



light SHOW

Laser and light treatments aren't just for zapping wrinkles—now, they're targeting beauty calamities from head to toe BY MICHELLE VILLETT

JUST LIKE THE IPHONE HAS an app for almost every dilemma, so too, increasingly, the answer to many beauty concerns is: "There's a laser for that." Along with light therapies, lasers are revolutionizing how we deal with problems as diverse as blemishes and lumpy thighs—making total-body rejuvenation possible. Sure, it all sounds a bit *Deep Space Nine*, but in recent years the technology behind these devices has significantly advanced, says Dr. Jaggi Rao, an associate clinical professor of dermatology at the University of Alberta. "They're now safer and more user-friendly, and because of competition between manufacturers looking for new applications and niches, we're seeing greater scope in how they can be used."

Lasers, light therapies—what's the difference? Lasers are ideal for resurfacing the skin or removing hair, since they release targeted beams that seek and destroy specific components such as unwanted pigment, broken blood vessels or hair. Meanwhile, "light devices emit several wavelengths of >

light—so they're like having multiple lasers in one—but each wavelength is not as strong as a true laser," says Dr. Benjamin Barankin, dermatologist and medical director of the Toronto Dermatology Centre, who adds: "They're great for aging skin, since they can target multiple issues [such as wrinkles and sunspots, at once]." We asked the experts to shed some light on the latest advancements in high-tech makeovers.

1. LASERS CAN NOW BE USED ON A FULL RANGE OF SKIN TONES. It used to be that anyone with a medium, olive or brown complexion was turned away from laser procedures, since the pigment in their skin increased the risk of blistering, scarring and permanent light or dark patches. Now, people of all ethnicities can achieve results not just

with laser hair removal but also laser rejuvenation treatments—provided the right machine is in the hands of the right practitioner. "Lasers with longer wavelengths of light can safely penetrate deep into the skin but spare the top layer [where the pigment is]," says Dr. Davindra Singh, founder and lead dermatologist at AvantDerm, a new dermatology clinic in Toronto specializing in ethnic skin. "We also use less energy and lengthen the pulse duration—how slowly that energy is delivered—to make it safe for darker skin types. Plus, the newer lasers have better cooling systems to prevent burning." One of Dr. Singh's most popular procedures is "pigment blending" using Laser Genesis (see "Test Drive" sidebar, page 114), which evens out the blotchy patches that can afflict all skin tones after bouts of acne or melasma (discolouration associated with pregnancy or the use

of oral contraceptives). No matter which laser treatment you go for, make sure it's performed under the supervision of a physician with experience treating your particular skin colour and concern (see "Can Laser Treatments Be Dangerous?" sidebar). "If you aren't comfortable, they can do a test spot in an out-of-sight area and wait one or two days to observe if you have a reaction," adds Dr. Singh.

2. NEW LIGHT THERAPIES ARE REDUCING THE NEED FOR ACNE-FIGHTING DRUGS.

Dermatologists have long used bacteria-zapping blue light and inflammation-taming red light as a remedy for acne—but a new combination therapy partners blue light with suction to increase its effectiveness. Isolaz is a 15-minute doctor's office treatment that painlessly pulls sebum and dead skin cells from pores with a vacuum-like device; at the same time, blue broadband light penetrates oil glands to destroy bacteria and calm inflammation. Suitable for all skin tones, most patients need four sessions to clear and prevent future breakouts while reducing pore size and evening skin tone. There is no downtime, but regular follow-up visits (every 6 to 12 months depending on your skin) are usually needed to maintain results. "It works for mild inflammatory acne and is a good option for people who can't or don't want to take oral or topical medications," says Dr. Rao. "It may also help reduce the necessary >



CAN LASER TREATMENTS BE DANGEROUS?

Q Laser therapies may sound like an easy, non-surgical solution to many beauty woes, but in the wrong hands, they can be extremely dangerous, says Dr. Benjamin Barankin, dermatologist and medical director of the Toronto Dermatology Centre. Although Health Canada monitors their sale and labelling, there are no regulations governing actual use—meaning untrained individuals can legally offer laser services. In one extreme case, an Edmonton laser practitioner made headlines this summer when the College of Physicians & Surgeons of Alberta discovered he was illegally calling himself a doctor and left at least one client severely burned. Before going through with a treatment, consult with the supervising dermatologist, cosmetic surgeon or family physician—avoid places staffed only by aestheticians—and ask how many people he or she has treated with your particular skin type and issue. If you've snagged a hot deal through a coupon site, proceed with caution. "If it's from a medical clinic that has a doctor with skin expertise on site, you may be fine," says Dr. Barankin. "But some practitioners use incorrect or out-of-date devices"—or the correct device in the wrong manner. People with darker skin tones, he says, are particularly vulnerable.

dosage of drugs like Accutane, therefore lessening their side effects.” But it won’t have an effect on whiteheads and blackheads, nor will it address hormonal causes of acne. Expect to pay about \$200 to \$300 per session.

3. LASERS ARE NOW CHALLENGING STUBBORN CELLULITE.

According to a study in the *International Journal of Cosmetic Science*, 85 percent of women over age 20 have cellulite—and most of us have become resigned to the fact that it’s there to stay. But this fall, Health Canada approved a procedure called Cellulaze, which targets fat pockets with a laser under—not on top of—the skin. “Instead of pushing the laser’s heat through the skin, it targets the cellulite exactly where the fat is located, which is far more effective,” says Dr. Stephen Mulholland of SpaMedica in Toronto, who is the first cosmetic surgeon in Canada to offer Cellulaze. Performed under local anaesthetic, the treatment involves inserting a tiny laser fibre about the width of a needle under the skin, where it melts fat, smooths dimples and stimulates collagen production. Despite some bruising, downtime is minimal—you can go back to work the next day and back to the gym at full capacity in one month—but patients need to wear a compression garment for one week post-treatment to force the skin to

flatten out and minimize the risk of fluid buildup. A single 15- to 60-minute session can diminish dimples on the thighs, buttocks, upper stomach or arms for at least one year, but since it’s pricey—about \$3,000 to \$5,000—Dr. Mulholland recommends having a non-invasive cellulite treatment such as VelaShape (which uses radio frequency and light energy to smooth the skin on the surface and costs about \$250 per session) every three months “to protect your investment.”

4. LASERS ARE GIVING NEW HOPE TO UNSIGHTLY NAILS.

If a stubborn fungal infection is forcing you to hide your pedi, a new laser remedy might knock your socks off—literally. It’s estimated that as many as 50 percent of the population will contract onychomycosis (a condition where toenails become discoloured, thickened and separated from the nail bed) at some point in their lives, but treatment was previously limited to prescription topical and oral medications with limited success rates and sometimes side effects. In July, the GenesisPlus laser received approval by Health Canada (see “Test Drive” sidebar). “We don’t know its exact mechanism—it either slows the growth of the fungus or builds up the body’s ability to fight it—but we know this laser is very safe and very effective in most cases,” says Dr. Rao, who led the clinical trials. The 15-minute

treatment is painless and requires no downtime, but you’ll need to be diligent about preventing reinfection, he adds. For at-home maintenance, an ultraviolet sanitizer called SteriShoe, \$130, is designed to fit snugly into your shoes after each wear to help kill bacteria and prevent reinfection.

5. HAND-HELD LIGHT DEVICES ARE ZAPPING WRINKLES AND ACNE RIGHT IN YOUR HOME.

If you’re on a budget, the boon in affordable at-home anti-acne and anti-aging devices could be good news. Unlike professional treatments, home-based light gadgets use low-level LED light that is safe for all skin types. As with the in-office Isolaz, Dr. Rao says blue-light systems such as Tända Clear+, \$250, which is said to reduce acne-causing bacteria by 86 percent after a six-minute treatment, or Tria Skin Perfecting Blue Light, \$195, can be useful for inflammatory acne. But the jury’s out on whether red-light therapies that promise anti-aging benefits, such as LightStim for Wrinkles, \$299, and Silk’n FaceFX, \$350, are worth their wattage. Both claim to stimulate skin cells (and, in LightStim’s case, increase collagen and elastin production), but Dr. Barankin says the effects are modest. “Some people will see an improvement, but you definitely won’t get the same results as you will with professional treatments,” he says. □

TEST DRIVE WE PUT THREE LASER THERAPIES TO THE TEST

LASER GENESIS: Designed to target wrinkles, large pores, redness and uneven texture and tone, this does-all laser works by gently heating the dermis to stimulate collagen. For our tester, the session was targeted to fade dark spots, the remnants of breakouts past. She found the 20-minute session to be completely pain-free, noting, “Spa facial extractions feel way worse.” The treatment didn’t entail any downtime, and she noticed only the subtlest pinkness to her complexion afterwards. But don’t expect immediate results: A single visit reaped

no noticeable improvement. Most derms recommend four to six sessions for maximum effect, depending on your specific concern. Cost: Price varies per treatment. For locations, visit cutera.com
LASER GUM CONTOURING: Used to remove excess tissue in order to expose more of the crown, laser gum contouring has replaced cutting and stitching. Our tester squirmed at the thought of a laser cutting into her gums, but the needle that froze the area was the only part of the treatment that stung. After that, the 10-minute

procedure was completely painless and helped to reshape her previously gummy smile. For about a week post-treatment, the area was tender and our tester couldn’t floss, but the dramatic smile-transforming results were noticeable immediately. Cost: \$500–\$1,500. To find a cosmetic dentist in your area, visit aacd.com
LASER ONYCHOMYCOSIS TREATMENT: A certified laser technician drilled away any thickening of our tester’s problem nail before the GenesisPlus laser was directed at all

10 toenails to kill hidden fungus well below the nail bed. With only one quick and painless zapping session (about 15 minutes) required, our tester was left wondering whether it was all just a little too good to be true. The medical pedicure immediately reduced discoloration and a rough texture, and five months later the results remain. But the promise of a perfectly straight, pink and unclouded nail may take several months, since nail regrowth is slow. Cost: \$800–\$1,200. For locations, visit cutera.com