

Q/A Discussion; Commentary on Periorbital Rejuvenation, Challenges, and Debates

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Faisal A. Quereshy, and Shahriar Nazari

Behnam Bohluli: The patient is a 54-year-old female who has undergone three consecutive upper lid blepharoplasties in two years. She believes that her eyes are getting smaller and she is having a narrower visual field while her visual acuity is normal. How this frustrating complication happens? And how can it be prevented? (Fig. 47.1).

Malcum Paul: It would be helpful to see her pre-op photos to assess the perceived change in the size of her eyes and narrower visual field. Her brows are at the proper height because there is no indication of frontalis muscle strain that is seen in patients who are contracting their frontalis to raise their eyebrows thereby elevating a hooded eyelid. The inferior placement of the lateral aspect of the upper eyelid incision in this patient may have produced an appearance of a smaller eye.

Faisal A. Quereshy: From repeated skin excisions, and the position of the lateral extent of the upper eyelid crease incision location has caused contracture and scarring narrowing the aperture of the eye (right eye).

- There also appears to be lid ptosis on the right side with weakening of the levator muscle.
- She will need levator repositioning to “open up” or raise the upper eyelid above the limbus.



Fig. 47.1 A 54-year-old female patient who has undergone three consecutive upper lid blepharoplasties in two years. She believes that her eyes are getting smaller and she is having a narrower visual field while her visual acuity is normal

Shahriar Nazari: If we look precisely to her eyes we can see disproportionate brow fat span (bfs) to tarsal plate show (tps) and the position of her eyebrows is absolutely high that means she has hidden ptosis with compensation of her frontalis muscles, because of this undiagnosed blepharoptosis any blepharoplasty operation will be defeated because the main pathology will be untouched.

I think before any blepharoplasty operation a surgeon should notice especial concern to eyelid position and brow position as well, there is a simple test by putting the hand of the examiner over the frontal area and neutralizing the function of the frontal muscle by this simple maneuver the patient cannot use the elevator force of frontalis muscles and his or her hidden ptosis will show itself. Any upper blepharoplasty case should be examined for different causes of ptosis and the surgeon should know how to manage it by him or herself or should ask an oculoplastic surgeon to help for alleviating this problem.

Behnam Bohluli: Some surgeons believe that a sole indication of upper lid blepharoplasty rarely exists and most cases (like the case below) will be corrected by only brow lifting or a brow lifting and a very conservative blepharoplasty. Do you agree? (Figs. 47.2 and 47.3).

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Fig. 47.2 Female patient who has undergone upper lid blepharoplasty

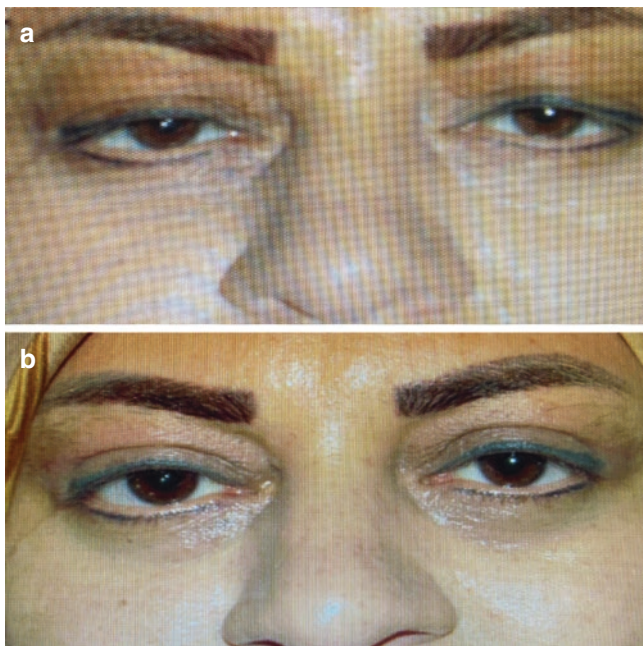


Fig. 47.3 (a, b) Upper blepharoplasty just by removing skin and muscle flap and conservative medial fat pad removal

Malcum Paul: It is important to assess the position of the eyebrow at rest to determine if a brow lift alone or an upper lid blepharoplasty alone or in combination with a brow lift is indicated. Patients who show a normally positioned eyebrow at rest may only need any upper lid blepharoplasty. Patients who demonstrate frontalis muscle strain or lateral hooding that passes the lateral orbital rim usually require a brow lift with or without an upper lid blepharoplasty.

Faisal A. Quereshy: The evaluation of a younger patient, perhaps hooding or fullness in the lateral aspects of the upper eyelid region may be a result of brow ptosis alone; with little excess skin laxity or dermatochalasia; evaluation should include repositioning the brow position and assess excess upper lid skin to see if brow only would be effective in addressing her chief complaint.

Ryan Diepenbrook: While I do not subscribe to the notion that “a sole indication of upper lid blepharoplasty rarely exists,” I do agree that accessing brow position is extremely important. The textbooks teach us that ideally the apex of the female brow (junction between the middle and lateral one-third) should be roughly 10–12 mm above the supraorbital rim. This is a recommendation, not an absolute. By analyzing the aesthetic norms, we find that often times, what is perceived as beauty does not always fit into a box or norms. Many attractive women do not have brows that rest that are in the “ideal” position or are arched as described in the literature.

An evaluation of historic photos of a patient, i.e., senior pictures, wedding photos, or other photos of patients in their 20s–30s, would inevitably show that these patients never had brows that were arched or positioned well above the supraorbital rim. Performing a brow lift in these patients may result in an extremely unnatural look that does not represent their youthful appearance.

I often begin my evaluation by asking patients to show me a photo of them in their late teens to 30s. I then may elevate the brows into a more superior position and ask the patients if they like the elevated position. Some patients may be pleased with the position and state, “That is where my brows used to be.” On the contrary, some may feel the elevated position is unnatural.

It is also important to evaluate for lacrimal gland ptosis and orbicularis oculi hypertrophy. These elements may be overlooked by the novice surgeon and result in a poor outcome if not addressed.

While completing simultaneous brow lift and upper lid blepharoplasties, I ALWAYS reposition the brow first and remove as much upper lid tissue as required to slightly evert the upper lids.

For patients whose brow position is relatively the same as in their youth, I have no objections in performing an isolated upper lid blepharoplasty. I find that often times, what people perceive as brow ptosis is actually orbicularis oculi hypertrophy, steato-blepharon, and dermatochalasis. By removing excess muscle,

fat, and skin, the supratarsal crease is reestablished and the youthful lid is achieved. I believe the orbicularis muscle is often under-treated and brow lifts unnecessarily performed.

Many times, I may simply complete an internal browpepxy to gain 2–3 mm of brow elevation and reestablish an arched brow.

There are certainly times when brow ptosis is the causative factor, and isolated brow lifts are completed. I again reiterate, when planning on simultaneous brow lifts and upper lid blepharoplasties, complete the brow lift first to establish proper position, sit the patient upright, and reassess. If dermatochalasis is still noted, then complete the upper eyelid blepharoplasties.

Unfortunately, I often see patients that have had one, two, or even three upper lid blepharoplasties when a brow lift should have been performed. These cases are challenging, because subsequent brow lifting is impaired because there is not enough skin remaining between the upper ciliary line and inferior portion of the brow skin (<20 mm).

Shahriar Nazari: No I do not agree. Nowadays we know more about hooding effect of brow ptosis on upper eyelid and also the hooding effect of hypertrophy of ROOF and also prolapse of lacrimal gland on superolateral part of eyebrows, skin laxity, and blepharochalasion are the most important indication of upper lid blepharoplasty but fat prolapse especially medial or nasal fat pad many times cause a baggy eye appearance that should be handled as an age process the orbital bone diminishes and the post septal fat pads prolapse and will be visible also the elasticity of skin decreases and let the skin folds on itself therefore by conservative removing of just medial fat pad and excess skin and muscle over the orbicular part we can achieve a good result but I agree that sometimes if the descent of brow is prominent there is a good indication for doing forehead lifting with upper lid blepharoplasty at the same time and simultaneously but the brow lifting should be done before blepharoplasty at first and then skin marking for remaining skin excess done to prevent excess skin removal and its consequential complications.

Behnam Bohluli: Does augmentation has a role in your upper lid blepharoplasty?

Faisal A. Quereshey: Use of filler augmentation (typically autologous fat transfer) is to enhance the volume of the brow and help rejuvenate a deflated brow; usually inserted mostly in the lateral 1/3–1/2 of the brow; the effect of volume replacement would be to gain more prominence in the brow region with elevation of the lateral brow.

Shahriar Nazari: Almost always in most of my upper lid blepharoplasties, I remove some medial fat pat but the middle fat pat leaves untouched in most of cases and even augments with the fat that I removed from medial fat pad, especially in elder people that their middle fat are atrophied or removed by surgery and caused an A-frame deformity in upper lid this augmentation is mandatory but in some deep sulcus cases I use micro and Nano fat at the time of upper

blepharoplasty or alone as only method of augmentation blepharoplasty.

Malcum Paul: Augmentation of the upper lid with fat injections or with non-autologous fillers is indicated in patients who demonstrate a hollow upper lid sulcus. Fat injections below the eyebrow can act as a structural support and slightly elevate the eyebrow.

Behnam Bohluli: Is your most common approach for lower lid blepharoplasty?

Faisal A. Quereshey: Preferred approach is a transconjunctival approach with a retro-septal approach to the lower eyelid fat pads. With avoiding a transcutaneous approach, one can avoid skin contracture with injury and scarring to the middle and posterior lamellae (with lid contracture and ectropion).

Ryan Diepenbrook: I perform a subciliary approach in probably 75% of my lower lid blepharoplasties. This is due to the fact that most patients also have hypertrophy of the lower portion of the orbicularis oculi. Additionally, there may be excess skin that can also be excised and redraped.

With a properly taught lower lid (accessed by snap, pull, and distraction test), there is not much risk of ectropion and canthal rounding. While completing a lower lid blepharoplasty via a subciliary approach, it is imperative to ensure the integrity of the orbital septum. I do not access the lower lid fat pads via a subciliary approach by completely violating the septum, rather I make small nicks in the medial, middle, and lateral portions to access the fat pads. After excision, I “tack weld” the perforated septum back together with a bi-polar.

Shahriar Nazari: It depends on pathology that should be corrected for instance if there is a negative vector shallow orbit I should augment the orbital rim therefor my operation will be fat injection and/or orbital rim prosthesis insertion.

If my snap test is good enough and there is no too much laxity in orbital ligament I prefer transconjunctival fat transposition and distribution over the orbital rim and removal of excess skin by pinch test very conservatively.

And if there is a need to do something more on skin and lateral cantal ligament and midface lifting I prefer subciliary incision and transposition of fat and very limited and conservative medial fat pad removal.

But nowadays in most of my lower blepharoplasties, fat injection is a mandating process for me.

Malcum Paul: My most common approach for lower lid blepharoplasty is the transcutaneous approach where I perform a submuscular dissection in combination with fat reduction with or without fat repositioning over the inferior orbital rim. Frequently, my dissection includes division of the orbital-malar ligament which allows me to lift the upper cheek which occurs with the suspension of the orbicularis oculi muscle which I always use to support the lower lid. The lateral orbicularis oculi muscle flap is sutured to the fascia above the lateral aspect of the lower eyelid incision. In younger patients who demonstrate only herniated sub-septal

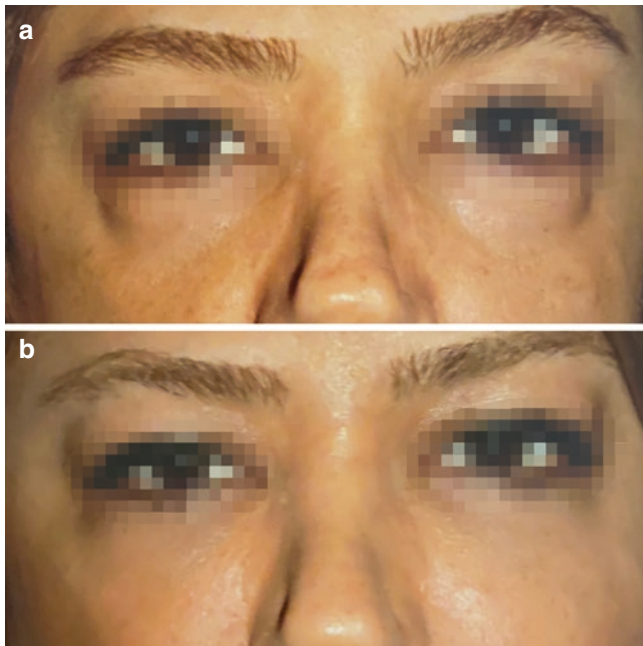


Fig. 47.4 (a, b) Periorbital rejuvenation by micro and nano fat grafting, result 6 months after second session of fat grafts

fat, a transconjunctival approach is preferred with care being taken not to produce a concavity due to over resection of orbital fat.

Behnam Bohluli: What is your preferred method for correction of tear trough deformity? (Fig. 47.4).

Faisal A. Quereshey: Treat the tear trough deformity my preferred method is filler using autologous fat transfer, although significant deformities can be corrected using a tear trough implant.

Ryan Diepenbrook: Depends on the patient. I usually will perform injections of hyaluronic acid fillers to efface the tear trough and build the orbital rim. Fat is my second choice. If the patient has significant malar/submalar hypoplasia, I find implants to be very successful.

Shahriar Nazari: Injection of some HA filler with a short cannula and in the deepest layer over the periosteum is the method of choice for me in non-surgical cases but at the time of lower blepharoplasty medial fat pad release and transposition of it to midface in a subperiosteal pocket is my method of choice.

Malcum Paul: My preferred method for correcting the tear trough deformity is to release the tear trough ligament with a blunt cannula, and, at the same time, inject hyaluronic acid to fill the tear trough.

Behnam Bohluli: What is your preferred method for correction of eye festooning? (Fig. 47.5).

Faisal A. Quereshey: The arcus marginalis and release of any periosteal attachments to the infraorbital rim; redraping of the lower eyelid lid fat; fat transfer to the lower eyelid; and resuspension of the malar fat pad.

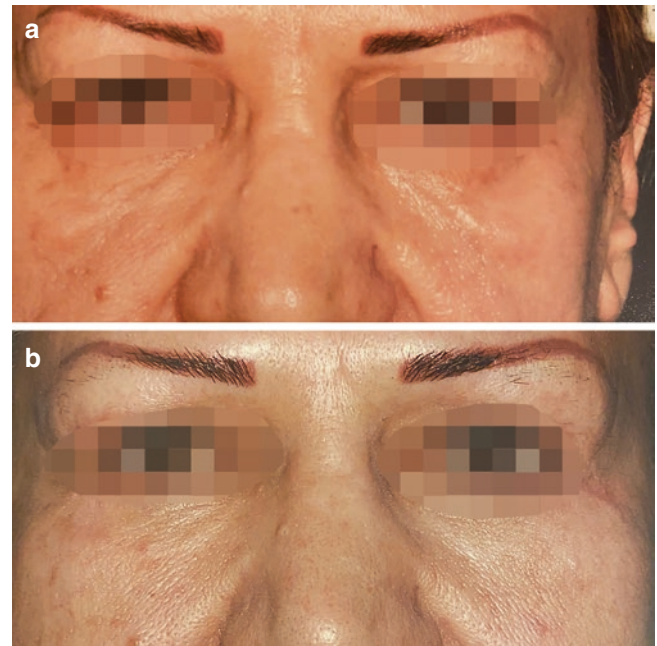


Fig. 47.5 (a, b) Periorbital rejuvenation in the patient with mounds and festoons by upper and lower blepharoplasty by fat repositioning and endoscopic mid face lift

Ryan Diepenbrook: Patients with festoons suffer from a variety of conditions. Often times, significant lower lid laxity, in combination with infraorbital and malar/submalar hollowing and laxity of the orbitomalar ligament are compounding factors. Obviously, lower lid dermatochalasis plays a role.

First, it is imperative to evaluate the laxity of the lower lid because any aggressive treatment can lead to significant lid complications. Since I find most patients with festooning also have infraorbital hollowing and some degree of lid laxity, I often treat with a combination of canthopexies, submalar/malar implants, and laser skin resurfacing. This may be the definitive treatment or may be followed by additional lasering or even lower lid blepharoplasties. It is important to realize the etiology of festoons. Festoons are essentially edema or fluid collections within tissue planes. Lack of tight skin in combination with orbitomalar ligament laxity and maxillary bone atrophy results in loose tissue amenable to collect fluid.

Festoons are separate from steatoblepharon or herniation of the lower fat pad and thus should be managed separately.

Shahriar Nazari: To answer this question I should discuss the difference between malar edema and malar mounds and festoons.

Malar edema: Fluid that collects over the malar eminence, below the level of the infraorbital rim. Malar edema often varies in severity; it may be more noticeable after a salty meal and sometimes has a slight bluish discoloration.² The presence of pitting on examination is evidence of edema.

Malar mound: Chronic soft tissue swelling or bulge over the malar eminence situated between the infraorbital rim and midcheek. The transition between malar edema and malar mounds can be subtle; the distinguishing factor is the permanent presence of excess tissue and soft tissue bulge.

Festoons: Cascading hammocks of lax skin and orbicularis muscle that hang between the medial and lateral canthi and may or may not contain herniated fat. The term is derived from the seventeenth-century Italian festone or French feston that describes a festive ornament—such as flowers, foliage, or fabric—hung in a graceful loop between 2 points.

According to pathology using extended skin muscle flap unit and anchoring it and lateral cantal ligament to zygomatic bone periosteum, concomitant midface lift, daily using of potassium sparing diuretics, and CO₂ laser resurfacing are different approaches that I use when I face this problem.

Malcum PAUL: My preferred method for correction of eye festooning is a wide submuscular dissection with resection of excessive skin and muscle while always supporting the lid with an orbicularis oculi muscle flap. In older patients who demonstrate festoons and deep periorbital and upper cheek rhytids, a direct excision of the festoon is performed without a sub-ciliary incision. The scar heals well in older patients and will blend with the existing rhytids.

Behnam Bohluli: Looking back over the past 10 years, what has changed in your approach to periorbital rejuvenation?

Faisal A. Quereshy: Of skin treatments in conjunction with Lower eyelid surgery.

- No longer use a transcutaneous approach.
- Aggressively using fat transfer in most cases.

Ryan Diepenbrook: I have a more thorough understanding of the aging periorbital region to include the importance of the skeletal substructure. Additionally, I feel I am more adequately treating the orbicularis muscle than in years past. Today, I rarely do a transconjunctival approach to the lower lid. Unless the patient is young with minimal orbicularis muscle hypertrophy, I will utilize a subciliary approach. Additionally, a new found respect for the lower lid integrity is essential. I frequently resuspend the lower lid with canthopexies much more today than 5 years ago.

Shahriar Nazari: Nowadays removing of fat for me is very scanty and in most times I transpose them to new places and also I use more and more fat grafting both micro and nano fat for augmentation of periorbital tissues my skin removal is very little and so conservative and I do more mid-face lift at the time of my lower blepharoplasty and more endoscopic brow lift at the time of upper blepharoplasty.

Malcum Paul: I tend to be more conservative in skin, muscle, and fat removal in the upper and the lower eyelids and I routinely support the lower eyelid with a laterally based orbicularis oculi muscle flap unless I am only performing a skin pinch blepharoplasty and there is no visible tendency for the lid to pull inferiorly.