

#### AS MORE OF US CHOOSE

#### THE NEEDLE

OVER THE SCALPEL,

#### INJECTABLE "FILLERS"

ARE RESHAPING

FACES AS WELL AS IDEAS ABOUT

BEAUTY AT EVERY AGE.

# SPEAKING OLUME OLUME

BY JANET CARLSON

the field of "having a little work done." Whether you've always said that no cosmetic physician would ever touch instrument to your face, or you think nothing will help you at this point short of a face-lift, or you're convinced that the occasional Botox injection will suffice until the scalpel looms, you might soon surprise yourself. You might even find yourself asking: what took me so long?

Facial "fillers" are at the center of a quiet revolution in aesthetic dermatology. Used to perform what's sometimes called a liquid face-lift or a face-lift in a syringe, they trace their roots to the 1980s, when collagen and silicone became popular for filling lips. Over the last five to seven years, much has happened in the field of "injectables"—viscous materials injected into the face by a dermatologist or a plastic surgeon via hypodermic needle to produce a rejuvenating effect. More than anything, fillers have become big business. Ten million injections to date of one filler called Restylane, at \$550 a prick, add up to \$5.5 billion worth of refusing to age gracefully. That's the size of a decent bailout contribution for Greece. And that's just one of the dozen or so products on the market (see "What's in the Syringe?," page 87).

A filler session will make you look 7.3 years younger on average, according to a study of ten female patients aged

# "INJECTABLES ARE LIKE DECORATING. ARE LIKE DECORATING. YOU START WITH A LITTLE BOTOX, THEN YOU NOTICE YOUR CHEEKS ARE

THEN YOU NOTICE YOUR CHEEKS ARE SAGGING, SO YOU FILL THERE.
THEN THE JOWLS ARE HANGING. YOU END UP DOING THE WHOLE LIVING ROOM."

-TRACEY JACKSON, PATIENT, NEW YORK

forty-two to fifty-nine that was published this March in *Dermatologic Surgery*. Some doctors promise even more. "They can immediately shave about ten to fifteen years off your face, without surgical intervention and without altering the natural appearance of your face," says dermatologist Fredric Brandt, of New York and Miami. Until recently, you'd have a few lines or folds filled and maybe a concavity here, an acne scar there. "Now chin implants can be done with filler," says Dr. Brandt. "We can straighten a crooked nose, even fix a poor nose job."

More often, though, doctors use fillers today to banish the common signs of aging around the eyes, cheeks and mouth. That's what Tanya Tohill-Farber, forty-one, a medical marketer in Manhattan, aimed to do after having her first child four years ago. "My sister said, 'You need to do something about your face. You look tired all the time." Although she probably was tired all the time, Tohill-Farber booked a consultation with New York dermatologist Patricia Wexler. "I've been going to her ever since, about every six to eight months," she says. "I'm in and out in twenty minutes. That first session is a bigger deal, and it took longer, maybe an hour." Using filler and some Dysport (a new Botox competitor), Dr. Wexler touches up sagging cheeks, smile lines and forehead lines. "There's no pain, just a little pinch, and no redness or swelling," Tohill-Farber says.

While many fear the idea of injections, especially in the face, patients generally report feeling discomfort rather than

pain. As David Bank, a Mount Kisco, New York, dermatologist, describes it: "Fillers are definitely not fun. It's the thick, honeylike material going in under the skin that can cause an uncomfortable sensation." For Tohill-Farber, though, it's worthwhile. "It's like I've had a mini face-lift. Even my dark circles have disappeared."

Too good to be true? For doubters, Dr. Wexler, who's been in practice for twenty-four years, makes a straightforward case: "Fillers are part of our everyday vocabulary now. There's no shame. Maintenance is good. The competition for jobs out there is fierce, and we live and work well past our fifties. We have to keep competitive to stay in the game."

Still, how do you decide if injectables are for you? Doctors and manufacturers emphasize the advantages—but what do *you* need to know to make the best decision for yourself? If you proceed, how should you choose a doctor? What might you want done, and at what age? What should you be cautious about? And once you start, how do you know when enough

is enough? (Hint: when you're looking about 7.3 years younger.) To find out, *T&C* surveyed leading doctors from coast to coast as well as patients who've used fillers. (Full disclosure: this writer has periodically had treatments, with good results and only two downsides: a minor bruise and some little nodules resulting from Radiesse.) The results? We can confidently report that if nearly any aspect of your maturing face bothers you enough, you can with relatively little risk feel safe in giving fillers, as they say, a shot. Most doctors have completed the arc of their learning curve, and most of the new fillers are impermanent-good news if you don't like the effect. Which may reassure you that all you have to lose are your nasolabial folds.



#### THE BIG FILL

What most doctors talk about these days more than anything else is volume. The last two or three years have seen a shift away from filling a line here (take a look now at those nasolabial folds, which run from your nostrils to the outer edges of your mouth) or a wrinkle there (peek at your crow's-feet) toward restoring volume, much as one might refill a leaking balloon with air. "It's no longer about filling two lines, wham, bam and you're done," says Dr. Wexler. "It's a more global filling of the face according to each patient's need. You build the cheek back up,

#### WHEN FILLERS AREN'T THE ANSWER

The rule of thumb as to when it's time for a face-lift is this: if there's so much "redundant skin" or skin laxity on the neck that fillers, Botox and even regular laser treatments aren't helping anymore, it's time for the scalpel. Dr. Grossman says, "If you'd have to fill someone so much that they'd look odd, it's time." Dr. Wexler points out that it's frequently after a face-lift that you really need the volume restored. According to Dr. Rosenberg, "It's often at fifty-two or fifty-four, with the loss of hormones at menopause, that a woman will develop loose skin to a degree that requires the lift." But Dr. Brandt says, "Some people with the right bone structure and not a lot of fat in the neck can get away with never doing a face-lift." J.C

and this lifts the nasolabial fold. Fill the hollow in front of the ear, and it will lift the turned-down corner of the mouth. Fill the angle of the jaw under the ear, and it smooths the jawline."

Karyn Grossman, a dermatologist in Santa Monica, California, who has a second office in New York, has been using a similar technique to lift—and to prevent an overblown midface and "trout mouth": "For the past several years I've been filling the periphery of the face. Filling the temples can help bring the brow area back to where it used to be, and it can lift your upper lids, too."

This new approach to filling the face started evolving in 2003 with a run of new products approved by the FDA and released by large pharmaceutical companies like Allergan and Medicis. Chief among them: Restylane, the brand name for a synthesized version of hyaluronic acid, a substance our bodies produce to keep our tissues plump and lubricated. (Originally derived from rooster combs. hyaluronics are now cultivated via a bacterial process in a lab.) Soon came Juvéderm and other hyaluronics; then new and improved forms of collagen; a sturdier filler called Radiesse (made of microscopic calcium particles derived from bone); and Sculptra, a polymer that provokes the

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AND IT WILL LIFT THE TURNED-DOWN CORNER OF THE MOUTH."

-PATRICIA WEXLER, DERMATOLOGIST, NEW YORK

#### WHAT'S IN THE SYRINGE?

It's the doctor who'll select the filler that's right for you, but it's wise for you to know some basics about the most widely used products. For all fillers, it's normal to experience some swelling, a little bruising, mild soreness for a few days in some areas like the jaw, perhaps some temporary asymmetry and small nodules that you can feel but not see. More serious reactions do occur, however rarely. When patient Tracey Jackson got Lyme disease a few years ago, it triggered an immune reaction to her Sculptra, requiring steroid injections. Also serious: when a filler presses against a blood vessel and causes an occlusion, for which you need to see your doctor. With hyaluronic acids, this is easily treated by an enzyme that "melts" the filler. Prices listed below represent the national average cost.

#### **HYALURONIC ACIDS**

- × RESTYLANE: One of the first hyaluronic-acid fillers. On the market: 2004. Lasting power: Up to eight months. Best for: Undereye area, nasolabial folds, medium-depth wrinkles. Pros: The medium-sized particles make it a versatile filler; the more you're treated, the longer Restylane lasts. Cons/Risks: Rare bruising can last from two days to a week. Cost: \$550 per syringe.
- × JUVÉDERM: A smooth gel that comes in several viscosities for various wrinkle depths. On the market: 2006. Lasting power: Up to one year. Best for: Deep wrinkles, hollow cheeks, depositing volume over a large area. Pros: "It's good for smoothing an area rather than lifting," says Dr. Brandt. "And when Cosmoderm [see "Collagens and Collagen Stimulators," below] goes off the market this year, I'll use tiny amounts of Juvéderm for the finest wrinkles." Cons/Risks: Same as for Restylane. Cost: \$600 per syringe.
- × HYDRELLE: A gel with the highest concentration of hyaluronic acid in an injectable filler, so less is needed to see results. On the market: 2009. Lasting power: Up to one year. Best for: Thicker-skinned areas of the face, nasolabial folds, deep wrinkles. Pros: Minimal swelling and bruising affords it the nickname the lunchtime procedure. Cons/Risks: Rarely, severe redness and tenderness. Cost: \$600 per syringe.
- × PERLANE: A thick form of Restylane. On the market: 2007. Lasting power: The FDA says six months, but Dr. Brandt says several years in less mobile areas. Best for: Deep wrinkles, straightening the jawline. Pros: "It's one of my favorites," says Dr. Brandt. "Especially good for lifting. You get more change per unit. Perlane is like a thick paintbrush, and Restylane is a thin one." Cons/Risks: Touch-ups often needed after first injection. Cost: \$550 per syringe.

#### **COLLAGENS AND COLLAGEN STIMULATORS**

- × ZYDERM AND ZYPLAST: Collagen derived from cows. On the market: Zyderm, 1981; Zyplast, 1984. Lasting power: Zyderm, up to four months; Zyplast, up to six months. Best for: Zyderm, shallow forehead lines, light scars, crow's-feet; Zyplast, deeper facial wrinkles, lips. Pros: Collagen has decades' worth of established efficacy and safety. Cons/Risks: Redness that lasts for days; swelling; allergy test required. "It's falling out of use because who wants to get tested when you don't have to?" says Dr. Brandt. Cost: \$500 per syringe.
- × **COSMODERM AND COSMOPLAST:** Purified human-based collagen derived from foreskins, so no allergy test required. **On the market:** 2003. Work the same as Zyderm and Zyplast; costs are similar. Note: All four of the above collagen products were available at press time, but manufacturing has ceased.
- × RADIESSE: Calcium hydroxylapatite microspheres suspended in a gel that acts as a filler while the spheres stimulate the body to produce collagen. FDA approved to treat HIV patients suffering severe facial atrophies. On the market: 2006.

Lasting power: One to two years. Best for: Cheekbones, jawline, hands, nose reshaping. Pros: It's sturdy and long-lasting. "This is the main filler in our practice," says dermatologist George Hruza, of St. Louis. "We inject it deep so it doesn't show." Cons/Risks: Bumps can arise, particularly in lips. Cost: \$550 per syringe.

× SCULPTRA: Synthetic poly-L-lactic acid, which, upon injection, metabolizes and breaks down after stimulating collagen production. Originally FDA approved for HIV patients in 2003. Must be injected in several sessions spaced over months.

On the market: 2009. Lasting power: Up to two years. Best for: Replacing volume over big areas; known as the liquid face-lift. Pros: Dr. Airan says, "It's one of my favorites for all over because it's natural looking. Great in temples and cheekbones." Cons/Risks: Results are not immediate; must massage the site for five minutes, five times a day, for five days; bruising and swelling; rarely, palpable and visible lumps and bumps; rarely, skin reactions requiring steroid treatment. Cost: \$1,000 per syringe.

#### PERMANENT AND SEMIPERMANENT FILLERS

- × FAT: Your own, extracted from thigh, belly or buttocks by liposuction. In use since: 1980s. Lasting power: Touted as permanent but is fragile, and some patients have reported a disappearance of volume after six months. Best for: Cheekbones, nasolabial folds, undereyes. Pros: No worries about allergic reactions; a lifetime supply of replacement filler available. Stem cells improve skin quality, says Dr. Antell. Cons/Risks: Time intensive; the two-part procedure involves liposuction followed by compression bandages. "It's tricky," says Dr. Orentreich, "because it's living tissue and has to establish a blood supply, plus it's more traumatic as an injectable because it requires larger needles." Cost: \$3,000 plus anesthesia fees.
- × SILICONE: Purified injectable oils that stimulate the body to form collagen, creating volume. On the market: Used off-label since the 1960s. Lasting power: Permanent. Best for: Scars and defects, lips, deeper lines, cheek volume. Pros: "It's the softest, most natural filler I've ever worked with," says Dr. Frank. Dr. Orentreich says, "I see patients in their eighties now who've come to our practice since they started with my dad in their forties, and they have no problems." Cons/Risks: Says Dr. Rapaport, "Twenty years later, patients will react to it." Asks Dr. Airan, "Do you really want something permanent in a face that's continually changing?" Can migrate to other parts of the body; can form granulomas. Cost: \$500 to \$1,500.

body to refill itself by producing additional skin-beautifying collagen. The latest advance in the hyaluronics group came this past February: Juvéderm and the anesthetic lidocaine ready-mixed in prefilled syringes.

Since then, virtually all fillers have added anesthetics. Restylane's Twitter page contains an enthusiastic news flash: "Restylane—Now available with local anaesthetic included!" The biggest difference has been for the lips, says Dr. Bank. "Before, lips were incredibly uncomfortable to fill. They almost always required four injections of nerve block, plus topical numbing cream and ice packs."

With new tools at their disposal, the

country's leading cosmetic doctors have been busy developing ways of using them. Volume may be the common goal, but ask half a dozen of these pros which filler they like for achieving it and you'll get six different answers. They've learned that some injectables work better in certain parts of the face than in others and at different levels within the skin. A few last considerably longer. Others suit the patient's skin quality—or budget.

What the new fillers have in common is that they are nontoxic, nonallergenic—unlike bovine collagen, which does require an allergy test—and relatively noninvasive. Because they have a solid safety profile (seven years and counting in the case

of hyaluronics), anyone trying them for the first time needn't fear guinea-pig status. They pose very mild risks compared with a face-lift or laser resurfacing-"occasional bruising, swelling, tiny nodules and, rarely, a minor skin reaction," says Jon Turk, a New York facial plastic surgeon. "Those are considered the common consequences." And fillers cost much less than a face-lift, although after a few years of repeat visits you'll probably end up spending the same amount. Another huge advantage: no downtime. "I never had a bruise. I went right back to work immediately after," says Sarah (last name withheld), a patient of Dr. Grossman's in Santa Monica.

The fact that most fillers are temporary—they last anywhere from four months to three years—makes patients more willing to try them. "And reversibility with the hyaluronic acids is a big draw," says Dr. Grossman. If you don't like the way you look with your new cheeks or smooth undereyes, says dermatologist Paul Jarrod Frank, of New York, "I can inject an enzyme and it's gone within six to twenty-four hours."



#### SHAPING THE FIELD

The medical landscape has changed dramatically since doctors first explored, more than a century ago, the notion of filling bodily indentations resulting from injury. According to New York dermatologist David Orentreich, "They tried olive oil, they tried candle wax, and they learned that anything they put in, the body would react to." Then came silicone, introduced into medicine as a lubricant in the 1960s. Dr. Orentreich's father, Norman, also a dermatologist (now retired), began working with it in the early '60s. It's still used regularly today as a filler but has become more or less a specialty of very experienced doctors like David Orentreich,

## LOOK AT OTHER PATIENTS IN YOUR DOCTOR'S WAITING ROOM. CHECK OUT THE SUPPORT STAFF:

### THEY'VE PROBABLY HAD SOME WORK DONE.

because injected improperly, it can result in bumps (granulomas) and any problem that arises is permanent. A couple of decades later, bovine collagen arrived, easy to extract and plentiful. In the late '80s, having one's own fat injected as a rejuvenator came into practice, thanks to the new popularity of liposuction for body sculpting. Then the injectables field went quiet for a time, brewing.

It's tempting to think of the current trend toward restoring volume as a move away from cutting and pulling skin. For some people, especially before age fifty, this is a viable option. "People start seeing changes they don't like from about thirty to forty," says New York dermatologist Lisa Airan. "Most start with Botox and maybe a little filler in the nasolabial folds." Then, in their forties, they'll add more filler; come the fifties, everyone "needs" volume in

some key areas like the temples; and in the sixties, it's probably time for a skintightening procedure, too. But, says Dr. Frank, "It's not that face-lifts are out and volume is in." Nothing replaces a lift when there's too much hanging skin (see "When Fillers Aren't the Answer," page 86). And even those trained to use the scalpel respect the contribution of the needle. New York facial plastic surgeon David Rosenberg says: "Yes, fillers can delay the onset of surgery. But as aging progresses, fillers can be overused. The two in combination-face-lift and fillers-are a real home run." Wexler agrees. She likens the facelift to repairing the foundation of a house. "Then you still need to spackle and paint."

But easy does it. Today most of us are familiar with overdone Hollywood lips and chipmunk cheeks. The best use of fillers is, however, the work you don't

see. "People got carried away a few years ago, influenced by the TV makeovers." says Dr. Grossman, "and all of a sudden, instead of looking like yourself, only better, it was about turning into Pamela Anderson or a Barbie doll." New York hairdresser and makeup artist Paul Podlucky says: "I saw a friend on Facebook recently who'd updated her photo, and she'd obviously gotten too much Restylane. It's so sad when you look at befores and afters and the befores look better. There is some terrible, terrible work being done out there. Why does no one say anything? 'By the way, you need to ease off the filler." (Podlucky himself goes once a year to Dr. Orentreich for silicone and sends many of his clients to the practice.)

Two key factors determine success: your doctor's artistry and your spine as a patient. Considering that beauty is in the eye of the beholder whom you're paying to take up the hypodermic needle, it's essential to get a sense of his or her aesthetic. And you must have a clear idea of your own. If you don't want a square jaw because it looks too masculine, say >115

#### **HOW TO CHOOSE A DOCTOR**

I met with more than a dozen doctors to learn about fillers when Restylane launched, before I was ready to try it, and before I decided who would do it. Here's the protocol I suggest for choosing your doctor:

- 1. Don't rush. The procedures are tempting, but don't be tempted to hurry. Get a second opinion, a third and, if you're still not certain, a fourth, no matter what the cost. Better to spend the money up front becoming informed rather than spending it on the back end trying to repair something really disappointing.
- 2. Check the doctor's credentials. Dermatology; plastic surgery; ophthalmology or otolaryngology plus plastic surgery: these are some areas in which the physician has to be qualified. Most doctors you consider will have certification with the American Board of Medical Specialties, but there are other specialties that may qualify a doctor to inject fillers. And nothing beats years of experience.
- 3. Get word of mouth on doctors from friends, family... and hairstylists. "I see the good work and the bad—the Saran

Wrap lifts and the genius lifts," says Sharon Dorram, a colorist in Manhattan.

- 4. Study the doctor's aesthetic bent. Looking at his or her photo books or computer screens of befores and afters is a must. Look at other patients in your doctor's waiting room. Check out the support staff; they've probably had some work done.
- 5. Know your tastes and preferences, and speak up. At one filler session, I pointed to the before photo of a patient with a face shaped like mine and then to her after photo and said, "I would like to be less filled than that." It's

your face; you have to live with it.

- **6.** Ask how many fillers are used in the practice. If the answer is only one, move on. You need variety and versatility.
- 7. When you decide to go ahead, if you're still a tad fearful, don't worry; that's normal. Start small, advises Dr. Frank: "Do just a little thing, and see how you like it."
- 8. Don't reject a doctor who says no to you if he or she feels you're asking for too much. Dr. Grossman tells of patients who say, "What I like about you is that you say, 'No, stop; that's enough."

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### $THE\ FINE \\ ART\ OF\ FILLING$

"We have a saying: 'It's not the filler; it's the filler," says Dr. Wexler. Translation: far more important than what's in the syringe are the expertise and artistic talent of the professional who's wielding it. Don't hesitate to ask a doctor about artistic sensibilities. You might get an answer like that of Macrene Alexiades-Armenakas, a New York dermatologist, who'll tell you she studied sculpture while doing premed at Harvard. Yan Trokel, a maxillofacial surgeon in New York, has a patient, Mariana (last name withheld), a fortynine-year-old TV host, who describes her experience at his hand: "You're lying down, and he shoots you and massages the filler around. You sit up, and he looks at you from a distance. Then you lie back down. It's like watching a sculptor, only he's working on you."

Focusing on volume requires seeing in three dimensions rather than treating the skin's surface. Youth is 3-D, while aging causes a flattening or deflating, explains Dr. Trokel, whose practice is dedicated to a strategic placement of fillers below the muscle. "When you inject deeper, near the bone," he says, "the result is a beautiful, youthful softness. Aging isn't so much about gravity pulling downward. We lose volume, the face elongates, and bones protrude, giving a harder look; and bone actually shrinks. So the face collapses inward. Filler is like putting that pillowy softness back on top of the bone."

Doctors tap their artistry in combining materials, too. "Under the eyes, a hyaluronic acid will create a bluish tint that shows through the skin," says Dr. Gross-

man. "So I tried mixing it with Cosmoderm, one of the collagens, which are more opaque, and it worked." Pairing fillers with Botox to ease wrinkles, or other procedures to tighten or even out the skin, is more the rule lately than the exception. Doctors use Thermage (a radiofrequency device), laser, Ulthera (a new fractionated ultrasound for skin tightening) and the Acu-Lift laser (also new), with an acupuncture-type needle that delivers the benefit below the skin's surface. New York plastic surgeon Darrick Antell is partial to the ultimate combo: "Today in about 90 percent of my face- or neck-lift patients, I will administer fat injections to the cheeks, chin, nasolabials, to add not only volume but also the stem cells in the fat, which can improve the quality of the skin."

Unlike a face-lift, which for many is a once-in-a-lifetime experience, injectables tend to become routine. "Doing fillers to-day is like getting your hair colored or teeth cleaned," says Dr. Frank. "When I was a kid, having a health-club membership was for rich people. Now everyone belongs to a gym. That's the way fillers are going."

Have a look around. You're seeing fillers everywhere—you just haven't realized it. There's no secret handshake, though. In fact, people are more open about admitting they've had fillers than they are about anything else, including Botox, according to Beverly Hills dermatologist Vicki Rapaport. The stealth revolution likely won't stay quiet much longer.

Tracey Jackson, a fifty-two-year-old author and screenwriter in New York, concurs: "I blogged my entire eye lift, including photos every day of recovery, so others could see what it's like. And I've done fillers. I tell all. I think it's unfair to others if they look at you and you look ten years younger than you are and you say nothing. It makes them feel bad and is a lie. I look good because I have everything done to my face. I look natural, but it's not without a lot of help."

Which gives new meaning to the notion of aging gracefully.