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Non invasive cosmetic procedures

Kareem Bakr Elessawy, M.D.

Associate Professor of Ophthalmology

Cairo University



Non surgical options for facial rejuvenation

- Plasma
- Laser
- HIFU
- Threads
- Botox
- Fillers
- Skin boosters
- Mesotherapy



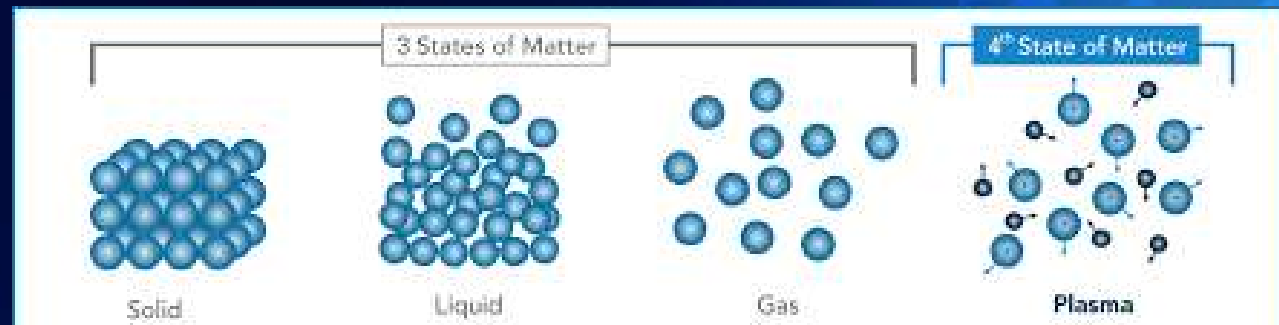
Plasma



- Plasma exeresis is a new non surgical method, which may provide a less invasive treatment option for facial rejuvenation.
- Plasmage or plexier
- Fractional plasma is a type of energy based on the fourth state of matter.

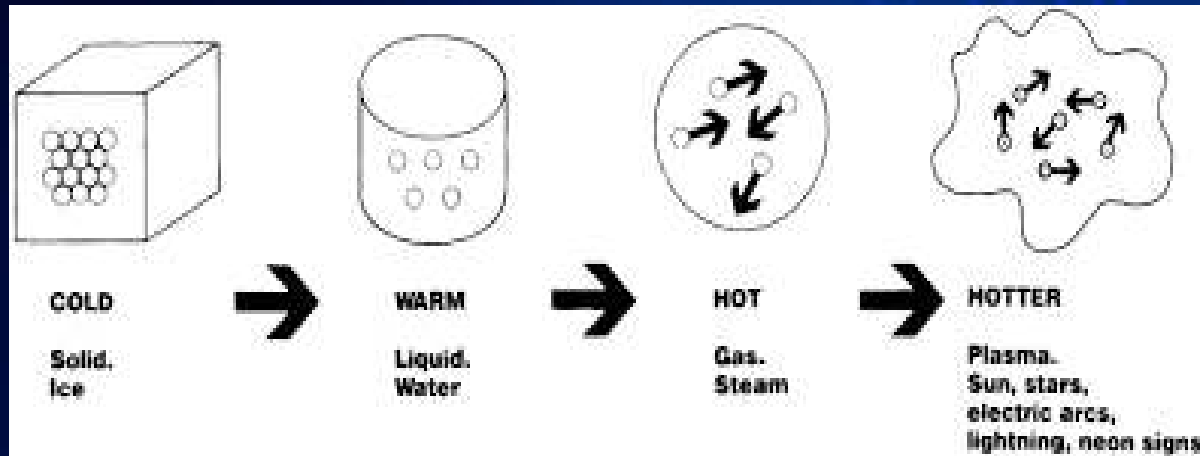
Plasma

- It delivers plasma energy on the desired tissue, formed by the gas ionization from the air.
- The generated plasma is used to raise the temperature in a certain part of the skin using specific electrode by the creation of a series of small dots on the skin.
- The rise of temperature stimulates skin contraction and tightening through the superficial layers only down to a depth of 0.1 mm at the level of the stratum corneum.



Plasma

- The main advantage of fractional plasma is the high precision with no affection of the surrounding skin.
- It can be used in the management of acne scars, wrinkles as crow's feet or smoker's lines, skin tags, milia, syringoma, and dermatochalasis (blepharoplasty)

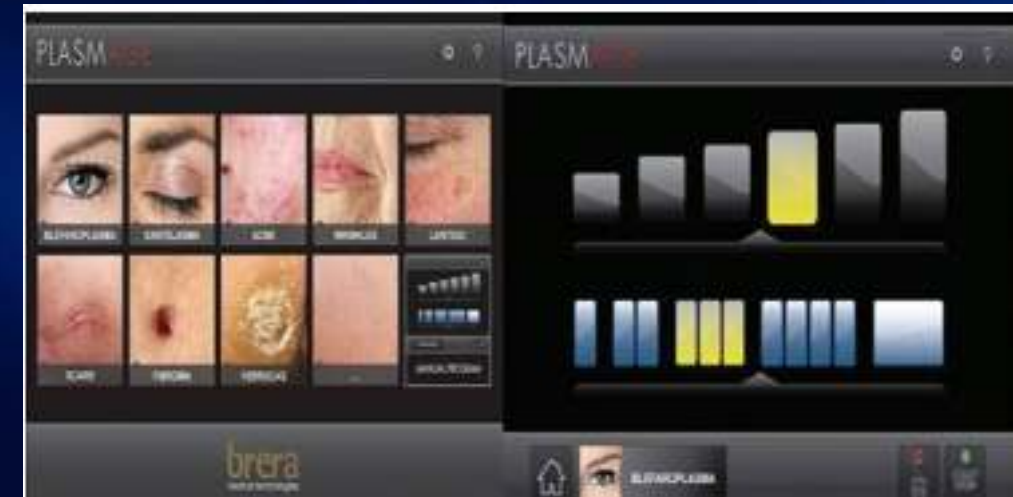


Plasma

- Surgical eyelid blepharoplasty is the classic treatment option of dermatochalasis. It involves excision of excess skin and prolapsed fat.
- Surgical intervention leave a scar at the site of incision.
- Scar related complications as wound dehiscence, infections, granuloma formation, keloid formation, and disfigurement are rare nowadays, but are still present.

Plasma

- The area of the skin to be treated is determined with the surgical mark in the form of equidistant spots 1 mm apart in horizontal curvilinear lines following the curve of the upper lid crease.
- The fractionated plasma device (Plasmage) setting is adjusted to the module of blepharoplasty (power 155 J and frequency 3 Hz)



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Plasma



- Under a foot switch control, fractional plasma is delivered to the treated area using a special needle. The needle tip is brought close enough to each marked spot without touching the skin to form a plasma arc that stimulates skin contraction and shrinkage.
- The end point is reached when the desired shrinkage of the treated skin spot is observed, approximately after 2 s of plasmage application.

- This is a prospective, comparative, interventional case series that included 20 eyes of 10 patients suffering from upper lid dermatochalasis.
- It took place between November 2018 and July 2019.
- Surgical upper eyelid blepharoplasty was performed on one side and fractional plasma (blepharoplasma, Plasmage) was performed on the other side of each patient.

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Conventional vs noninvasive upper lid blepharoplasty in upper lid dermatochalasis: a comparative case series study

Ahmed Tharwat^a, Wael M. Saudi^b, Omar Solyman^c, Kareem B. Elessawy^d

Departments of ^aOphthalmology, ^bDermatology, Faculty of Medicine, Misr University for Science and Technology, 6th of October City, ^cDepartment of Ophthalmology, Research Institute of Ophthalmology, ^dDepartment of Ophthalmology, Faculty of Medicine, Cairo University, Cairo, Egypt

Correspondence to Ahmed Tharwat, MD, Department of Ophthalmology, Faculty of Medicine, Misr University for Science and Technology, 9A Ramu Buildings, Ammanayez District, 6th of October City 12568, Giza, Egypt. Tel: +20 120 778 2340; e-mail: a.leyedline@yahoo.com

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Purpose

The aim of this study was to compare the efficiency of fractional plasma with conventional surgical upper lid blepharoplasty in the management of upper lid dermatochalasis.

Patients and methods

This is a prospective, comparative, interventional case series study that included 10 patients with bilateral upper lid dermatochalasis. Surgical upper eyelid blepharoplasty was performed on one side and fractional plasma (Blepharoplasma, Plasmage) was performed on the other side for each patient. The outcome was compared between both sides of each patient in terms of the amount of residual excess skin, patient satisfaction with lid contour, scar line, and pretarsal platform, in addition to the duration of the procedure and postoperative complications.

Results

No statistically significant difference was found in terms of patient satisfaction between the two techniques. Lid edema was noted in both groups. However, ecchymosis was significantly more obvious in the eyelid that underwent surgical blepharoplasty compared with the lid that underwent fractional plasma, but it resolved within the first week.

Conclusion

Fractional plasma may offer a less invasive alternative to surgical upper lid blepharoplasty in mild to moderate cases with some limitations regarding fat prolapse and the severity of dermatochalasis.

Keywords:

Blepharoplasma, blepharoplasty, dermatochalasis, fractional plasma, plasmage

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Plasma

- According to the results of this study, fractional plasma offered a good alternative to surgical blepharoplasty for skin shrinkage especially in mild and moderate cases of dermatochalasis.
- It can be used even in severe bilateral cases of dermatochalasis to achieve the symmetrical acceptable outcome without the need for surgical intervention

Plasma

- Fractional plasma is a minimally invasive outpatient procedure. However, at least two sessions may be required to achieve the desired outcome, usually 3 weeks apart.
- The need for more than one session and the interval between the sessions may be a disadvantage for those who want to achieve the desired aesthetic outcome rapidly with the least possible visits.

Plasma

- The limitations for blepharoplasty are severe dermatochalasis with much excess skin and fat pocket prolapse as fractional plasma only works on the superficial layers down to the level of the stratum corneum.
- Good patient selection with pre intervention counseling is important to achieve the expected aesthetic outcome with the use of blepharoplasty

Plasma pen



- The highly accurate hand held Device utilizes the voltage in the air between its tip and the natural gasses emitted from our skin to form a plasma charge.
- A small plasma arc is created and instantly shrinks the targeted skin.
- There is no cutting to remove the excess skin resulting in minimal downtime (around 3 days of swelling and 5 days of visible brown dots).

Uses

- Hooded/sagging eyelids
- Crows feet
- Baggy eyes
- Smokers Lines
- Marionette lines
- Face lines & wrinkles
- Lip flip
- Skin resurfacing
- Scarring
- Sagging jaw line



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Contraindications

- Plasma Pen is not appropriate for anyone with hyperpigmentation or having skin types 3-5 on the Fitzpatrick scale.
- It is not recommended to treat areas with any skin disorders (e.g. psoriasis, eczema, dermatitis)

HIFU

- High Intensity Focused Ultrasound
- HIFU is FDA-approved non-invasive technology used to firm and tighten skin.
- It uses ultrasound energy below the surface of the skin to stimulate collagen production to tighten, firm and lift skin.



Mechanism

- HIFU uses focused ultrasound energy to heat the skin at a deep level.
- At 60°C and 80°C, the targeted cells become damaged, which stimulates the body's natural healing response, starting a repair process that produces new collagen and elastin.
- By encouraging the production of new collagen and elastin, skin can become firmer and smoother, with wrinkles becoming less visible.



- HIFU treatments are suitable for all skin types, as it does not target pigmentation.
- The HIFU energy is applied to a depth of 1.5-4.5mm in the skin, depending on the specific skin concern being treated.
- HIFU cartridges to the depth of 1.5mm, 3.0mm, and 4.5mm are used in face HIFU
- People with severe skin laxity or sun-damaged skin, may need treatment at a deeper level and repetition of the sessions before seeing results.



Technique

- The skin is first cleaned after which a gel is applied. Then the pulses of the HIFU is applied.
- Skin warmth lasts for an average of 2 hours.
- Skin redness will be gone after average 1 hour.
- Can be used for both upper and lower lids



Uses

- Lift the eyebrow and forehead area
- Reduce fine lines and wrinkles around the eyes
- Tighten sagging skin around the eyes
- Reduce crow's feet
- Skin rejuvenation without surgery
- Reduce dark circles under the eyes
- Tighten and lift around the cheeks
- Sculpt and tighten the jawline
- Smooth fine lines and wrinkles around the mouth
- Reduce skin laxity on the face and body.



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- Its better to have collagen supplements or booster before and after HIFU to optimize the results
- Initial improvements may be immediately obvious, but most patients will see significant lifting, tightening and firming 3 months after treatment.
- This is because the skin needs time to repair and produce new collagen and elastin, so further improvements may even be seen for up to 3-6 months



Redo

- HIFU treatments can be carried out every 4-6 weeks
- but as it usually take around 12 weeks (3 months) for the results to become significant
- it is best to wait to ensure time for the results of the previous treatment to be seen before deciding whether to have more treatments or not.

Contraindications

- Some medical conditions as patients with pacemakers, Epilepsy, Facial paralysis, Lupus, Kidney disorders, Cancer, and Anti-Coagulant medication users.
- Its better to wait 4 weeks after Botox or filler before HIFU
- Stop using topical Retinoids/Steroids in the treatment area for at least two weeks before treatment.

Laser

- Laser utilizes concentrated light to target various skin issues.
- The laser's energy is absorbed by the skin, where it can be used to heat and remove or reshape tissue.
- This process can help to improve skin texture, reduce the appearance of fine lines and wrinkles, and even skin tone by targeting pigmentation issues.
- Laser therapy is also effective for hair removal and can reduce the visibility of scars.



Laser blepharoplasty blepharo-laser

- It is a minimally invasive approach to eyelid surgery using CO2 laser instead of scalpel.
- Laser blepharoplasty
 - ✓ allows accurate and precise incisions
 - ✓ determine the exact amount of tissue to remove
 - ✓ minimizes the risk of error enhancing the precision of the procedure.



- The CO₂ laser can function as a cutting tool, a dissecting instrument, and a cautery for coagulation.
- The laser technology also promotes collagen stimulation, which can aid in the skin's rejuvenation
- Surgeons must place a protective metal shield over the eye before using laser



Advantages

- More precise incisions: result in better outcomes and less damage to surrounding tissue.
- Less swelling and bruising: less than traditional methods.
- Faster recovery: Patients can usually resume their normal activities in about 7 to 10 days, compared to 2 to 4 weeks for traditional eyelid surgery.
- Less visible scarring.

Threads

- Threads are minimally invasive, non-surgical substitute for typical surgical brow lifts.
- They give the face a more youthful appearance with little recovery time and no scarring.
- PDO thread eyebrow lifts have a lifting and rejuvenating effect.



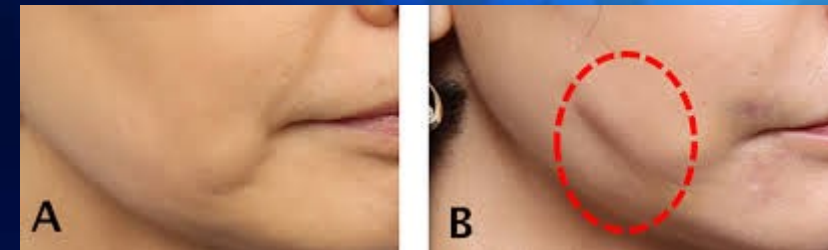
Threads

- The threads immediately produce a lifting effect once they are lifted and put into the facial skin.
- Additionally, it encourages the synthesis of collagen, which with time improves the firmness, volume, and youthful appearance of the skin.



Disadvantages

- Temporary results: Over time, the threads can gradually dissolve, and the lifting effect may diminish.
- Limited lift: Thread lifts are better suited for individuals with mild to moderate sagging.
- Risk of complications: infection, thread migration, puckering of the skin, and visible or palpable threads beneath the skin.



Disadvantages

- Uneven or un natural results: possibility of uneven results, where one side of the face appears lifted differently from the other.
- Skill-dependent: The success of a thread lift heavily relies on the skills and expertise of the practitioner performing the procedure.
- Cost: Thread lifts are generally more affordable than surgical facelifts. But they still involve costs potential follow-up sessions. Over time, these costs can add up.



Disadvantages

- Limited area: Thread lifts are most common for specific areas, such as the midface and jowls. They may not be suitable for other areas, as the neck or forehead.
- Side effects: Temporary side effects such as bruising, swelling, and discomfort are common after a thread lift.
- Patient selection: Not everyone is an ideal candidate for a thread lift. Individuals with certain medical conditions or skin types may not be suitable candidates.



Advantages



- Minimally invasive: Thread lifts involve smaller incisions, which generally result in reduced scarring, less discomfort, and a shorter recovery period.
- Natural-looking results: Thread lifts are popular for providing subtle and natural-looking results.
- Collagen stimulation: The insertion of threads into the skin induces a natural healing response, stimulating the production of collagen, This can contribute to longer-lasting results beyond the immediate lifting effect.

Advantages

- Quick procedure: Thread lift procedures are typically quicker to perform compared to surgical facelifts.
- Minimal downtime: Since the procedure is less invasive, downtime is significantly shorter. Most individuals can resume their normal activities relatively quickly.
- Adjustability: Unlike surgical results, thread lift outcomes can be adjusted to some extent if needed. If the initial lift is not as pronounced as desired, additional threads can be added later to achieve the desired effect.

Advantages

- Local anesthesia: Thread lifts can often be performed under local anesthesia, minimizing the risks associated with general anesthesia and making the procedure more accessible to patients.
- Volumizing your face: A thread lift will rejuvenate the face.
- Instant effect: Although a thread lift will not last long, the results can be seen instantly.



Thank you for your attention

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