

BLOW UP

Once the secret behind sculpted cheekbones and crease-free eyes, filler is now injecting youth into the aging body. Catherine Piercy investigates. Photographed by Nick Knight.

If a definitive picture of twenty-first-century aesthetic medicine is beginning to emerge, it's one in which the boundaries between science fiction and reality are slowly giving way. Take, for instance, Sydney Coleman, M.D.'s, Tribeca practice. Inside his sleek, state-of-the-art facility, the Manhattan plastic surgeon holds the tools to erase, retouch, and even rescale your most stubborn problem areas. It's like stepping into fantasy Photoshop—and the possibilities for redesigning your body are endless.

Your options include:

- the C cup you've never quite been able to fill out (or that has fallen with age);
- the rounder, fuller backside of your 20s;
- the ability to retouch cellulite dimples and sunken scars;
- all of the above.

What's novel here is that his weapon of choice isn't a scalpel, a laser, or a silicone implant. It's a syringe.

Perhaps it was only a matter of time before the revolutionizing power of injectable fillers—from human fat to hyaluronic acid-based synthetics like Restylane and Juvéderm—made its way below the neck. After all, they've been lifting cheekbones, filling in under-eye hollows, and replacing lost volume in the face for more than a decade now. Yet while their body-sculpting applications are undeniably exciting, they're not without controversy—for starters, with research remaining in its relatively early stages, surgeons still don't know their possible long-term side effects. One thing, however, is certain: As experts around the world scramble to harness its youth-restorative potential, filler is heading south.

SMOOTHING OVER MINOR IMPERFECTIONS

The evolution of using small-scale dermal fillers on the body may owe a singular debt to the hand, where the appearance of protruding veins and tendons has betrayed a perfectly good facelift on more than one occasion. "It was the next obvious step after the face," says Fredric Brandt, M.D., a cosmetic dermatologist with practices in New York City and Coral Gables, Florida, who began padding the area with dermal fillers like Perlane nearly seven years ago.

These days, dermatologists like Manhattan's Howard Sobel, M.D., are using carefully controlled amounts of Radiesse (a filler made from calcium hydroxylapatite, a naturally occurring substance found in the bones and teeth) to plump the occasional dimple from cellulite. Success, however, depends upon choosing the right physician; an overzealous dosage "can create more bumps than you had in the first place," cautions Sobel.

In the case of sunken scarring—the tiny hollow where a precancerous lesion was cut away, the deflated souvenir of a cortisone injection, the shallow depression of an acne scar—a few injections of Restylane or Juvéderm can restore volume for up to eight months, says Brandt.

Its corrective power may be marvelously efficient, but even in proper hands, says Mary Lupo, M.D., a clinical professor of dermatology at Tulane School of Medicine, "you can have complications with any filler"—including a hardened accumulation of material known as a "nodule," which may form beneath the skin's surface at the injection site. In some instances, it can be treated with massage or, in the case of hyaluronic acid-based fillers, dissolved with an injection of hyaluronidase; in others, it may break down naturally over the course of several months to several years. *(continued on page 337)*



HOPE FLOATS

Bodysuit by
LucyandBart, a
collaboration between
Lucy McRae and
Bart Hess. Model:
Caroline Trentini.
Hair: Sam McKnight
for Premier London;
makeup, Val Garland
at Streeters London.
Details, see In This Issue.
Fashion Editor:
Phyllis Posnick.

Prince Harry only as a face on the cover of *Voici*, but it is still debated among Princess Margaret loyalists across the Channel. The princess “could have married me only if she had been prepared to give up everything—her position, her prestige, her privy purse,” Townsend wrote in his 1978 autobiography, *Time and Chance*. “I simply hadn’t the weight, I knew it, to counterbalance all she would have lost.” While he went on to enjoy what by all accounts was a rich and satisfying family life, Margaret’s marriage to Lord Snowdon collapsed. “Disobedience is my joy,” she once told Cocteau; sympathizers only wish she’d applied that credo earlier, to Townsend. “In many ways,” observed *The New York Times* in the princess’s obituary, “the group captain might have made an ideal husband.” If you’re Isabelle, that can’t be easy to read. Still, she says, “I have no regrets about living at the Mill. I think it was fate, that in some strange way my father sent us here.” □

BLOW UP

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FILLING OUT YOUTHFUL CONTOURS

“Whether it’s the face or the body, we lose volume as we age,” says Patricia Wexler, M.D., a Manhattan dermatologist who regularly uses filler below the neck. “The fat repositions; everything drops.” A heart-shaped face becomes a square, and, if logic follows, an hourglass figure becomes a rectangle.

Liposuction alone may sculpt away stubborn fat deposits, but the ultimate youth equation, as it pertains to the body, doesn’t always equal skinnier. “A thinner body is not necessarily a younger-looking body,” says Steven Teitelbaum, M.D., assistant clinical professor of plastic surgery at the David Geffen School of Medicine at UCLA. “If you look at a 20-year-old woman, her abdomen swells out and up slightly. There’s a certain roundness there.” Volume-filling injectables offer new tools for reconquering those lost contours.

“It’s about shadows and concavities: architecture versus a paint job,” says Lupo, who uses a small amount of diluted Sculptra or hyaluronic acid to smooth the thin expanse of skin between the breasts, which may become hollow and crepey with age.

CREATING CURVES WITH FAT GRAFTING

For bigger jobs, fat grafting by injection—reinjecting one’s own fat into areas that have steadily deflated with time—is emerging as an exciting recontouring tool.

Once something of a fringe procedure, fat grafting was pioneered by Coleman in the mid-eighties, when the emergence of liposuction meant that large volumes of fat were suddenly available. These days, surgeons travel from around the world to learn his trademark LipoStructure technique. And while pharmaceutical giants are racing to develop synthetic counterparts for big-picture recontouring—like Macrolane, the hyaluronic acid–based filler that has received mixed reviews in Europe, where it’s approved for use—plastic surgeons agree that the unique advantages of fat, which is easily recognized by the body and, once grafted, may last anywhere from several years to a lifetime, make it a particularly appealing body-sculpting medium.

In a nutshell, here’s how it works: Fat is suctioned from the abdomen, love handles, or back—“anywhere there’s excess,” says Coleman—using low-pressure liposuction, and is transferred to another area of the body through a series of precise injections with a syringe-like instrument. There, the tiny blood vessels within the fat will connect to the tissue around it and take up residence in their new environment. Once it settles into place, you may see more than an increase in volume. “The quality of the skin—its color, its texture—improves,” says Coleman, who also notes a softening in the appearance of stretch marks and cellulite. That’s because fat is loaded with adult stem cells—as many as one million per cubic centimeter, by recent estimates—making it “a dynamic, living form of repair and rejuvenation.”

Ironically, fat grafting’s greatest strength may also be its weakness, with those uniquely organic properties yielding unpredictable results. While the majority of the injected fat—about 70 percent—will “take” to its new environment, about 30 percent will be reabsorbed into the body and naturally eliminated, meaning multiple injections may be needed over the course of a year. As Phil Haeck, M.D., a Seattle plastic surgeon and the current president-elect of the American Society of Plastic Surgeons, puts it, “The big question is ‘How much of this survives over time?’ You may be a C cup after grafting, but what if, a year later, you’re not quite filling out that cup anymore?”

The answer, experts say, may lie in surgeon-to-surgeon technique. “Fat grafting remains one of these weird areas in plastic surgery where you’ve got a group of well-known, well-respected doctors that show amazing results, and you’ve got another group of well-known, well-respected doctors that

doesn’t,” says Teitelbaum, who points to a lack of accepted guidelines surrounding the best way to extract, treat, and reinject the fat. In terms of arriving at one standardized, state-of-the-art method with guaranteed results, adds Haeck, “we’re just not there yet.”

In efforts to improve the procedure’s success rate, medical experts are focusing on what G. Patrick Maxwell, M.D., assistant clinical professor of plastic surgery at Vanderbilt University School of Medicine in Nashville, calls “supercharged fat”—fat loaded with extra regenerative stem cells. The logic goes something like this: “If you’re trying to plant grass in a yard of dirt and you throw some seeds out there, maybe they’ll take. But if you fertilize the soil, maybe they’ll take better.” Stem cell–enriched fat, continues Maxwell, “is like supercharged fertilizer.” With implications that could extend far beyond cosmetic surgery (and into the realms of heart, joint, and spinal health), leading experts around the world are scrambling to develop techniques for extracting and maximizing their numbers in harvested fat before reinjection.

Even in its present incarnation, doctors agree that fat grafting offers some truly uncommon advantages: Surgeons like Teitelbaum and Trevor Born, M.D., clinical lecturer of plastic surgery at the University of Toronto, regularly use it to address common liposuction deformities. A corrective dose of fat can restore feminine angles and lost definition to overtreated arms, abdomens, or thighs.

Fat grafting may also offer hope for flattened backsides. “With age, the buttocks lose muscle; they deflate; the fold beneath them deepens,” says Born, adding that fat grafting to the posterior “can add back some significant lift.” For an extra boost, a few additional c.e.s in the crease where your bottom meets your thigh “pushes everything out and up.”

Those same directionals—outward, upward—also characterize the youthful breast, which loses its buoyancy as a result of weight loss, pregnancy, and simple gravity. In fact, fat grafting isn’t new to the area, where it has been used successfully for over fifteen years to thicken damaged tissue and soften the appearance of reconstructive implants in post-mastectomy breast cancer survivors. When it comes to cosmetic augmentation, most experts agree that fat injections, which can provide an increase of about a single cup size, will never replace implants in the quest for bigger—but they may provide a revolutionary tool in the quest for better.

“Suddenly we have the ability to change the parts of the (continued on page 338)

(continued from page 337) breast,” says Coleman. That might mean anything from creating subtle cleavage where there is none to balancing out a caved-in teardrop with a series of injections to its upper perimeters. Maxwell regularly combines injections with traditional implants as a way to correct natural asymmetries—think of an A cup on the right, a C cup on the left—or in combination with a lift. They’ve also proved helpful, according to Haeck, in smoothing out the wrinkles that may occur around a poorly placed implant.

While fat injections are promising, the number of surgeons relying solely on them for breast augmentation is still exceedingly small. The main concern, explains Haeck, lies in

calcifications—hard, nonthreatening nodules of scar tissue that occasionally form in the breast after injection, which may interfere with mammogram screenings. “Could this cause erroneous readings and unnecessary alarm?” he asks. “We need to have a better understanding of what fat grafting might look like in a mammogram—two, five, seven years down the road.” For now, most doctors agree that women with a family history of breast cancer should abstain from cosmetic fat grafting to keep tumor detection as straightforward as possible.

Even for women without risk factors, there are potential drawbacks to fat grafting, says Teitelbaum, who chooses not to perform big-volume procedures

(on breasts or elsewhere) at his Santa Monica practice. “There’s a huge difference between performing a breast augmentation by fat and filling in [a small] divet or bony sternum,” he says. “The more you’re injecting, the more likely you are to create small pools, rather than distinct rivulets, of fat in an area.” Once cut off from healthy tissue and a fresh blood supply, “the fat can die; the risk of infection can go up.”

No doubt, questions still remain. But as doctors embark on new research and gain insights into fat grafting’s myriad applications, they continue to push the limits of the latest body-sculpting technology—not to mention our own DNA. “This,” says Maxwell emphatically, “is truly exciting science.” □