



Expanding the Canvas

High patient satisfaction rates for facial procedures are driving the development of cosmetic hand, neck and chest protocols.

By Inga Hansen

Facial treatments geared toward reducing wrinkles and uneven skin tone are the foundation of cosmetic medicine. High satisfaction rates with noninvasive techniques that help patients turn back the hands of time and put their “best faces forward” have spawned growing interest in treatment options for other highly visible areas of the body, namely the hands, neck and décolleté. According to Harold J. Brody, MD, clinical professor of dermatology, Emory University School of Medicine and member of Hailey, Brody, Casey and Wray, MD, PC, Dermatology and Dermatologic Surgery in Atlanta, requests for off-the-face cosmetic treatments are not as rare as one might think. “These procedures are now being performed routinely by dermatologists and plastic surgeons,” he says. This burgeoning trend has sparked a variety of treatment options to address common aesthetic concerns, including sun damage-related pigmentary problems and telangiectasia. Secondary concerns include skin laxity on the neck, wrinkles and volume loss in the hands.

© Timette Reed/Getty Images

Expanding the Canvas

Improving Skin Tone on the Neck and Chest

In the neck and chest regions, one of the primary patient concerns is skin discoloration, including poikiloderma, lentiginos and age spots. Whether used alone or in conjunction with in-office treatments, an effective homecare regimen is key to reducing sun damage-related pigmentation problems. A typical homecare regimen includes the use of sun block during the day and retinoids and lightening agents at night. "The standard treatment for global rejuvenation of the décolleté region has been a combination of Retin A products and hydroquinone. The Retin A builds collagen and elastin while allowing for deeper penetration of the hydroquinone to fade dark spots," says Lisa A. Zdinak,

MD, chief surgeon and medical director of Precision Aesthetics in New York City and Palm Beach, FL. "Obagi makes a décolleté combination that yields good results. I have been leaning away from hydroquinone due to the controversies abroad about dangerous side effects." Dr. Zdinak's preferred product is Lumixyl (Envy Medical, lumixyl.com), which uses a plant-based peptide that prevents the formation of the pigment in the skin by blocking the same pathways as hydroquinone. "I have my patients mix the Lumixyl with Retin A at bedtime and apply it to the décolleté region. They notice an effect after about three weeks," she says.

In-office treatments, such as IPL, lasers—including fractional resurfacing lasers—and chemical peels provide faster results for pigmentation problems when combined with a homecare regimen. "The Candela VBeam Perfecta is good for lentiginos. I use a fractional resurfacing laser or Q-switched alexandrite laser for more extensive pigmentation problems," says Nancy J. Samolitis, MD, The Laser Skin Care Center, Long Beach, California. "For rough texture combined with pigmentation problems, fractional resurfacing lasers are most effective."

Patients generally see significant results with just one laser, light or chemical peel treatment, "but it may require two sessions for maximum improvement," says Dr. Brody. "In cases of tremendous sun damage, I may do three treatments."

Mary P. Lupo, MD, dermatologist and clinical professor of dermatology, Tulane University, notes that, although physicians tend to have their favorite modalities, there are benefits to offering multiple options in your facility. "There are nuances to each technology. I present the options to the patient, listen

to her feedback and we choose what's best for her," she says. "You want to fit the treatment to the patient, not the patient to the treatment."

Choosing Treatment Tools

If the patient wants only one treatment, Dr. Lupo finds that she obtains the best results with the nonablative Fraxel Re:Store dual system. "Occasionally I very lightly perform ablative fractional CO₂ resurfacing with the Lumenis system, but I see better results with the nonablative because you have to be so conservative with the ablative devices in these areas," she says. In addition to discussing patients' lifestyles and desired treatment and recovery times, Dr. Lupo selects her treatment modalities based on facial procedures. "I tend to continue the treatment from the face onto the neck," she says.

Left: Photo courtesy of Mary P. Lupo, MD Right: © iStockphoto.com



▲ Dr. Mary P. Lupo used IPL to reduce the redness on this patient's neck.

Treatment protocols must be "adjusted for accordingly in a downward direction when treating the body."



Expanding the Canvas

“You need to be particularly careful on the jaw and at the base of the neck near the clavicle and the sternum. Heat builds up over the bone.”

Treatment protocols must be “adjusted for accordingly in a downward direction when treating the body. The skin on the body and neck especially has fewer pilosebaceous units making healing in this area longer in duration and less predictable where pigmentation is concerned,” Dr. Zdinak says.

IPL treatments do require multiple sessions—“What I can do in five IPL treatments, I can do with one Fraxel dual system session,” says Dr. Lupo—but they also offer some additional benefits. Unlike chemical peels and fractional resurfacing, “IPL addresses both brown and red discoloration,” says Dr. Lupo. In addition, ancillary staff can perform IPL procedures, notes Dr. Brody.

“Even with IPL and nonablative fractional resurfacing, you need to be particularly careful on the jaw and at the base of the neck near the clavicle and the sternum. Heat builds up over the bone and you can get some damage. When working over these areas, lower the heat energy of whichever device you’re using,” says Dr. Lupo.

“The challenge with IPL on the neck is making it even. You can get zebra striping so you need to watch your handpiece placement,” says Helen M. Torok, MD, medical director, Trillium Creek Dermatology, Medina, Ohio. “If the energy level on the IPL is too high, you will see an immediate burn—the skin darkens and the patient will feel immediate, intense pain. If the energy level is correct, you will see an immediate darkening of the brown spots and the blood vessels will lighten.”

When working with the alexandrite Q-switched laser for pigmentation, “if the lesion bleeds immediately, the energy is too high,” says Dr. Samolitis. “If there’s no change, it’s too low. If you see an ashy appearance to the lesion, the setting is good.”

Chemical peels are “the most cost-effective treatment option” for pigmentation problems, says Dr. Brody. “In-office TCA peels are the most effective. One good peel gets rid of the majority of discoloration, but you must use caution.



The neck and chest are more prone to scarring than the face,” he says.

Dr. Torok performs 35% TCA peels on the chest, “especially for patients who are very tan,” she says. While Dr. Lupo uses a 35% TCA peel to spot treat lentigines following nonablative fractional treatments with the Thulium fiber wavelength for pigmentation. “The 1927nm wavelength is very good for diffuse dyschromia. For lentigines you may need an Nd:YAG, Q-switched YAG or IPL treatment as well,” she says. “You can also use liquid nitrogen or a 35% TCA peel to spot treat lentigines.”

Visible Vessels and Redness. For visible vessels and redness, the two most effective options are IPL and pulsed dye lasers. Dr. Samolitis uses a pulsed dye laser to clear the discoloration of broken vessels and cherry angiomas. “With the PDL, transient



▲ Neck laxity before and six weeks after one Cutera Titan treatment and 15 units of Botox Cosmetic.

Expanding the Canvas

blanching of the vessel or slight redness is good. If you have immediate purpura, the energy is too high," she says. "With multiple sessions, you can get good results without purpura."

Addressing Textural Changes

In addition to discoloration, the appearance of fine lines and wrinkles in the neck and décolleté area combined with lax skin and prominent platysmal bands distress patients anxious to maintain a youthful appearance.

Vertical platysmal bands can be treated with a weak dose of Botox Cosmetic in an off-label procedure, which is "nicely effective if the bands are not too prominent," says Dr. Zdinak. "Otherwise, they require surgical intervention."

Before



After



▲ Dr. Neil Sadick performed foam sclerotherapy to reduce this patient's visible, bulging veins.

Botulinum toxin injected at the bands is a popular choice for horizontal neck lines, but there is a risk of side effects. "Toxin drift can lead to temporary difficulties [in] swallowing," says Dr. Zdinak. "These lines can also be filled with hyaluronic acid fillers, however, sometimes filling these lines can make them appear more like scars than depressions." The superficial placement of fillers required in this area increases the risk that the filler will show through the skin. Injecting the fillers using a smaller gauge needle than normally used can lessen these effects, according to Dr. Zdinak. "This effectively 'shears' the product and changes the flow characteristics," she says. "I don't necessarily like the way that filling the neck lines looks, but my patients do."

You can provide correction to the deeper wrinkles in the cleavage area with a combination of dermal fillers and botulinum toxin injections. "The end result of Botox injections depends on the skill of the practitioner," says Dr. Zdinak. "It doesn't work very well in women with deep crease lines due to heavy breast tissue. Dermal fillers such as Restylane or Juvéderm can be used to fill in these lines with modest improvement."

If the primary concern is crepey skin between the cleavage, Drs. Zdinak and Lupo focus on homecare products. "I recommend sun block, retinoids, growth factors and a Revision product called Nectifirm that is very good," says Dr. Lupo. Dr. Zdinak cites Retin-A and the Obagi system for the neck and décolleté as her "go to" home use products for this concern.

Laxity in the neck is one of the most challenging indications to treat noninvasively. Minimally invasive procedures—such as submental laser lipolysis—are effective for removing fatty deposits and tightening the skin in the jaw line and area beneath the chin, "but they have a surgical downtime of up to two weeks," says Dr. Zdinak.



Botulinum toxin injected at the bands is a popular choice for horizontal neck lines, but there is a risk of side effects.

She finds that patients who are within their normal weight range benefit from radiofrequency skin tightening. Her top choices are Thermage CPT (Solta Medical, thermage.com) and a new radiofrequency device called the Exilis (BTL Industries, exilis.com). "Both are exceptional at tightening the crepey skin that so often plagues women," she says.

Infrared tightening devices offer similar benefits, according to Dr. Lupo, who treats skin laxity in her patients with the infrared energy-based Cutera Titan (Cutera, cutera.com).

Hand Rejuvenation

Rough texture and pigment problems on the hands are addressed with the same modalities as those used on the neck and chest region—and require the same precautions. One exception, says Dr. Brody, is hands marked by spots that are "scaly, red, pigmented and sometimes crusty. The patient will describe her hands as gross or ugly, and they are a

Expanding the Canvas

mass of precancerous lesions,” he says. “These patients need an abrasive treatment or topical chemotherapy—this is a noncosmetic and reimbursable treatment.” After treating the precancerous lesions, the patient can undergo cosmetic therapies to remove lentigines and broken vessels, says Dr. Brody.

Two concerns that are unique to aging hands are volume loss and bulging vessels on the back of the hand. Physicians are addressing these concerns in two ways—sclerotherapy and/or fillers. “Fat is still superlative for hands. It flows very nicely, it can be smoothed out, and it lasts,” says Dr. Brody. “Fat can also be frozen so the patient can come back in and have more added, and the only cost is the injection fee.”

Hyaluronic acid fillers are short-lived

“Fat is still superlative for hands. It flows very nicely, it can be smoothed out, and it lasts.”

and can be cost prohibitive based on the number of syringes needed to fully correct the volume loss. In addition, “HA fillers can leave a blue tinge to the skin,” says Dr. Torok. Radiesse (BioForm Medical, radiesse.com) is the most popular volumizer for hands because it is opaque. Neil Sadick, MD, clinical professor of dermatology, Weill Cornell Medical College, and founder of Sadick Dermatology in New York, and Dr. Zdinak cite diluted Sculptra Aesthetic (Dermik Medical, sculptraaesthetic.com) as an alternative to fat and Radiesse for the hands. “The Sculptra mixture is placed in the mid-dermal layer of the skin where the fluid is resorbed, leaving behind the poly-L-lactic acid granules to elicit the body’s formation of collagen,” says Dr. Zdinak. “At least two sessions, six weeks apart, are required for gratifying results.”

The use of both Radiesse and Sculptra for hand volumizing is considered an off-label usage. Side effects include bruising and swelling “with hand stiffness that can last for up to one week,” says Dr. Zdinak. “The swelling can be alleviated by frequent applications of ice compresses—20 minutes on, 20 minutes off—for the first 48 hours, and elevation of the extremity. Patients are also cautioned not to wear rings for the first 48 hours in the event that swelling can cause constriction.” Dr. Zdinak cautions physicians to make sure the skin is always tented by the needle prior to injecting and that you can see the needle tip at all times. “Otherwise, you are too deep and can risk causing a compartment syndrome,” she says.

Sclerotherapy for the hands has waned with advances in filling, but remains an option for visible, bulging veins. “You usually can’t see the

veins after filling so there’s no need for sclerotherapy, although you can do both if the veins are still visible,” says Dr. Lupo. She prefers detergent sclerosants, but notes that the more muscular veins—particularly the main vein on the back of the hand—can be very difficult to treat. Dr. Sadick employs foam sclerotherapy or endovenous laser therapy to address protuberant hand veins.

“When treating the hands, consider the patient’s occupation and capacity for downtime,” says Dr. Zdinak. “If an individual uses a computer daily or her work requires fine motor skills, simply forewarn her that these activities may be difficult for the first week after injection treatments and, perhaps, perform the procedure on a Friday or over a long weekend so she has time to recuperate without losing productivity.”

When determining a treatment protocol for off-the-face cosmetic concerns, two factors must be taken into account to achieve the best possible outcome: patient lifestyle and the physician’s comfort level with each procedure. “In the neck area especially, there is so much vital and intricate anatomy. One must be well-versed in the anatomy of this area and work directly under the tutelage of an experienced physician before attempting to perform advanced rejuvenation techniques on the neck,” says Dr. Zdinak. “This is particularly the case when using Botox Cosmetic because the dosages differ in various areas of the head and neck, as well as proper placement can mean the difference between a good versus an unfortunate outcome.”



Inga Hansen is the executive editor of MedEsthetics.