin rejuvenation using monopolar radiofrequency (RF) treatment is used by physicians and trained technicians to promote tissue tightening, dermal augmentation, wrinkle reduction, and tissue contouring.
 - Rusciani A, Curinga G. Nonsurgical tightening of skin laxity: a new radiofrequency approach. *J Drugs Dermatol.* 2007 Apr;6(4):381-6.

J Drugs Dermatol. 2007 Apr;6(4):381-6.

Nonsurgical tightening of skin laxity: a new radiofrequency approach.

[Rusciani A](#)¹, [Curinga G](#), [Menichini G](#), [Alfano C](#), [Rusciani L](#).

Author information

¹Division of Dermatology, Plastic and Reconstructive Surgery, University of Rome "La Sapienza", Italy. skinlaser@skinlaser.it

Abstract

BACKGROUND:

Improvement in skin laxity can be difficult to achieve without invasive surgical procedures. Monopolar radiofrequency (RF) treatment is used by physicians to heat skin and promote tissue tightening and contouring. RF technology produces an electric current that generates heat through resistance in the dermis and subcutaneous tissue. The thermal effect depends on the conductivity features of the treated tissue. When heated, collagen fibrils will denature and contract, which is believed to lead to the observed tissue tightening.

METHODS:

Ninety-three consecutive patients with mild to moderate laxity were included in the study. The Surgitron Dual Frequency RF (Radiowave technology, Ellman International) was used to treat skin laxity. The application of RF energy took place in an ambulatory setting with no need for skin sterilization or anesthesia.

RESULTS:

Patients immediately noticed a microlifting retraction in the treated tissues according to the vectors mapped in the area. There were no significant complications and the majority of patients were satisfied with the procedure and able to return to their daily routine after leaving the office, thereby substantiating the popularity of noninvasive rejuvenating procedures.

PMID: 17668535 [PubMed - indexed for MEDLINE]



Key Points...

- Evidence in the literature supports the scientific mechanism of action as acute collagen modification and continued neocollagenesis resulting in increased dermal volume.
 - Taub AF(1), Tucker RD, Palange A. Facial tightening with an advanced 4-MHz monopolar radiofrequency device. *J Drugs Dermatol*. 2012 Nov; 11(11): 1288-94.

J Drugs Dermatol. 2012 Nov;11(11):1288-94.

Facial tightening with an advanced 4-MHz monopolar radiofrequency device.

[Taub AF1](#), [Tucker RD](#), [Palange A](#).

Author information

Abstract

BACKGROUND:

Over the past 10 years, radiofrequency (RF) technology has been utilized for nonablative treatments for the treatment of rhytides and skin laxity. This manuscript reviews the scientific background of collagen synthesis in vivo and in response to RF energy as well as a clinical study of 17 patients receiving a series of facial treatments with a 4-MHz monopolar RF (Pellevé, Ellman International, Inc, Oceanside, NY). Clinical methods, results, and a review of the literature for RF aesthetic treatments of the face are presented.

METHODS:

Seventeen patients were treated in one site with 6 total treatments scheduled as follows: 1 session was performed every 15 days for 2 consecutive sessions, 1 session every month for 2 consecutive sessions, and 1 session every 2 months for 2 consecutive sessions. Both the treating physician and the patients via live viewing and comparison with baseline photographs performed assessment of results. Results are reported as averages across the 17 patients.

RESULTS:

Two weeks after the first treatment, patients noted an overall average of 25% to 30% improvement. Just before the last or sixth treatment, there was an average of 50% improvement noted by the physician, with patients ranking an average self-improvement of 48%. The treating physician rated average improvement of 46% compared with baseline, whereas the patients ranked average improvement of 30% compared with baseline at 1 year after treatment was initiated (6 months after the final treatment). Patients find this treatment to be very well tolerated, with minimal to no discomfort and no downtime or significant side effects.

CONCLUSIONS:

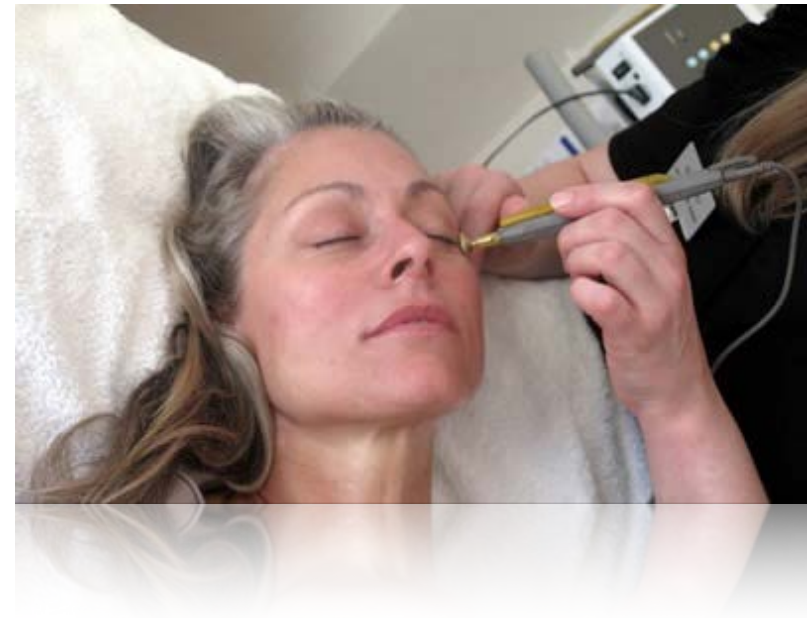
The Pellevé 4-MHz monopolar RF device is effective, safe, and very well tolerated for treating laxity, texture, and wrinkles of the skin without complication or discomfort. Evidence in the literature supports the scientific mechanism of action of acute collagen modification and continued neocollagenesis observed with the system. In this cohort, patients maintain approximately 50% improvement on average at 6 months and a 30% to 50% improvement 1 year after beginning the treatments, 6 months after completion.

PMID: 23135076 [PubMed - indexed for MEDLINE]



Key Points...

- The 4-MHz monopolar RF device is effective, **safe, and very well tolerated** for treating laxity and wrinkles of the periorbital skin without complication or discomfort.
 - Taub AF, Tucker RD, Palange A. Facial tightening with an advanced 4-MHz monopolar radiofrequency device. *J Drugs Dermatol.* 2012 Nov; 11(11): 1288-94.
- Volumetric rejuvenation of the periorbital skin is an important element/adjunct in maintaining and restoring normal periocular and eyelid function, appearance, and their physiological and functional correlates:
 - the function of the lids and lacrimal apparatus
 - the tear film and corneal integrity
 - the functional visual decline experienced with dysfunctional lid/lacrimal mechanics.



Pellevé® is a registered trademark of Ellman International, Inc., Hicksville, NY



Skin Rejuvenation System

- Reduces skin laxity (e.g, dermatochalasis).
- Reduces facial wrinkles (e.g., periorbital rhytids).
- No down time – immediate return to normal activity
- Minimal discomfort
- No anesthetic or skin cooling required
- *“Research clearly demonstrates the power of the Wrinkle Reduction System. With a single treatment, over 87% of our patients experienced an improvement in skin laxity and fewer overall facial wrinkles at six months. The Wrinkle Reduction System is an effective, non-invasive, economical and safe tool.”*



Dr. Antonio Rusciani

Division of Dermatology, Plastic and Reconstructive Surgery, University of Rome, Italy.





The System for the reduction of dermatochalasis and upper lid hooding

Aging changes in the skin are associated with:

- Loss of collagen
- Loss of elastin
- Thinning of dermis
- Thinning of epidermis
- Sagging of skin
- Wrinkles
- Ocular rhytids
- Age-related Dermatochalasis or skin laxity



Pretreatment

60 Days Post initial treatment

Radiofrequency rejuvenation:

- Induces new collagen deposition
- Induces new elastin deposition
- Adds volume to the dermis
- Tightens and firms the skin
- Reduces wrinkles

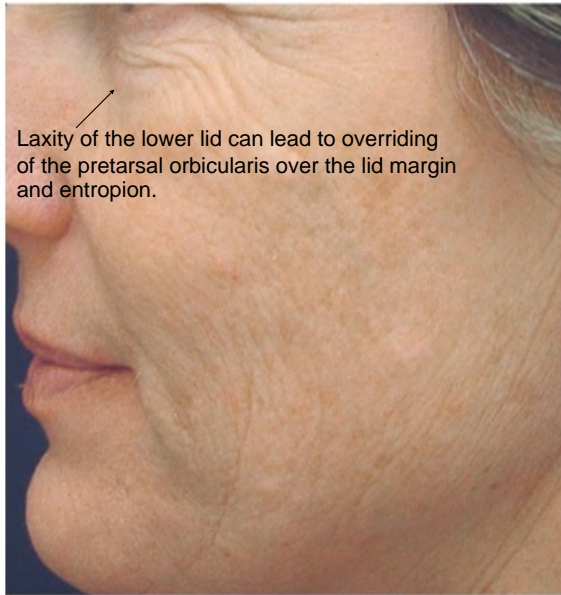


BEFORE and AFTER

Reduction of lower lid skin laxity following treatment

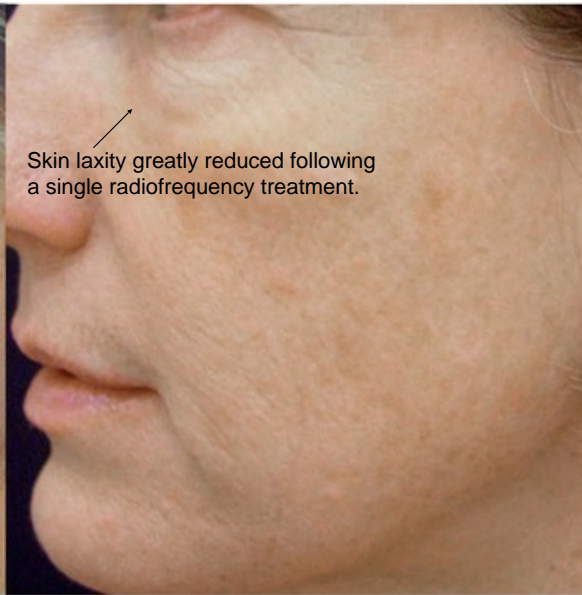
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Laxity of the lower lid can lead to overriding of the pretarsal orbicularis over the lid margin and entropion.

Pretreatment



Skin laxity greatly reduced following a single radiofrequency treatment.

180 Days Post-treatment

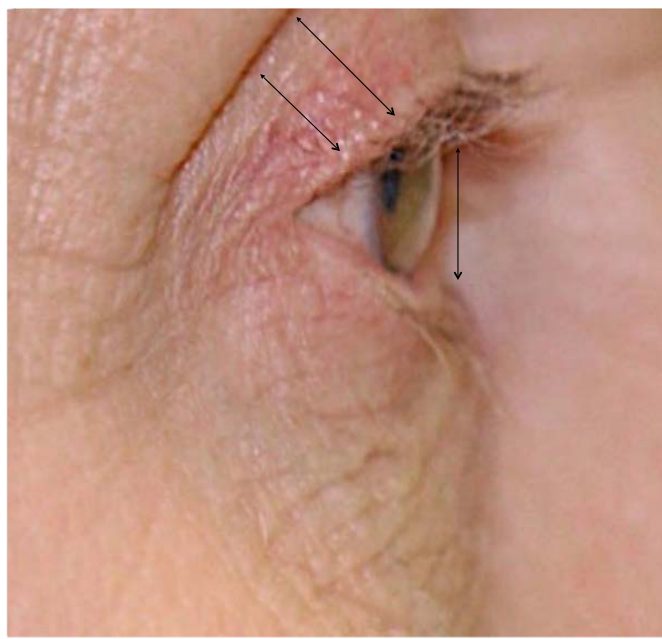
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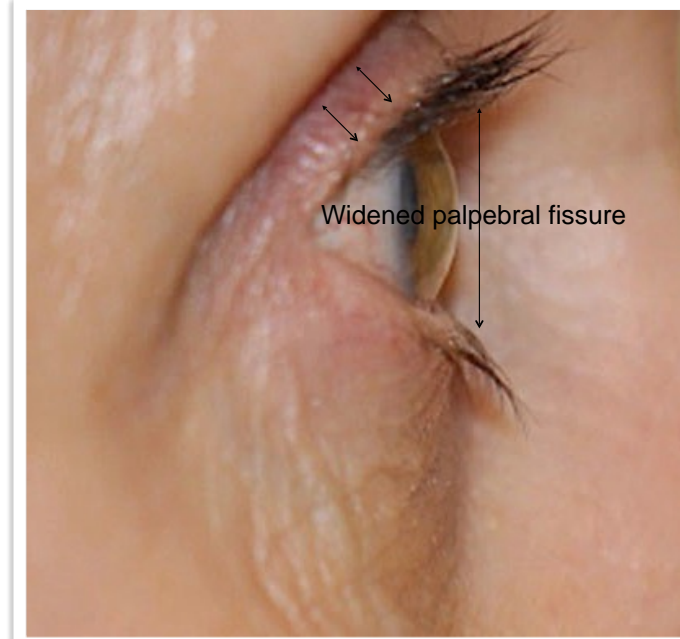




Notice **significant** improvement in the position of the superior lid margin



Pre-Treatment



Post- Treatment



How does it work?

- The device precisely delivers energy into the dermis using patented radiofrequency technology, inducing collagen contraction without damaging the overlying epidermis. The result is noticeable improvement in skin quality and appearance.
- promotes the synthesis of new collagen and elastin, resulting in restoration of dermal thickness and a gradual rejuvination of the skin.





Wrinkle Reduction Animation Model with Radiofrequency

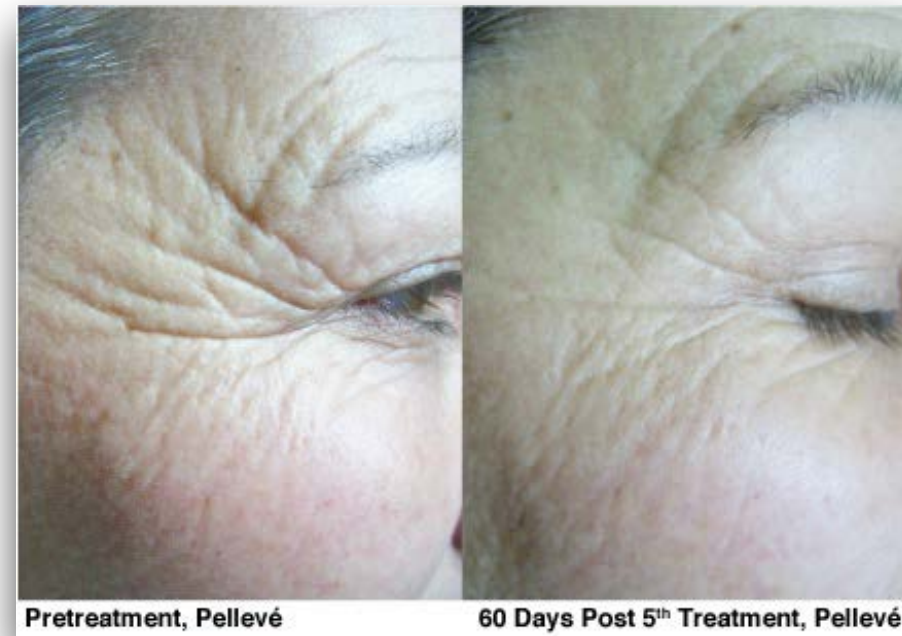






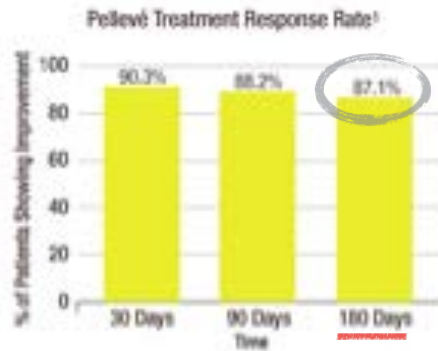
Q & A

- How long does the procedure take?
 - A full facial treatment can be performed in about 30 minutes. The periorbital region can be done in around 10 minutes.
- Are there any immediate after-effects?
 - Mild swelling and redness may occur, but studies have demonstrated that this usually goes away within 2 to 24 hours.
- How long does it take to see results?
 - Many patients see results immediately even after the first treatment. Continued improvement may be seen for up to 6 months while the skin produces new collagen. Continued treatments tend to improve results.
- How much does a treatment cost?
 - Depending on how many areas of the face are being treated, providers are charging between \$500 to \$2,500 per session.





How long does it last?



¹ Rusciani A, Curinga G, Menichini G, Alfano C, Rusciani L.
Nonsurgical tightening of skin laxity: A new radiofrequency approach. J
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A 200 study by Rusciani A, Curinga G, Menichini G, Alfano C, Rusciani L.
Nonsurgical tightening of skin laxity: A new radiofrequency approach.

- 93 patients followed for 6 months after a single treatment
- Three independent, blinded assessors (2 facial plastic surgeons & 1 dermatologic surgeon) rated improvement over baseline for each time frame
- Response defined as average rating of three assessors indicating greater than 25% improvement in depth and number of wrinkles and improvement in tightness of the skin

A maintenance treatment is typically recommended once every 6 months.



Oklahoma

Board Of Examiners In Optometry

Statute 581 dealing with scope practice definition:

Correcting ocular abnormalitiesexcluding cosmetic lid surgery.



Drs. David Cockrell/Elliott/Laverty

- .





Oklahoma

Board Of Examiners In Optometry

The Oklahoma Board of Examiners in Optometry has determined that ***RF therapy*** is not a cosmetic procedure if it is used in accordance with the intent of the law to relieve ocular abnormalities.



Oklahoma

Board Of Examiners In Optometry

RF can be used in the ocular adnexa to relieve
Dermatochalasis





Women would like an alternative to this:







And they don't want to look like this:





**And they
definitely don't
want this:**





Acyclovir prophylaxis?





- The loss of collagen causes skin to droop and fall where the collagen used to keep it in place.
- **RF** will appeal to patients in their mid-30's!







Eyelid Rhytids

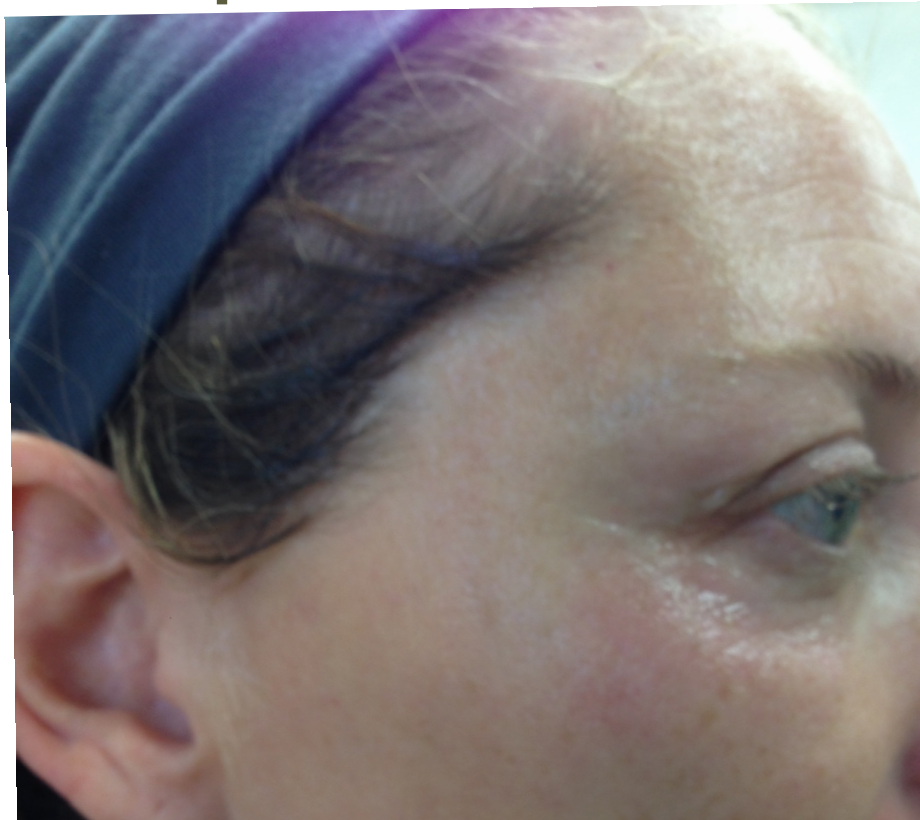
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immediate post tx

- .





Post Treatment 4 month

- .





- Patients can go back to work immediately right after treatment with no downtime.
- Patients can use their normal facial regimen for:
 - cleaning
 - make-up
 - lotions (e.g., Retin-A)





- Safest anti-aging tool for women of colour:
 - African American
 - Native American
 - Hispanic





- Is it better than Botox with needles or the CO2 laser?
- It is less invasive and less drastic than the CO2 laser leaving you with a more natural look immediately after treatment.



Post-CO2 Laser Surface Ablation



In Summary: Why radiofrequency skin rejuvenation?

- Medical studies have proven that radiofrequency skin rejuvenation is a **safe and effective** way to treat skin laxity and minimize wrinkles without surgery.
- The side effects and discomfort are minimal to nonexistent.
- **No drugs or anesthesia** are used.
- **No down time.** Patients can return to work immediately following the procedure.
- **Allows you to treat the pathological and functional periorcular correlates to aging and skin laxity AND achieve a simultaneous cosmetic benefit for your patient!**





Applied Clinical Methods

- Practical usage in general optometric practice
- Utilization of paraoptometric/Aesthetician
- Supplying patient with ocular/skin/health benefits of Omega 3/antioxidants



AT&T 7:29 AM 100%

Yesterday at 8:20 AM · iOS · Edited ·

Happy Birthday to the one and only Brent Hays (57).



**"It's made from seaweed, bee pollen, fish oil
and organic dirt, but the magazine gave it**



Skin Care



- Testimonial



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- Ophthalm





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Volumetric Increase/

- technique/training/preoperative/post operative techniques and principles will be applied for desired outcome. Explanation of a volumetric increase in the collagen which tightens skin without surgery, for the relief of ocular abnormalities

- Remember Neocollagenesis



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Handpiece sizes

- 7.5mm, 10, 15, 20mm for face





face map

- treatment
- zones

pelleve[®] Patient Name: _____ Date: _____
 (Male _____ Female _____)
 Elegance through science.

of Passes¹: R L
 Generator Setting²: R L
 Skin Temperature³: R L
 Handpiece Size: _____mm

of Passes¹: R L
 Generator Setting²: R L
 Skin Temperature³: R L
 Handpiece Size: _____mm

of Passes¹: R L
 Generator Setting²: R L
 Skin Temperature³: R L
 Handpiece Size: _____mm

of Passes¹: R L
 Generator Setting²: R L
 Skin Temperature³: R L
 Handpiece Size: _____mm

Note: _____

1. 3-5 passes recommended
 2. SS generator setting range from 1-99
 3. 39°-42°C recommended

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Facial Mapping

Basic Wrinkles and Rhytids

The diagram illustrates facial mapping for wrinkles and rhytids. It features a central line drawing of a woman's face with eight callout boxes, each showing a close-up of a specific wrinkle type and its location on the face. The callouts are: Crow's Feet (outer corners of the eyes), Zygoma (cheekbones), Nasolabial Folds (sides of the nose to the corners of the mouth), Oral Commissures (corners of the mouth), Transverse Frown Lines (forehead), Vertical Glabellar Lines (between the eyebrows), Perioral Wrinkles (around the mouth), and Mentolabial Folds (between the mouth and chin).

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3333 Royal Avenue, Oceanside, N.Y. 11572-3625 U.S.A. • (800) 835-5355 • Fax: (516) 569-0054 • www.ellman.com • www.pelleve.com
CG11012A



Grounding Pad

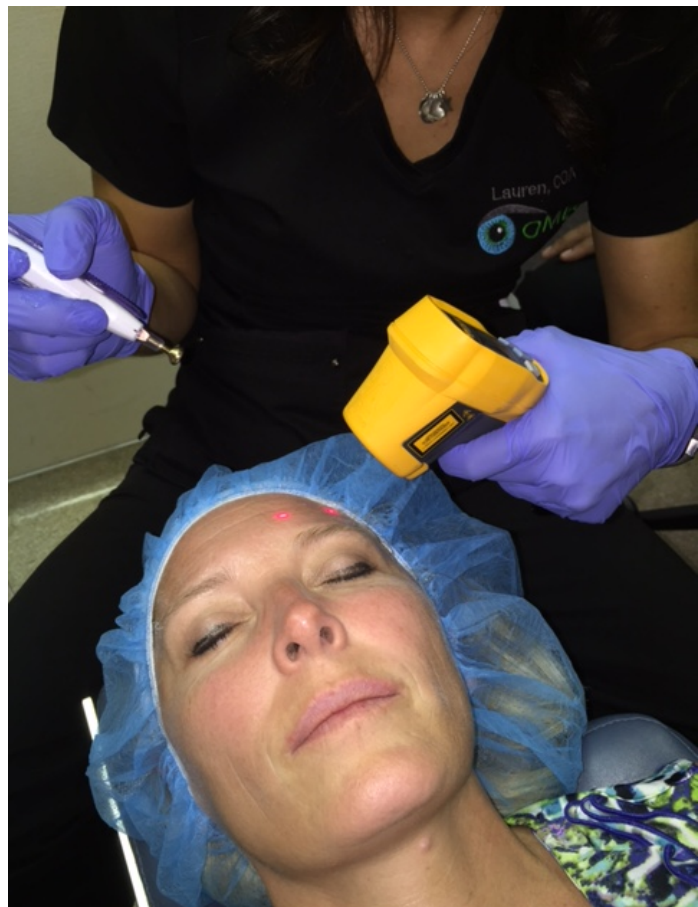
- No Metal plates
- No Pacemakers
- No wet hair

- RF IS safe to use
- with braces



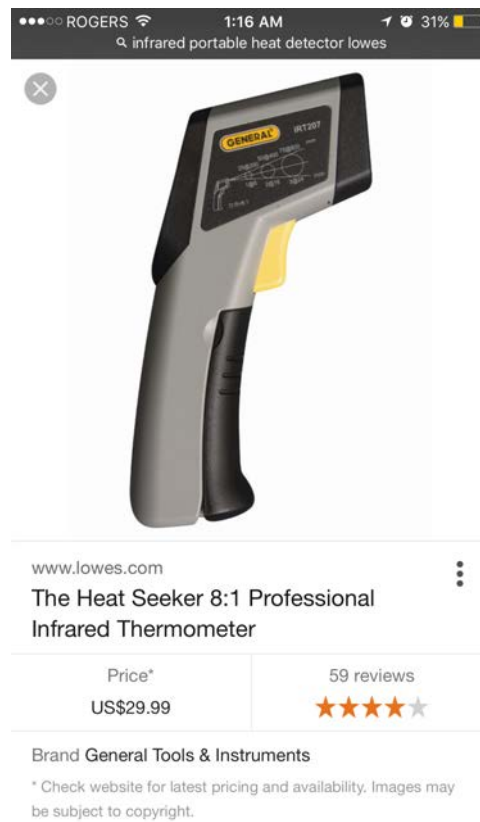


-
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Thermometer

- cost





eye tx

- .





History of RF

Radiofrequency has been around for over 30 years, however , new emerging treatment has been found to work in conjunction with many medical entities, providing a nonsurgical approach to noninvasive skin rejuvenation directly affecting ocular abnormalities. A review of current technology, a review of ocular and facial anatomy, and safety techniques will be demonstrated



H₂O

Tissue interaction

1. Hydration dependent
2. The amount of water in the molecular tissue has a direct effect on the interaction with the radio frequency energy.



corneal shield

Corneal shields

1. Insertion/removal technique
2. In the treatment of ocular abnormalities around the orbital rim, corneal shields provide protection from mechanical injury, as well as radio frequency energy.



- - .Power generator settings /grounding pad
 1. Highly dependent upon outsource of energy/
wattage
 2. Also depended on the hydration of the
molecular cells.
 3. **Power Settings can vary with individual patient treatments, and within individual
specified areas that are treated**
 4. **There are guidelines and ranges of power per areas treated, however these settings are
highly individualized and can change between treatment times.**



temp

- 1. Ideal temp for maximum effect
- 2. Maximum effectiveness and then stimulation of collagen occur at the ideal temperature.
- Number of Passes
 1. 5 passes at 38-40 Celcius
- 2. Pretreating the tissue, while moving the hand piece quickly while adjusting the power setting, will result in maximum temperature effect, with maximum collagen benefits.



Treatment

- Hand piece size in mm
 1. 10, 15, 20 mm sizes
- 2. Variation and sizes of the hand pieces are used to create different tissue effects
- G. Pre treatment of skin
 1. Hydrating gel
 2. Make up removal
 3. Normal skin care routine can be used before and after the treatment



outcomes

- Skin Hydration
- 1. Variable effect depending on patient hydration level
2. Different settings , individuality of patient visits



Follow up care

- Post-Operative procedural instructions:
 - A. Facial cleansing
 - B. Sun exposure
 - C. Postoperative nutraceuticals and Omega 3 supplements
 - D. Make up
 - E. 48 hour effect
 - F. 28 day affect
 - G. Treatment schedule



Temp

- A. Desired effect is reached when temperature reaches 38 to 40°C, and five passes are made at that temperature
- B. Manipulation of gel to decrease discomfort during treatment
- C. Clinical pearls on the size of the hand piece.



Equipment

- .





Equipment

- Make up Brush preferred





S5 Unit

- .





-
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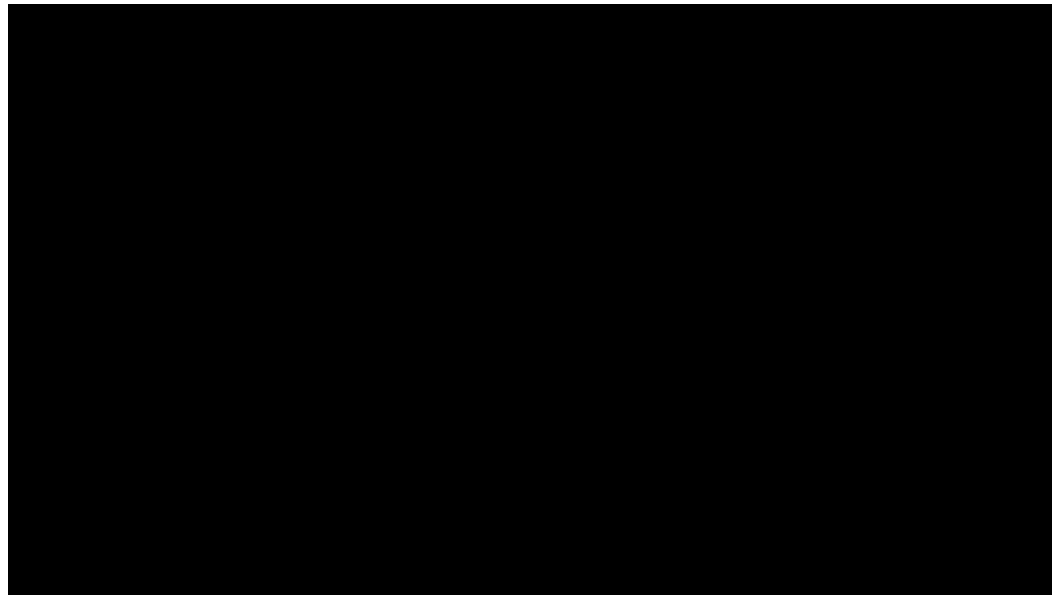
RF Procedure

- Video



Ellman unit Radiofrequency

- Nevus Removal Dr. Castillo





Aesthetics

- Dr. Lynsey
- Instantly ageless
- Eyelash boost

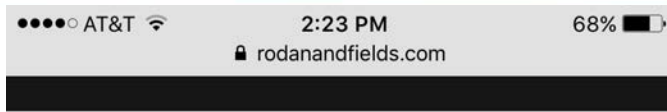




Zoria Boost

- Lash Boost





RE AND AFTERS
0% YOURS.



before

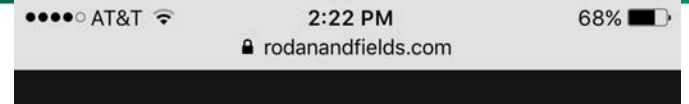


after



after + mascara

Lash Boost



RODAN + FIELD

100% REAL



before



after



after + mascara



Aesthetics

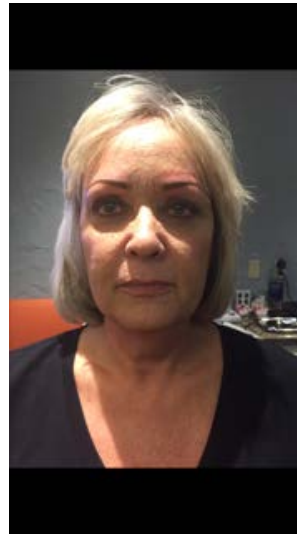
- Micropigment
- niche service
- aesthetician
- tinting
- extensions





Immediately

- Pre drawing





3 weeks out

- Immediately



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THANK YOU!

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