focus on the eye

By Inga Hansen

The eyes are among the first features we notice when we meet a new person. They define a person's face and, to our chagrin, they love to display our age. The delicate skin around the eyes is prone to fine lines, hyperpigmentation and skin laxity. As a result, treatments to address problems around the eyes are among the most requested cosmetic services. To help you design the most comprehensive treatments for the eye area, we spoke with four *Medesthetics* advisory board members to discuss how they would approach the five most common cosmetic concerns that manifest around the eyes: dark undereye circles, fine lines, deep lines, undereye bags and drooping upper eyelids.

Photo: Randy Butler

DARK UNDEREYE CIRCLES

Katz: You have to determine why the patient has the dark circles. If they are due to telangiectasias in the eye area, we use a vascular pulsed dye laser. Usually one session will take care of it, maybe two. You do need to use high heat because you're treating vessels. As a result some people will experience swelling and bruising for a day or two after the treatment.

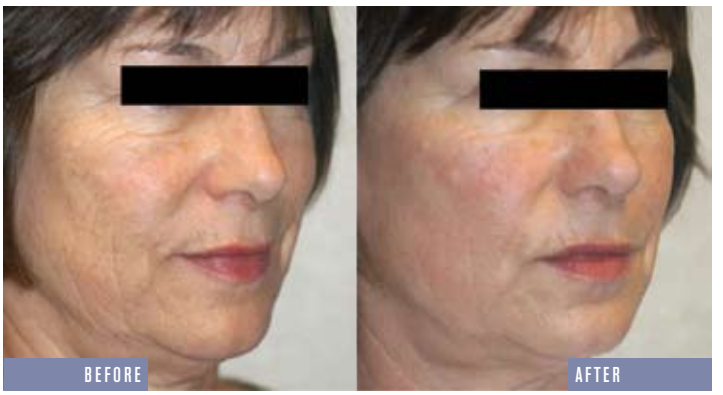
For discoloration due to pigmentation, which may be the result of sun exposure, irritation or genetics, Sciton offers a new laser called the MicroLaserPeel, which allows you to resurface at graduated depths. You can start at 10µm, go to 20µm and very gradually take away the pigmentation. It usually takes three to four treatments spaced two weeks apart. We've found this to be very effective in treating dark rings under the eyes with no downtime.

Werschler: Hyperpigmentation around the eyes can occur due to genetic pigmentation anomalies or as a result of chronic allergies and chronic heeling, where an allergy sufferer regularly rubs her eyes with the heel of her hand and gets a reactive hyperpigmentation.

If the discoloration is the result of allergy congestion or a deviated septum, you would start by treating those underlying conditions with decongestants to bring down the puffiness and congestion. We would address pigmentation problems with bleaching agents and exfoliating agents, including chemical peels in some cases. Since the skin around the eyes is very sensitive, you have to be gentle when working in this area. We also recommend makeup concealers to enhance the results of bleaching or peeling.

Discoloration can also be the result of sentinel veins, which are big blue veins in the eye area. These typically occur in people with very fair skin (skin type I or II). You can use laser treatments to treat and shrink the veins.

A third situation involves patients who have a normal anatomic configuration but are experiencing some separation in the semicircle area where the



Courtesy Sciton

Dr. R. James Koch of Palo Alto, California, achieved these results with the MicroLaserPeel and ProFractional in combination.

MEET OUR PANEL

Dr. S. Berger

Dr. B. Katz

Dr. M. Gold

Dr. W. Werschler

Saul Berger, MD, board-certified plastic surgeon; member of the American Society for Aesthetic Plastic Surgery; medical director, Skin Deep Aesthetic Center, Encino, California.

Michael Gold, MD, assistant clinical professor, Vanderbilt University Medical Center; founder, Gold Skincare Center/Advanced Aesthetics Medi Spa/The Laser and Rejuvenation Center/Tennessee Clinical Research, Nashville, Tennessee.

Bruce Katz, MD, clinical professor, dermatology, and director of the Cosmetic Surgery & Laser Institute, The Mount Sinai School of Medicine; director, Juva Skin & Laser Center, New York, New York.

Wm. Philip Werschler, MD, assistant clinical professor of medicine/dermatology, University of Washington, School of Medicine, Seattle, Washington; Spokane Dermatology Clinic and Aesthetic Image Medical Spa, Spokane, Washington.

eye skin becomes cheek skin. When patients come in and complain about their lower eyelid being puffy, baggy and blue, most of the time it's an age-related change. In this situation you have two intervention options. The first is to refer the patient to a surgeon for a mid-face-lift. Or you can use a filling substance in the lower eyelid to artificially recreate thicker tissue in the area to minimize that transition line at the arcus marginalis.

Berger: For people who have darker pigmentation, which is often genetic, I can offer no magic bullets. A lot of these people rely on makeup and lightening creams around the lower eyelid with mixed results.

In patients where the darker undereye area is related to contour—fat protruding or a groove between the fat bag and the nose in the nasojugal groove—you can get good results with wrinkle fillers or fat transfer. If you're a surgeon operating on the lower lid, you can also take that opportunity to release some of the indented areas and fill them, so you have a number of options for these patients.

FINE LINES

Katz: Botox (Allergan) is a good way to start, and it solves the problem pretty quickly. I may use the MicroLaserPeel as well. It works well for both squint lines and discoloration.

Gold: I would start with topicals. Clinical studies over the years have shown that both OTC and prescription retinoids are beneficial in reducing wrinkles, and using retinoids allows the patient to be involved in her treatment. Ten years ago we'd inject collagen very carefully. Today there's no question that Botox is the treatment of choice for lines around the eye area. I think there's enough clinical evidence in the literature that says combining intense pulsed light and Botox improves the effect of the Botox. The Botox lasts three to four months, and with IPL we do three to six treatments spaced a month apart and prescribe retinoids for home care.

Werschler: I divide fine lines into two categories—dynamic lines of motion or static lines. If they're static I offer chemical peeling around the eyes—again you need to be very gentle in this area—or a hyaluronic acid filler. Undereye wrinkle creams that use a large molecular weight protein to absorb water and swell the epidermis are also helpful. For dynamic lines, I would use a little Botox.

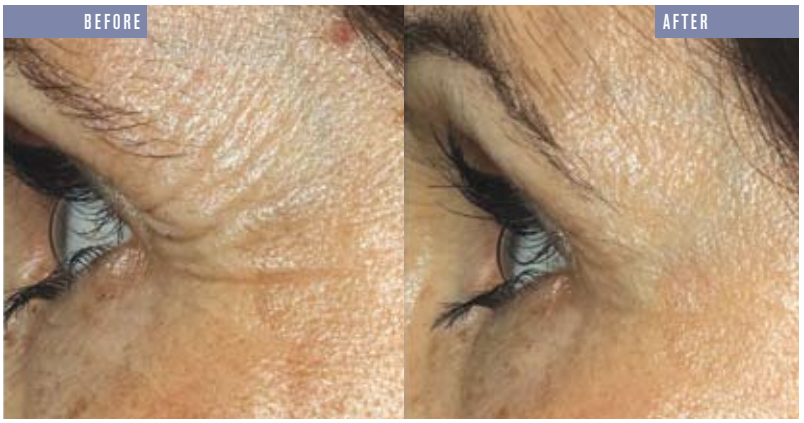
Berger: Generally, fine lines around the eyes are in either the lower lid skin or the crow's feet area. The most effective options for these are Botox to relax the muscle activity in the area, or laser or light resurfacing therapies, including the Fraxel (Reliant Technologies). Your third option would be to surgically remove some of the skin or muscle bulk and tighten the area.

DEEP LINES

Katz: Deep lines don't typically respond to Botox; we usually do laser resurfacing with either the Fraxel, the Affirm (Cynosure) or the Pixel (Alma Lasers). They do require multiple sessions but the patient experiences very little or no downtime.

Gold: We currently have Cosmoderm and Cosmoplast (Allergan) that work well to fill lines around the eyes. When Restylane Fine Lines (Medicis Aesthetics) becomes available, I think it will also be a good option for deep lines and wrinkles in the eye area. These very superficial fillers can also be used to augment Botox treatments, which remain the best option for dynamic lines.

If you have very deep lines, and Botox isn't sufficient or the patient doesn't want Botox, I get into laser resurfacing. We would talk to the patient about erbium peels, fractional resurfacing, pulsed dye laser and CO_2. They all work; it just depends on how many treatments the patient wants and how much downtime she can tolerate.



Courtesy Reliant Technologies

Dr. Z. Rahman used the Fraxel (Reliant Technologies) to smooth the crow's feet for this happy patient.

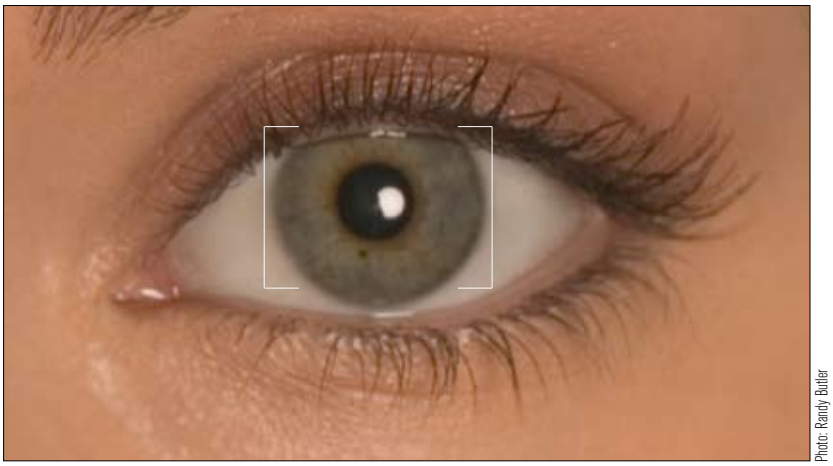


Photo: Randy Butler

The goal with every treatment is to bring the skin around the eyes back to a youthful state.

Werschler: When I think of deeper lines I think of the dynamic lines—lines of motion—such as crow's feet that march around to the front of the eye, which we refer to as preseptal lines. These are what Botox was made for. If some of those lines are deeply etched you'd look at fillers, resurfacing treatments and Retin-A (OrthoNeutrogena). The original studies on Retin-A were for periorbital fine lines and wrinkles, and retinoids can smooth lines. We would almost always offer a combination of treatments—Botox to reduce dynamic contractions, fillers to plump out lines and a take-home retinoid to smooth lines.

Berger: The milder and more dynamic the lines, the more likely you'll see good results with something like Botox. The more static or etched in the lines are, the more likely I would be to look at either a light- or laser-based treatment or surgical options to tighten and reduce the appearance of the lines. Our general flow is usually Botox for early lines, then light-based therapy or surgery as they become deeper and more static. Collagen fillers have a long track record of safety and can be injected superficially but they also have a very powerful weak point, which is short-term results.

UNDEREYE BAGS

Katz: If this is a regular situation—and by that I mean the bags don't worsen toward the end of the day—the best option is to refer the patient to a surgeon for a blepharoplasty. The bags are generally the result of fat pads in the area pushing forward. If the bags worsen in the course of the day, it tends to be the result of a hormonal imbalance or a very high salt diet, in which case you would change the diet to reduce the bags under the eyes.

Gold: As a dermatologist, I look at the eye area and ask, "What do the fat pads feel like? Is the problem genetic? Is this going to require a surgical solution?" If I tell the patient she'll need surgery and she doesn't want to go that route, there are some noninvasive options. The fractionated peeling or skin tightening devices can help. You need to make sure every part of the eye is protected when using a laser, light or radiofrequency device in this area. In the next few years you're going to see a lot of people concentrating on skin tightening equipment for the eye area. That will be the next wave of what we can offer patients.

"If I tell the patient she'll need surgery and she doesn't want to go that route, there are some noninvasive options."

Werschler: Bags under the eye may be genetically predetermined. The fat pads may be larger than you require. In this case, you would go in surgically and remove some of the fat pad, which is great when the patient is young, but as she continues to age she may start looking cadaveric. Today what most of us are doing is putting that volume back. But there are situations where it's absolutely appropriate to surgically remove some of the fat.

More often than not the reasons you're seeing bags are congestion or a separation of the mid-face. The solution is to either lift that area or add some filler.

Berger: The first step is a thorough assessment. We look at the lower eyelid, both the skin and the anatomy. Some people have a very prominent eyeball; others have very deep-set eyes. The position of the eyeball in relation to the eyelids and even to the skeleton underneath is very important in eyelid surgery.

The other thing we look at is the contour and whether fat creates the effect of undereye bags. We also assess the function and positioning of both the upper lid and the lower lid. Based on the analysis and diagnosis, we devise a treatment plan. For some

patients, the primary need is to address the fat under the eye. For others, it's more important to tighten the lower eyelids beause the support of the lower lid is weak.

DROOPING UPPER EYELIDS

Gold: We in dermatology look at these patients and ask what are the nonsurgical options? Botox may be an option if you're an expert injector. But if we have a patient who needs surgery to correct the drooping, then we refer her to an ocular plastic surgeon.

If a patient comes to me and says, "I don't want surgery," we look at resurfacing and skin tightening lasers. We also have radiofrequency and pulsed light skin tightening equipment. There are multiple skin tightening devices including the new Thermage for eyes and the Aluma (Lumenis), which is a bipolar radiofrequency with a vacuum device. Options do exist but you have to be realistic. Surgery is still the treatment of choice.

Werschler: For eyelid laxity, surgical intervention is the gold standard, and we can't forget

Courtesy of Alma Lasers

Use of the Alma Lasers Pixel achieved nice tightening of the upper eyelid in this patient.

that. But there are patients who don't want surgery or can't afford it. For those patients we offer Thermage for eyelids, which is probably better in terms of predictability and the "wow" factor of results than Thermage in other areas of the body. Any LLRO (laser, light, radiofrequency and optical) tightening treatment around the eyes can be helpful.

With the upper lid, you either have increased tissue of the upper eyelid (blepharoptosis) or you have a browtosis where the brow is falling down and causing the eyelids to droop a little bit. You need to determine what's causing the drooping. In men it's often browtosis; in women it's often a combination of the two.

If it's the brow, your choices are referral to a surgeon for a traditional brow lift or some tightening with a laser or radiofrequency system. Thermage, IPL or Elos (Syneron) all tend to lift the brow nicely. Properly injecting Botox can also reposition the brow.

Berger: When a patient comes in for a surgical consult, we look at the brow, the upper eyelid and the lower eyelid. We look at the skin, the fat and the anatomy of the area to determine what makes the patient appear a certain way; what things are structural and what things are functional; what things are working right and what is weak, loose or in need of repair.

We may find that the problem is indeed excess skin that has stretched over time, but the problem may also be that the amount of skin on the upper lid is pretty normal but the brow is too low. Doctors who don't do a lot of brow surgery may not appreciate the fact that a brow lift in a particular patient is necessary, and that can be a formula for poor results. Once the surgeon removes the skin from the eyelid, that individual is trapped because if you lift the brow at that point, the patient can't even close her eyes. My basic approach is to make a good assessment and diagnosis and then treat the components. ⚜

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