The Kybella Debate: Why Some Plastic Surgeons and Dermatologists Are Reconsidering the Chin-Slimming Injectable
SUBMENTAL FULLNESS. Say it out loud. The term has an almost Freudian feel — conjuring, perhaps, an overstuffed psyche, ripe with repression. But, of course, any skin nerd with a derm or 20 in her feed knows it’s actually doctor-speak for double chin, the ultracommon condition — and, yes, it is considered to be just that by the medical community — responsible for fueling both self-hate insecurities (ours, too) and body-positive belly laughs (was #chingning not everything in 2017?).

While long an annoyance for many, the stubborn fat pad under the chin entered our collective consciousness in 2015, when a first-of-its-kind fix hit the beauty scene: a fat-melting supershot called Kybella, indicated especially for the area. Just what alchemy is this, the world wondered? The drug’s active ingredient is a synthetic deicosahexaenonic acid — “a copy of a salt found in human bile that aids in the permanent destruction and digestion of fat cells,” explains Michael Kassardjian, a dermatologic surgeon in Torrance, CA. More specifically, Kybella dissolves the membranes lining our fat cells, causing them to spill their slippery contents, which are then gradually but efficiently expunged by the body’s own immune cells.

On the heels of Kybella’s long-awaited FDA-approval win, following more than 20 clinical studies involving 1,600-plus patients, the New York Times trumpeted the drug’s arrival with the headline: *Injection Offers Option to Slim Down Double Chin Without Surgery; irreversibly pitting syringe against scalpel.* "Physicians and patients alike were excited that an injectable could destroy fat cells, and doctors around the country began training to use Kybella,” says William H. Truswell, president of the American Academy of Facial Plastic and Reconstructive Surgery (AAFPRS).

But now, a mere three years later, the fanfare and fervor have subsided — and the wonder drug seems to be facing a backlash. "Kybella was tremendously anticipated by the aesthetics industry, but it’s proven to be slightly underwhelming," says Lara Devgan, an attending plastic surgeon at Lenox Hill Hospital and Manhattan Eye, Ear & Throat Infirmary.

While doctors have debated its shortcomings for some time, one surgeon’s social media post from last November compelled us to take a harder look at the injectable. Steven Teitelbaum, an associate clinical professor of plastic surgery at the David Geffen School of Medicine at UCLA, and an investigator on the Kybella clinical trials, Instagrammed himself speaking at a plastics conference in New York City. His caption read: On stage at #cuttingedge2017 meeting, talking about #kybella injections to remove neck fat. Only about five surgeons in the audience raised their hands to say they liked it. As usual, surgery beats needles.
“Kybella works, it’s just not always presented right. It's not a no-downtime alternative to liposuction — there will be swelling and tenderness — but it is a nonsurgical alternative, which carries fewer severe risks.”

A fair amount of data corroborates his account: According to the AAFPRS, fat-dissolving injections were, in fact, the least popular minimally invasive treatment performed by facial plastic surgeons in 2017. And newly released stats from the American Society of Plastic Surgeons (ASPS) show that of the 17.5 million surgical and minimally-invasive cosmetic procedures done in the United States in 2017, 62,587 were Kybella injections, while 246,354 were liposuction procedures (lipo being the go-to surgery for double chins). Lending further perspective, the non-invasive fat reduction category — which includes devices that freeze or heat fat cells to literal death — contributed 356,378 procedures to the ASPS's overall tally.

To be fair, these figures don’t tell the whole story, as they’re collected by individual organizations, and reflect only work done by a subset of surgeons. Which is why we reached out to Allergan, the makers of Kybella. Turns out, they track procedures, too, and recorded over 100,000 people treated with the drug since January 2016.
And we cannot overlook the strong contingent of doctors who remain loyal to the injectable. “Kybella works, it’s just not always presented right,” says Robert Anolik, a clinical assistant professor of dermatology at the NYU School of Medicine, who participated in the clinical trial. To be clear, he adds, “Kybella is not a no-downtime alternative to liposuction — there will be swelling and tenderness — but it is a nonsurgical alternative, which carries fewer severe risks.” If doctors communicate this distinction and manage patients’ expectations, “satisfaction will be high,” he says. (Potential lip complications, according to the American Society for Aesthetic Plastic Surgery website, can include contour irregularities, indentations, infection, scarring, sensation changes, and accumulation of blood or fluid under the skin.)

New York City plastic surgeon Sachin Shridharani, who’s administered over 2,000 Kybella treatments but also counts liposuction among his favorite tools, says, “We’ve been getting surgical-like outcomes with Kybella — sometimes even superior, because of the skin retraction that follows — and a big part of that is using the right dose and counseling patients on the number of treatments they need. If someone isn’t prepared to have more than one treatment, she’s not a Kybella candidate. And when clinicians tell me they’re not getting the same types of outcomes, and then I review their notes, they’re typically underdosing patients, because they’re afraid of the swelling and downtime.”

Up next, we zoom in on the controversy and share everything you need to know before putting your neck on the line. (But first, a quick disclaimer: As with every FDA-approved cosmetic procedure, we totally support your right to take it, leave it, or simply just learn about it. Your body, your choice. No judgment.)
BEHIND THE BACKLASH

When Kybella was first approved, “there was a huge marketing blitz around it,” says Truswell — one mired in confusion, and muddled by mixed messages.

Right out of the gate, recalls New York City cosmetic dermatologist Paul Jarrod Frank, “Kybella was hyped as a sort of Botox for fat,” the two injectables’ shared parentage (hi, Allergan) only strengthening their ostensible similarities. Yet, at the same time, Kybella, a so-called lunchtime procedure, aimed to rival the efficacy of surgery, an unprecedented move for an injectable, notes Teitelbaum.

“Most injectables address something that surgery cannot,” he adds, with neurotoxins minimizing muscle movement to stop skin from creasing, and fillers restoring the plumpness that wanes with age. But Kybella, from day one, was “comparing itself to surgery,” Teitelbaum says.

As doctors began dabbling in the drug, however, both analogies crumbled. Hardly the bulge-busting equivalent of a quick-and-painless, no-one-has-to-know neurotoxin, “Kybella can carry an enormous amount of downtime relative to the small percentage of improvement we get from it,” says Frank, referring to the soreness and bullfrog-like swelling that ensue after treatment and linger for weeks. “I tried it on myself, and was shocked by the massive swelling I saw.” Each dose of Kybella also requires 20 to 50 jabs to the target area — not quite akin to the modest pricks of a Botox needle.

The surgery parallel also fell flat, as deleting a double chin with the surgical gold-standard — liposuction done under local anesthesia — is a one-time procedure that gives immediate and dramatic results to the tune of “a very predictable 90 percent improvement,” says Frank. And the downtime? Forty-eight to 72 hours. “If I do submental liposuction on a Friday,” says Teitelbaum, “you hang around the house for the weekend, and go back to work Monday or Tuesday, already looking great.” Being careful not to downplay the significance of surgery, he adds that lipo, unlike Kybella, can involve oral sedation (you’ll need a ride home); a few stitches; and a headwrap to be worn during initial recovery. But “post-op pain is non-existent with lipo, as there’s still lidocaine left in the area, rendering it almost totally numb.”

Contouring the chin and neck with Kybella, on the other hand, requires multiple treatments, “with the initial session demonstrating only very subtle changes, and full results taking a few months to show,” says Kassardjian.

Patients who qualify as Kybella contenders (more on that ahead) generally achieve “ideal results after three to five visits, but sometimes they don’t even realize that Kybella has worked for them, because the results take so long to materialize,” says Devgan, who finds patients prefer the one-time experience of liposuction to the months-long process of Kybella.

“The most interesting thing to me about Kybella,” says Teitelbaum, “is how something that looked so good in clinical trials has failed so miserably in clinical practice.”
EVERYONE'S A CRITIC: THE KNOCKS AGAINST KYBELLA

It's unpredictable! This has to be the most ubiquitous complaint voiced by aesthetic doctors (particularly those wielding lipo wands). “I've only been disappointed with Kybella compared to my surgical interventions,” says Frank. “There's just no procedure in my armamentarium — not Botox, not filler, not one of my 25 lasers — that offers a more predictable, life-changing response than liposuction.”

Kybella, though, keeps us guessing: Will it take two treatments or six? Be a hit or a miss? The most lucid explanation we heard for the drug's inherent inconsistency is this: Unlike liposuction, which unequivocally cants away fat, “Kybella requires your body to do the work of breaking up fat cells, clearing them out, and then contracting the skin,” says Dara Liotta, a cosmetic and reconstructive facial plastic surgeon in New York City. “Some bodies do this well, and some do not — and we don't have a great way of knowing who, specifically, will have a robust response to the drug.”

Kybella requires us to take a leap of faith, to commit to a handful of treatments that can be uncomfortable and costly — quotes from board-certified dermatologists and plastic surgeons hover around $1,500 per visit (making price another big beef) — with little guarantee of a turkey-to-swan-neck transformation.
But, surely, surgery must be more expensive, right? Nope, not necessarily. A study in the May/June 2018 issue of *JAMA Facial Plastic Surgery* presents an eye-opening cost analysis of Kybella versus submental liposuction. Researchers found that the nationwide average price to receive the amount of Kybella used in the clinical trials (over four sessions, typically) is $6,426.35 — more than twice the average cost of neck lipo, which they estimate at $2,976.56. (For the record, the surgeons we interviewed gave a $3,000 to $6,000 range.)

But back to the payoff. While some doctors will ballpark an anticipated degree of change with Kybella — a 40 percent improvement after three treatments spaced six weeks apart, for instance — others refrain from talking numbers. Anolik promises only this: “I expect everyone who undergoes the procedure several times to have a reduction in the amount of fat in the area, but how dramatic of a change, I cannot say.” In the drug’s trials, he adds, when four treatments were completed, more than half of the subjects had a considerable change in the fat pad, downsizing from either a severe double chin to a moderate one, or a moderate to a mild.

But four isn’t always the magic number, says Ellen Marmur, an associate clinical professor of dermatology at the Icahn School of Medicine at Mount Sinai. In her experience, “young patients with only tiny submental mounds do well with two treatments, [while] older people with both excess fat and skin laxity [may] lose the majority of the fat and get about a 10 percent tightening of the skin after two to four visits.” In most cases, she adds, “the happiness quotient increases after the second treatment.”

Adding to the ambiguity, results can vary not only from patient to patient (because, biology), but also from doctor to doctor, with some pros garnering more consistently impressive results than others, likely due to some “subtlety in injection technique,” notes Teitelbaum. While Allergan teaches a standard method for administering the drug — instructing injectors to follow a grid-like pattern (made easy with the application of a temporary tattoo), and deliver a particular dose into each perfectly positioned, evenly spaced dot — some physicians, over time and with experience, refine their approach, adopting their own personal style. “I’m not strictly by-the-book,” says Liotta. “I’ve changed my injection technique, and doing so has definitely helped my results.”

It stands to reason that doctors with loads of Kybella under their belts — hundreds and hundreds of patients — who fully grasp the drug’s nuances, can more expertly tailor the treatment to each unique individual. Take Marmur: She’s learned to customize the Kybella experience for executives who can’t miss work by injecting “small, tiny lines of the drug over the course of 10 visits to really keep swelling under the radar,” she says.
“Kybella provides a treatment option for patients who are interested in addressing the fat underneath their chin, but are unwilling to consider more invasive procedures. As with any treatment, an individual’s response, reaction, and result will vary."

Which brings us to everyone’s primary gripe — the obvious ballooning they suffer after treatment. Driving this much-bemoaned side effect is the body’s critical immune response to the drug. “Anytime something in our body is not where it should be — like when the inside of a fat cell is suddenly on the outside [which occurs when a cell wall dissolves] — the body responds as though it’s being injured, initiating a healing process that results in inflammation,” explains Anolk. On the upside: That healing also begers collagen production and remodeling, which can lead to a rauter jawline. “Even a year out, patients continue to look better, and that’s probably because of the skin tightening that’s occurring over time,” he adds.

While smaller areas infused with less product may produce less puffiness, one should expect to have scarves and turtlenecks in near-constant rotation for a good two weeks post-injection. The intensity of swelling tends to diminish with each round of shots, with the first being the most blatant and persistent, but not everyone’s willing to ride it out, time and again.

Other Kybella carps include a burning sensation during injections (said to relent after 15 minutes); the bruising, tightness, and temporary numbness that can sometimes follow; and difficulty swallowing related to swelling. In the end, says Devgan, “the patient must be the ultimate arbiter of how good the experience was, and how noticeable the results are.”
When reached for comment on the reported dissatisfaction with the drug, Allergan’s senior vice president of US medical aesthetics, Carrie Strom, told Allure. “This product provides a treatment option for patients who are interested in addressing the fat underneath their chin, but are unwilling to consider more invasive procedures. As with any treatment, an individual’s response, reaction, and result will vary. Each individual has a different level of submental fat, and a licensed and trained physician will be able to determine the number of treatments a patient will need. Most need multiple treatments, given at least one month apart, for a total of up to six. In clinical studies, 59 percent of subjects received six treatments. Swelling is to be expected, and generally becomes less severe, and happens less often, with subsequent treatment sessions. As part of the training that is required by Allergan in order to administer Kybella, [injectors] are provided guidance on dosing, patient consultation, and how to appropriately set and manage patient expectations and side effects, including swelling.”

KYBELLA CONTENDERS: THE BEST SHOT AT SUCCESS

While a happy outcome can be hard to quantify, doctors angle for one by offering Kybella only to those who meet a certain criteria. “Ideal candidates are thin with small areas of fat that they’re unable to shed despite maximizing their diet and exercise routine,” says Miami-based cosmetic dermatologist Manjula Jegasothy. She’s seen the most striking (and lasting) results in patients with a BMI of 28 or less, who keep their weight steady. “The drug doesn’t remove every single fat cell in a given area, so if you gain a fair amount of weight — generally 10 pounds or more — remaining fat cells in the region can grow larger, and it will look like the fat has come back,” she notes.

For Kybella to work well, the target fat must also be “soft and squeezable,” says Marmur, as firm, fibrous fat — common on the upper and mid back, and in areas of abundant cellulite — tends to resist the drug. Why are we talking dimples and back fat when Kybella is only FDA-approved for the chin? There are reports of some doctors using it off-label to shrink small pouches of fat on the body — along the bra line, the lower belly, the inner and outer thighs, the tops of the knees, and just below the crease of the bum.

“The latest-breaking area that doctors are starting to explore is the jowls,” says Joshua Zeichner, the director of cosmetic and clinical research at Mount Sinai Hospital’s Department of Dermatology. But, when addressing the neck with Kybella, venturing outside of the designated treatment zone — that isolated A-shaped pocket right under the chin — can be dicey, as your jowls share real estate with the marginal mandibular nerve, which helps move your lower lip. A misplaced injection can damage the nerve, leading to a temporarily lopsided smile. In the clinical trials, adds Zeichner, it took about six weeks for a stunned nerve to recover.

“We don’t see that with surgery,” says Frank. It’s a rare example of “the more invasive option [liposuction] actually being safer for the one critical structure in the area,” adds Teitelbaum.
Another boon of surgery: A lipo wand can disappear broader swaths of fat more uniformly, and carve out crisper angles. “Not only does it offer a definitive contouring of this area, but it allows me to sculpt the jawline and the lateral neck, which I cannot safely and reliably do with Kybella,” says Devgan.

For all the love heaped upon liposuction, even the most enamored surgeons will admit that it’s neither a magic bullet nor an absolute fix. In fact, doctors warn that both lipo and Kybella can sometimes seem to fast-track neck aging by uncovering issues, like loose skin and platysmal bands (those rigid cords that jut out from the neck), which were previously veiled by a forgiving layer of padding. In such situations, it’s advantage, Kybella: Since the drug works in stages, begetting gradual results — versus the sudden and striking effects of surgery — “it cannot be overdone,” says Kassardjian, which means docs can spot and troubleshoot emergent problems before they get too serious.

Disqualifying factors for trimming a chin with Kybella include pronounced laxity (skin has to be springy enough to snap back once drained of fat); prominent neck bands (they’ll only look more conspicuous once overlying fat has vanished); and previous neck surgeries, as resulting scar tissue can distort normal anatomy, increasing risks with Kybella, notes Kassardjian. If someone has poor skin elasticity, or really excessive fat, she may not be a fit for Kybella or lipo, adds Liotto, and would likely benefit more from a traditional neck lift surgery.

**BOTTOM LINE**

Kybella clearly works, and has been proven safe in clinical trials, but the results “are nowhere near as instantly dramatic as liposuction,” says Marmur — and, all told, a series of injections can wind up costing more than surgery. That said, for people with the patience and grit to stick out repeat treatments, Kybella can offer a scalpel-free beauty (and confidence!) boost. As always, trust only board-certified dermatologists and plastic surgeons to perform this, or any, cosmetic procedure.