The size, shape and symmetry of one's nose should allow it to "blend seamlessly into the face, encouraging the lips and eyes to come forward," says Los Angeles plastic surgeon Jason Roostaeian, MD.

ALEXANDRE WEINBERGER / TRUNK ARCHIVE; MODEL USED FOR ILLUSTRATIVE PURPOSE ONLY

THE NEW NOSE JOB

HAVING SEVERED ALL TIES WITH COOKIE-CUTTER CONNOTATIONS, THE MODERN RHINOPLASTY IS A STUDY IN INDIVIDUALITY

BY JOLENE EDGAR

A nose is a nose is a nose...or is it?

In a provocative study published last year in the journal *Plastic and Reconstructive Surgery*, researchers sought to determine how a nose job might influence public perception of a person's appearance and personality. Upon examining pre- and postoperative photographs of women who'd undergone primary rhinoplasties, evaluators, naive to the purpose of the experiment, were asked which image better represented a variety of traits, and by what degree. Ultimately, the "afters" won for symmetry, youthfulness, facial harmony, likability, trustworthiness, confidence, femininity, attractiveness, approachability and intelligence. The "befores" scored higher in only one category: aggressiveness.

While the study is not without limitations, its findings are unequivocal: The modern rhinoplasty is deeply transformative—with the power to enhance not just a physical feature, science says, but the way in which it portrays its owner. And, yet, the best work is praised for its relative invisibility—the change is somehow at once striking and undetectable.

When escorted into recovery, patients should still look like themselves; their identities firmly intact. An "unoperated" appearance is de rigueur in 2019—though this wasn't always the case: "For a long time, rhinoplasty was viewed as a rather crude operation done to make the nose smaller, but not necessarily better," says Campbell, CA plastic surgeon R. Laurence Berkowitz, MD. "It was almost understood that you were going to come out looking like you had a nose job." Over the past 20 years, he adds, there's been a big push toward natural results, culminating in a new era of refinement in rhinoplasty.

"Natural" is a unanimous goal—on this rhinoplasty surgeons can agree. How best to achieve it, however, is up for debate. Some insist that "natural" doesn't reflect the extent of work done to a nose, per se, but rather "that the end result looks like it's always been there," explains Toronto plastic surgeon Jamil Ahmad, MD. Other surgeons say the rising demand for subtlety has led to a shift in technique: "Procedures today aren't as aggressive as they once were," says Chicago facial plastic surgeon Steven Dayan, MD. "There's not usually much grafting; the bony work has become gentler; and our instruments more delicate." These less-invasive moves have helped ease the classic signs of surgery—conspicuous swelling and shiners. According to Dr. Berkowitz, recoveries that once usurped entire summer vacations are now often managed within a week to 10 days.

Here, with the help of top pros, we delve into the nuances of the modern nose job.

> "Individualization is the biggest advance in the last two decades of rhinoplasty."
>
> LA JOLLA, CA PLASTIC SURGEON ROBERT SINGER, MD

THE BREAKDOWN

RHINO 101

The nose job, in a nutshell, courtesy of Westborough, MA facial plastic surgeon Min S. Ahn, MD.

CONSULT: "We ask the patient what she'd like to change and how long she's been considering surgery. Her answer tells us if she has expectations we can meet, and if she's serious about surgery. We take standardized photos and use computer imaging to ensure we're on the same page about the results we're seeking."

ANESTHESIA: "While general anesthesia can be used, we prefer twilight. The patient is sleeping and won't be aware of anything during surgery."

PROCEDURE TIME: "A primary rhinoplasty surgery can take up to two hours."

PAIN: "There's very little pain following surgery, especially when packing isn't used in the nose. Often patients don't need pain medication, or they stop taking it after a couple of days."

RECOVERY: "You leave with a cast on your nose and gauze beneath it. The cast is waterproof, so you can shower without worry; the gauze can be tossed the next day. For the first few days, you'll be bruised and swollen, and may feel congested. You'll have to sleep on your back."

RHINO REIMAGINED

If Jennifer Grey taught us anything, it's the importance of maintaining character through plastic surgery. And in recent years, this has become an unwritten rule of rhinoplasty—owning one's individuality while aspiring to optimize it. As San Francisco facial plastic surgeon David Kim, MD explains, "Now more than ever, patients are embracing the attributes that make them unique, and asking to retain features they identify with—those that give their nose personality."

PERFECT STRANGER

Gone are the prototype noses of the past—the scooped bridges, sharp angles, upturned tips. Today "we go for soft contours, smooth surfaces and a natural form," adds Dr. Kim. While plastic surgeons refer to the "textbook proportions" carved out by their predecessors, most deem them wholly impractical. "We know what it takes to make a 'perfect' nose—mathematically, it can be defined," says Dr. Dayan. But such noses tend to lack authenticity, he adds. And in practice, they blatantly clash with patients' 21st-Century preferences. New York facial plastic surgeon Dara Liotta, MD says: "If I computer-image an 'ideally proportioned' nose during consults, many patients feel that it doesn't look like them."

CAN'T TOUCH THIS

Indeed, patients connect more with the traits they've come to recognize as their own—be it an aquiline bridge or a flare to the nostrils—which may seem paradoxical given their obvious desire for change, but surgeons say this is the new normal in rhinoplasty. "My patients are very specific about wanting to preserve certain features that would've once been thought of as disproportionate," says New York facial plastic surgeon Edward S. Kwak, MD. "For an Asian nose, that may mean less projection of the tip and bridge. On an Eastern European, we might maintain a hint of hump instead of completely removing the convexity of the bridge." Nashua, NH plastic surgeon Mark B. Constantian, MD has even been asked to restore inherited qualities that were obliterated by other surgeons. For some folks, he explains, "going from a bump to a straight bridge is an intolerable change. I find that when I deliberately preserve a bump, or put it back, these are some of my happiest patients."

Beyond any surgical update or flashy instrument, "individualization is the greatest advance in the last two decades of rhinoplasty," says La Jolla, CA plastic surgeon Robert Singer, MD. "This includes better analysis of the patient's goals and of the anatomy to refine."

51.9% of rhinoplasty patients in 2018 were 18 to 34 years old

SOURCE: THE AESTHETIC SOCIETY

#TRENDING:

MIDLIFE MAKEOVER

The nose job may be branded as a young-person's procedure, but surgeons are now seeing a growing number of Gen Xers coming in to correct both lifelong gripes and newer issues that arise with age. While it's never too late to make a change, surgical tweaks should be minor, serving to smooth and support the nose, not sculpt it.

EVOLVING ANATOMY

"The nose doesn't actually continue to 'grow' throughout adulthood, but rather its tip-support mechanisms weaken, causing it to droop," explains Philadelphia facial plastic surgeon Jason Bloom, MD. The skin and soft tissues also thin, skeletonizing the nose and spotlighting irregularities that may have gone unnoticed in our younger, plumper days.

SURGICAL FINESSE

Dallas plastic surgeon Rod J. Rohrich, MD estimates 30 percent of his facelift patients request simultaneous rhinoplasties. "It's a new arena," he says. Because older bones and cartilages can be delicate, the 40-plus procedure calls for a light touch. Instead of fracturing and reshaping the nasal bones—standard practice in many cases—surgeons may choose to gently file down the dorsum, Dr. Rohrich explains. Elevating and age-proofing the tip may require a more durable type of graft than is ordinarily used. And if the skin is really thin, laying down fascia—borrowed from the temple, say—or acellular dermal matrix can help soften the overall outcome.

THE FAT REFRESH For those seeking subtler changes, adding fat to the nose during facelift surgery can often camouflage the lumps and bumps that come with age, notes Dr. Berkowitz. Fat also improves blood flow to the area, giving skin a more youthful quality. It can't boost the height of a bridge as much as filler, however, as bone isn't the best breeding ground for grafted fat. On the upside: Whatever fat does take root tends to stick around permanently.

MEET THE DISRUPTORS

Open versus closed has long been the central debate in rhino. And when we excise the hype, the reality looks something like this: Opening the nose leaves a small scar between the nostrils, but gives surgeons a three-dimensional view of the anatomy, particularly the tip and septum, making it ideal for complex problems and revisions. More straightforward corrections can usually be tackled via a closed or "scarless" approach. "I purposely go closed when someone likes their own natural tip, because dissecting it off the skin can change its character," adds Dr. Roostaeian. But, really, notes Dr. Singer, there is no single best method; a surgeon's experience and artistry matter most.

That said, emerging techniques are offering new sources of contention. With fan clubs spreading worldwide, both piezoelectric surgery and the preservation approach promise more natural results and a speedier recovery than conventional strategies—but are they more than just fads? Here, thought leaders help us navigate the claims.

KUTLU / TRUNK ARCHIVE. MODEL USED FOR ILLUSTRATIVE PURPOSE ONLY

THE PROCEDURE

PIEZOSURGERY

WHAT IT IS: The piezoelectric device is an ultrasonic power tool designed for cutting nasal bones. (Traditionally, fracturing/rasping bone is done with hand tools called osteotomes.) Much in the way a cast saw slices through plaster but not underlying skin, "the piezo vibrates so fast—at 30,000 cycles per second—that it cuts through bone, but when it hits the soft lining of the nose on the other side, it doesn't damage it," explains Dr. Berkowitz, an early adopter of the technology. Piezo currently requires an open approach, but "we are finding ways to use it for limited parts of the closed procedure, as well," he adds. New tips for the tool, made specifically for this purpose, are now in development.

THE CASE FOR IT: "Much of the bruising and bleeding associated with rhinoplasty comes from osteotomies done with hand tools, and you just don't see that [degree of trauma] with the piezo," says Dr. Berkowitz. He also sees more natural results—"smoother interfaces between bone and cartilage"—with piezo at one, three and five years post-op, but says in the absence of long-term outcome studies, there's no definitive proof of this. Still, in the opinion of Cleveland plastic surgeon Bahman Guyuron, MD, "There's going to be a role for piezo in rhinoplasty—it'll become a common tool for us—no question in my mind."

THE ARGUMENT AGAINST: The device demands good anatomical exposure, which translates to a wide undermining of the skin—and consequently more post-op swelling, says Dr. Rohrich. Dissecting a larger area also takes time, prolonging anesthesia. Overall, skeptics stress, it's the surgeon, not a single tool, driving rhino results.»

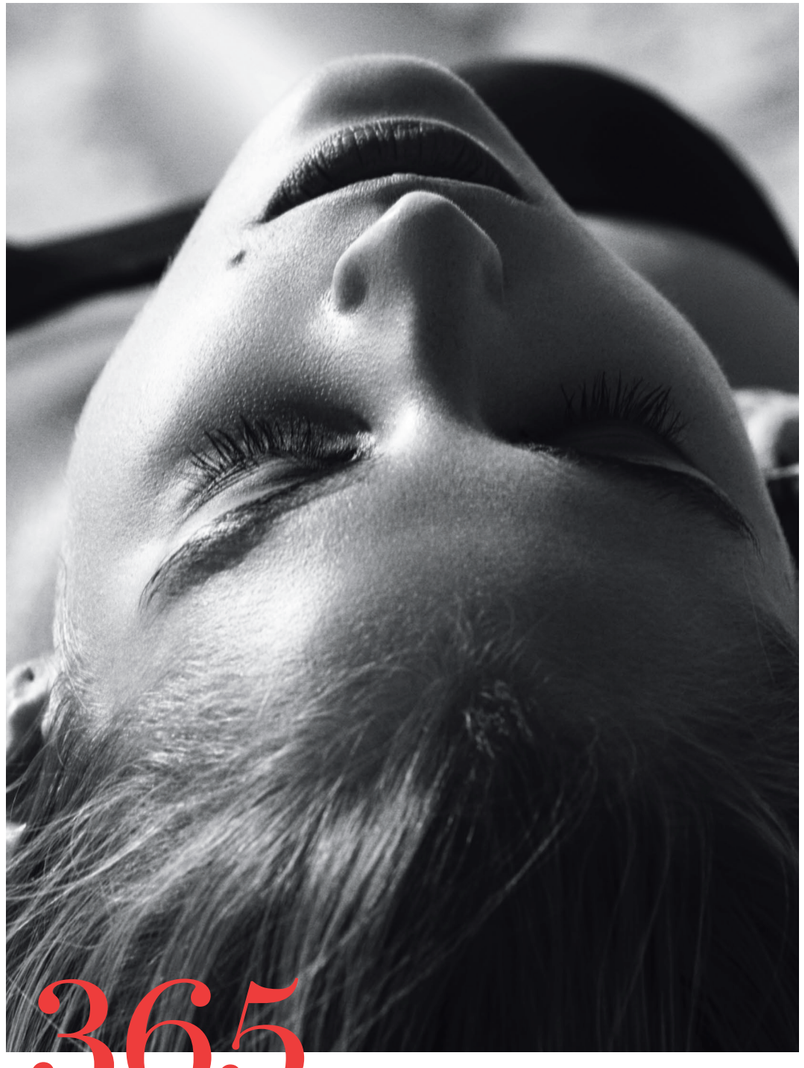
THE PROCEDURE

PRESERVATION RHINO

WHAT IT IS: Dubbed the "let-down" or "push-down" technique, preservation rhino was first espoused in the 1950s, and is now experiencing a rebirth. Interpretations of the concept vary, but at its core, preservation focuses on maintaining the integrity of the bone and cartilage comprising one's bridge, and treating them as a single unit when reducing a hump. Instead of disassembling the dorsum and shaving its top, space is carved out beneath it, and then the bridge is lowered down. When following the procedure's principles more completely, surgeons aim to keep ligaments, cartilage, septum and soft tissue mostly intact, reshaping and suturing the structures rather than resecting them.

THE CASE FOR IT: "Whenever we take apart and rebuild the nose, it can settle in unexpected ways over time: calluses can form on bone from rasping; a small rift or step-off may develop between bone and cartilage," explains Dr. Berkowitz. "But preservation avoids those issues by respecting the continuity of the bridge, and removing only a small amount from the unseen underside." Proponents say the technique tends to result in less swelling (especially when done closed). And as San Francisco plastic surgeon Dino Elyassnia, MD points out, the spared septum can later be used for grafting, simplifying any future surgeries.

THE ARGUMENT AGAINST: Without long-term follow-up studies, experts can't predict how preservation noses will fare three or five years after surgery: Can humps rise back up over time? Can pushing a bridge down too far beget what's known as a saddle nose with an abnormally flat or concave bridge? Only time will tell. Critics also note that this strategy can't be applied to every patient, but mainly those with a straight nose and moderate hump. Even so, more and more surgeons—even those once dubious—seem to be warming to the trend: "Rhinoplasty is all about precision, predictability and consistency," Dr. Rohrich says. "I don't know yet if preservation will meet those criteria, but I think it may have a good role in select cases."



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"Most swelling subsides within three weeks, but the tip can take a full year to resolve completely."

WESTBOROUGH, MA FACIAL PLASTIC SURGEON MIN S. AHN, MD

POLINA VILJUN / AUGUST; MODEL USED FOR ILLUSTRATIVE PURPOSE ONLY

NEWBEAUTY TOP DOCTORS
Turn to page 129 to find one near you.

THE SELFIE EFFECT

In the spring of 2018, a study in *JAMA Facial Plastic Surgery* revealed that selfies—more specifically, the close distance from which they're taken—make the nose appear about 30 percent larger than it actually is. Since then, the industry has continued to probe the link between digital photography and plastic surgery. In a poll conducted by the American Academy of Facial Plastic and Reconstructive Surgeons, 55 percent of surgeons reported seeing patients who were seeking surgery to improve their selfie game. Not only are selfies driving some to consults, but they're also helping us hone in on even trivial imperfections.

FILTER PHENOM

In a separate paper published in the aforementioned journal entitled "Selfies—Living in the Era of Filtered Photographs," researchers noted that prior to the rise of selfies, rhino patients' chief complaint was the glaring dorsal hump, but today, it's less-obvious asymmetries picked up whilst scrutinizing selfies.

Study author Neelam A. Vashi, MD, an associate professor of dermatology at Boston University and Boston Medical Center, also worries about selfies—the filtering and doctoring—promoting unrealistic expectations. "They blur the lines of reality and fantasy. We can't always give the fix that patients desire, and even if we could, it may not be appropriate in real life," she says. A nose that looks good in a selfie, for example, would be abnormally small and incapable of breathing.

+

"It's fun to post intraoperative pictures on social, and we all do that. But if a surgeon can't show you multiple views of rhino results at more than one year out, be very suspicious," says Dr. Rohrich.

TRICK PHOTOGRAPHY

On a related note, photo fakery isn't limited to our personal feeds. At the Aesthetic Meeting in May, plastic surgeons spoke out about popular digital tricks used by unscrupulous doctors: pulling back on an "after" shot to make a nose look smaller following liquid rhinoplasty, for instance. (In truth, using filler to disguise a bump or lift a tip can only increase the size of the nose.) Or showing a surgical rhino result from only one perspective, typically the profile, rather than multiple views: front, left and right profile, three-quarter angle on both sides, and base-of-nose or "worm's-eye" view. "If a surgeon doesn't show every angle, he or she is probably not proud of every angle," notes Dr. Roostaeian.

The most trustworthy B&As are taken in controlled lighting, at standard distances, against consistent backdrops and with the patient gazing straight ahead. "Afters" should be taken at least one year out. Be skeptical of anything less.

According to a study published in *JAMA Facial Plastic Surgery,* and conducted by researchers at Rutgers New Jersey Medical School, "when taken at 12 inches away...selfies increase nasal size by 30 percent in males and 29 percent in females. Predictably, an image taken at five feet, a standard portrait distance, results in essentially no difference in perceived size." (Here, *NewBeauty* staffer Allison Levy demonstrates the difference.) The authors go on to conclude: "Further studies are necessary to determine whether patients who take frequent selfies are less satisfied with their clinical outcomes and if this distortion informs future medical decisions."

#ETHNICRHINO EXPLAINED

THE HASHTAG HAS BECOME UBIQUITOUS, BUT WHAT THE HECK DOES IT MEAN? FOUR PLASTIC SURGEONS WEIGH IN.

1/ "In the generalist of terms, it refers to a rhinoplasty on a patient who is not white. The traditional aesthetic ideals that were taught for years were based on Caucasian women with Northern European features—a straight or slightly concave bridge and a small, defined tip. Around 20 years ago, we started to see more being written about ethnic rhinoplasty—techniques and standards for patients who are Black, Hispanic, South Asian, Middle Eastern and so forth. To me, every rhinoplasty is an ethnic rhinoplasty: it means making a nose that is unique to that person and their features." **–DR. AHMAD**

2/ "The term ethnic rhinoplasty gets tossed around quite a bit, but I don't really like it. Here's why: Although indisputably well-intentioned, to me it seems like just another way to separate people's facial anatomy into categories—Caucasian, and everyone else. In my practice, there is only one category of rhinoplasty: natural-looking. I create noses that harmonize with a person's ethnicity, for sure, but also with their highly individualized anatomy: the angles, proportions and shapes that compose each patient's unique countenance." **–DR. ROOSTAEIAN**

3/ "In many cases, it implies an augmentation rhinoplasty, which is commonly done on Asian and African American noses. Rather than reducing the nose to make it smaller, we're building up the bridge to create more structure. I've used this hashtag in the past, but not much lately because certain patients find it somewhat offensive." **–DR. ROHRICH**

4/ "Ethnic rhino is a very broad term and open to interpretation. A big part of it is maintaining ethnic identity, and not applying Western aesthetic norms to every nose." **–DR. KWAK**

DELMAINE DONSON/GETTY IMAGES; MODEL USED FOR ILLUSTRATIVE PURPOSE ONLY

FUTURE BUZZ

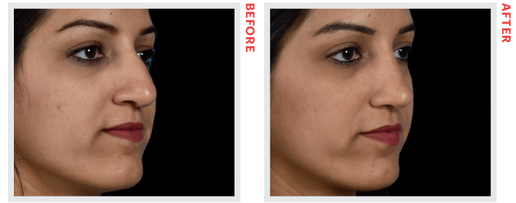
As the hammer and chisel begin to fade into the rearview, innovations on the horizon promise a kinder, gentler nose job. One, in particular, could "change rhinoplasty irrevocably" should it come to pass, says Dr. Berkowitz, who tipped us off to a groundbreaking technique called electromechanical reshaping, or EMR. Developed by scientists at the University of California, Irvine, EMR softens and reshapes cartilage (and other soft and semi-solid tissues) using needle-administered electric pulses. While currently under investigation, it's already been proven to work in a handful of animal studies.

Just as we've learned to control thermal energy to harness the power of skin-resurfacing lasers, "we can tame the beast that is electrochemistry to control the effects of acids and bases," says biomedical engineer and facial plastic surgeon Brian Wong, MD, PhD, one of the brains behind the technology. EMR, he explains, "creates highly localized regions of acid-base perturbation in the tissue that leads to an alteration of its structure." Beyond molding ear and nose cartilage, EMR has the potential to correct vision by reshaping the cornea, and to treat and sculpt fat—all at a very low cost, says Dr. Wong. Manipulating more rigid structures, like bone, would prove more challenging, he adds, "because the amount of energy that would need to be expended would be massive."

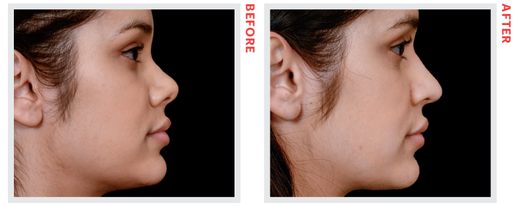
More studies are needed to bear out the true benefits of this procedure, notes Dr. Singer, and "a healthy wariness about the promise of any new advancement is always critical." Still, we're pretty amped about being one step closer to a truly nonsurgical nose job. NB

B&As

This 32-year-old disliked her dorsal hump and the width of her bridge where it met her cheek. San Francisco plastic surgeon **Dino Elyassnia, MD** performed a closed preservation rhinoplasty, reshaping her bridge without removing the hump.



Los Angeles plastic surgeon **Jason Roostaeian, MD** conservatively reduced this patient's dorsum to avoid a sloped look, and contoured the tip without over-rotating it, for a result that was congruent with her Indian heritage.



Following a rhinoplasty in her early 20s, this patient felt stripped of key ethnic features. San Francisco facial plastic surgeon **David Kim, MD** performed a revision to raise her bridge and return her tip to a lower position, restoring her sense of self-identity.

This 29-year-old patient did not like the overprojection of her nasal tip. Her dorsum ridge was refined by Beverly Hills, CA facial plastic surgeon **Davis Nguyen, MD,** in addition to a cheek enhancement, jawline refinement and Botox injections.