



PROTOCOLS TO
MINIMIZE BRUISING
AND SWELLING
FOLLOWING LASER
TREATMENTS AND
INJECTABLES.

HEALING AIDS

BY KATIE O'REILLY

A RECENT AMERICAN SOCIETY for Aesthetic Plastic Surgery (ASAPS) study on injectables showed that bruising occurs in 19% to 24% of all procedures, while other sources report a 68% likelihood that a patient will bruise. Additionally, laser- and light-based procedures can cause redness and edema that linger anywhere from 24 hours to one week following treatment.

In an industry that prides itself on creating both optimal results and an optimal patient experience, finding ways to reduce postprocedure downtime can set your practice apart from the competition and increase patient satisfaction and word of mouth.

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PRETREATMENT PROTOCOLS

Post-injectable bruising is more commonly seen in patients who receive larger volumes of filler delivered in less amounts of time—indicating that both rate of injection and volume injected are significant risk factors. But there are steps you can take to decrease the risk of swelling and bruising before the procedure even begins.

Houtan Chaboki, MD, a facial plastic and reconstructive surgeon at Potomac Plastic Surgery in Washington, D.C., has clients cease taking anti-inflammatory medications known to increase bleeding, such as aspirin and ibuprofen, two weeks prior to treatment. "Tylenol is still safe," he says. "Under the guidance of a cardiologist, I also have them go off blood thinners such as Coumadin or Plavix."

Before any procedure, he also has patients stop taking most supplements, aside from daily multivitamins. "Herbals that can increase bleeding include but are not limited to vitamin E, garlic, ginger, ginkgo biloba, ginseng, kava and St. John's Wort," he says. "Even herbal teas could increase bleeding and thus, bruising." Weight loss medications, smoking and alcohol also affect healing. Dr. Chaboki asks patients to steer clear of alcohol and caffeine the day prior to a procedure, enjoy a light dinner, and refrain from any food or drink—water included—after midnight. He also requests that clients arrive free of makeup, which can camouflage blood vessels at risk of being punctured.

H.L. Greenberg, MD, of Las Vegas Dermatology counsels patients to stop tanning at least two weeks prior to treatment. "This decreases the risk of burns, especially when lasers are involved," he says. "When I do fillers, I also get patients' cold sore history to better pretreat at-risk areas with Valtrex. A lot of times I'll go ahead and use some around the lips, just to be safe."

To further reduce bruising from fillers around the lips, Dr. Greenberg typically performs a ring block: "I inject in a circle around the mouth's oral cavity, thereby numbing the nerves inside the lip," he says.

He advises patients to schedule their procedures a week or two before any special events. "Emphasize that they could be extremely bruised for that wedding or awards banquet," advises Dr. Greenberg. "Be very clear—patients will not look well for at least a week, and if that is a problem for their schedule then they must consider postponing or avoiding the procedure."

TREATMENT DELIVERY STRATEGIES

During the procedure, patients should be positioned properly—in a chair reclined to 30 degrees, their heads resting

firmly against a solid headrest. "Physicians' hands should be braced against the patient, thus preventing unexpected movement," says Dr. Greenberg. "Careful inspection of the injection site is of course crucial, as doctors need to avoid penetrating blood vessels at all costs."

The room should be brightly lit, with a sidelight employed to help highlight blue vessels. Using magnifying devices to discern small vessels within the injection site is also recommended. "I always wear loupes, or magnifying lenses. They help me visualize the vessels much better," says Dr. Greenberg. "Of course, regularly brushing up on facial anatomy helps, too."

While some fillers, due to their particle size, require the use of larger caliber syringes, such instruments are more likely to transect blood vessels and cause bruising. Using a smaller, 30-gauge needle or blunt-tipped cannula can reduce bruising, especially when employing fanning injection techniques, which cause more damage to blood vessels than single puncture threading or multiple puncture techniques.

Garry R. Lee, MD, medical director of Look Younger MD in Henderson, Nevada, uses the Air-Tite anti-bruising MicroCannula for filler injections. "It reduces bruising by 70% to 100%, compared to the traditional sharp-tip needle," he says. "If you're gentle and you use a type of 'wiggle progression' technique, you can redirect the MicroCannula and avoid penetrating any tiny blood vessels; it's the oozy leakage of those vessels that typically causes bruising." Dr. Lee adds that the blunt tip minimizes the risk of vessel cannulation, "markedly reducing both pain and swelling."

PATIENT COMMUNICATION

A key aspect of procedure success involves adequately informing patients, so that when bruising does occur their alarm is tempered. "Make the procedure as transparent as possible," says Dr. Lee. "Communicate the risks of bruising and burning, as well as any contraindications prior to, during and after the procedure is completed."

Also keep in mind that many patients may not remember such information the first time. "Repeat yourself multiple times," says Dr. Chaboki. "Pretreatment anxiety may cause patients to forget the details. I personally call each patient the night prior to a cosmetic procedure to review everything, and I make sure to see everyone the day afterward to go over aftercare too. I post skincare instructions online, within a dedicated page on our website, and I also go over risks and protocols with patients' spouses and children. For a smooth recovery, there should be no surprises."

He cautions all patients about common medications that

could potentially cause increased bleeding and bruising—as mentioned above, these include aspirin, clopidogrel, warfarin, dabigatran, enoxaparin, ticlopidine and dipyridamole. “Especially where cardiovascular conditions are concerned, patients should not discontinue these treatments; but you do need to make sure they’re aware of their increased risk of bruising,” says Dr. Chaboki.

During the consultation, Dr. Greenberg has clients watch videos of the actual procedures they’ll be receiving on his practice’s YouTube channel. He also presents patients with pre- and postprocedure treatment documents that all involved parties must sign. “These list everything I’ll be doing, as well as all potential risks. Because, unless they have something spelled out in hand, patients won’t remember, and they’re more likely to get upset when bruising occurs.”

He also circles or highlights the risk section as he’s discussing it, making sure to emphasize that patients with rosacea or inflamed blood vessels are particularly prone to bruising. “If you tell patients beforehand, it’s informed consent; if you tell them afterward, it’s a complication,” he warns.

ESSENTIAL AFTERCARE

While pretreatment protocols and careful injection technique can reduce swelling and bruising, you can further reduce healing time with proper postprocedure care. Immediately following the injection, apply pressure to the injection site. The doctors we spoke with recommend cold compresses, which encourage vasoconstriction. Some also vouch for topical application of arnica, bromelain, or high-dose vitamin K to reduce the formation of ecchymosis.

“After any filler injection, I ask people to ice the area for 15 minutes,” says Dr. Greenberg. “A bag of peas is about the perfect temperature—you don’t want to use anything too cold, as it could cause frostbite. Make sure patients do cycles of 15 minutes, on and off. This encourages healthy vascular flow.”

Dr. Chaboki advises patients to apply ice packs or frozen vegetable bags to the injection site as well, for several days following a procedure. In addition, he has found success recommending arnica montana tablets. “I also make patients and their families promise to keep the head of the patient’s bed elevated,” he says.

Dr. Greenberg typically sends patients home with post-procedure kits from SkinMedica. To treat problems with HA fillers, he uses hyaluronidase, which breaks down the enzymes within the filler, and nitropaste to increase blood flow to the affected areas. “If you hit a vessel and the area goes white, you can put some topical nitropaste on it, and then inject some hyaluronidase,” he explains.

Another interesting tactic cited by Michael S. Hamman, MD, and Mitchel P. Goldman, MD, in “Minimizing Bruising Following Filler and Other Cosmetic Injectables” (*Jour of Clin and Aesthetic Dermatology*, August 2013) is to ask patients food-related questions during and immediately after the procedure. Not only are food fantasies fodder for distraction, but the mere thought of eating causes blood to flow into the gastric system. The relative cutaneous vasoconstriction minimizes bruising and bleeding in the face. **ME**

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POSTPROCEDURE TOPICALS

Practices can increase patient satisfaction by offering postprocedure topicals developed to reduce bruising and enhance the results of treatment. Following are some of the latest post-care products available for medical aesthetic patients and practices.



1. Senté **Post Procedure Recovery Cream** features 2% heparan sulfate, a biologically active glycoprotein with low molecular weight that speeds recovery and the appearance of results after aesthetic treatments. 760.753.5400, sentelabs.com.

2. LASERING USA's **AnteAGE Serum and Accelerator** was developed for use following laser skin resurfacing and features a combination of cytokines (immunoregulatory proteins including growth factors, interleukins and interferons) derived from cultured cells and known to mediate growth, wound healing and aging. 866.471.0469, laseringusa.com.

3. Environ **après-CIT** is a water-based serum developed to speed healing and enhance the results of noninvasive

cosmetic procedures. Ingredients include Matrixyl Synthe 6, Matrixyl 3000 and Trylagen, a triple peptide blend that hydrates, smoothes and firms skin. 508.539.8900, dermaconcepts.com.

4. Young Specialty Brands **TopiQuel** combines undaria pinnatifida, an extract of brown algae, and beta-carboline-rich quassia amara extract to reduce postprocedure bruising. 800.874.9686, youngpharm.com.

5. Phytoceuticals **SUPERHEAL Olive Gel** utilizes olive leaf extract for its potent anti-inflammatory and antioxidant properties, plus sodium hyaluronate and zinc gluconate to relieve irritation caused by laser treatments and chemical peels. 201.791.2255, phyto-c.com.