

# BEYOND *Vanities*

Plastic Surgeon Dr. Rick Antell's Studies on Twins Show How Sun,  
Smoking and Stress Produce Premature Aging

BY JANE KENDALL





# In the right hands,

plastic surgery is both a complex discipline and a subtle art. The ancient and sometimes suspect practice, which took a quantum leap forward in the first decades of the twentieth century, is by definition the very essence of creativity. With a knowing eye, deft hands, and skills both learned and innate, plastic surgeons can perfect that which nature made imperfectly. They can accomplish Einstein's dream of manipulating time and undo the inexorable drag of the years on muscle and flesh. And when a plastic surgeon of national renown, like Greenwich resident Darrick "Rick" Antell, takes identical twins whose faces have aged differently and restores them to the mirror-like similarities of the past, it can seem miraculous.

"Plastic surgery has nothing to do with plastic as we think of it today," Dr. Antell is quick to point out. "It comes from the Greek word *plastikos*, which means to mold. What we do is mold tissue."

Plastic surgery predates Hippocrates. Descriptions of procedures have been found in papyrus writings dating back to 3000 B.C. Modern plastic surgery, which often combines both cosmetic and reconstructive skills, was born in the trenches of World War I. Young doctors inexperienced in battlefield medicine struggled with old techniques and gave birth to whole new areas of medicine, including dental and plastic surgery, with the emphasis on repairing jaws and faces savaged by shell and machine gun fire.

"In trench warfare," Dr. Antell says, "the soldiers looked up over the trenches and were hit in the face." All that many people know about plastic surgery is from *Nip/Tuck* (the cable television series about two wildly dysfunctional Miami surgeons), he says, "so you have to educate them about World War I and

the injuries, and how it came to be the way it is."

A quick explanation: Plastic surgery includes reconstructive surgery, which Dr. Antell defines simply as taking someone and basically getting them back to normal; and cosmetic surgery, which is taking someone who is basically normal and improving their appearance. (While cosmetic surgery is not covered by health insurance, reconstructive surgery, theoretically, is.)

Dr. Antell maintains a busy Park Avenue practice in New York and teaches at Columbia University. He is a devoted family man to wife Lisa and their four children. When they used to vacation on Fisher's Island, he volunteered as a general practitioner and would be given vegetables and fruit by patients in return. A lifelong believer in giving back, he has treated patients from Kuwait, Egypt and England as a medical consultant in plastic surgery to the United Nations, operated on victims of the August 2003 terrorist bombing of the UN headquarters in Baghdad and is involved in Operation Smile, which provides free reconstructive surgery to inner-city children in the New York metropolitan area..

His groundbreaking study on aging and identical twins, which concluded that lifestyle and environmental factors were the most significant contributors to premature aging, was sparked by conversations with his patients. "I think I'm probably best known for face-lifts," he explains, "and patients always ask, 'How long will my face-lift last?' When I say, 'forever,' they look confused. So I would say, 'If you had an identical twin that had not had surgery and you had, you would both continue to age, but obviously you would always look better than your twin.' We can push the clock back but we can't stop it — the clock keeps ticking."





Dr. Antell and some of the identical twins he's operated on were featured several years ago on *Good Morning America* with Diane Sawyer.



*Above:* This woman smoked for thirty years, while her identical twin with a more youthful face (*above right*) never smoked.

*Right:* Excess exposure to sun, plus smoking and stress, made this twin look much older than her identical twin sister (*far right*).







*Above:* These identical twins are shown after both had been given face-lifts by Dr. Antell.



*Right:* The same twins photographed before Dr. Antell operated on them



*Below:* This woman, a U.N. employee from Ethiopia, was injured in 2003 when a truck bomb exploded outside her Baghdad hotel. Her facial scar almost disappeared after Dr. Antell's reconstructive surgery.





"I thought it would be interesting to see what would happen if I operated on one twin and not the other, which was why I initially went to Twinsburg," he says, referring to the annual Twins Day Festival in Twinsburg, Ohio. "So I went there with photo equipment and questionnaires and set up a research booth." Over the next two years, Dr. Antell conducted intensive interviews, reviewed hundreds of photographs, and performed face-lifts on selected twins so that they again looked like their siblings.

"How Environment and Lifestyle Choices Influence the Aging Process," was published in 1999 by the prestigious medical journal *Annals of Plastic Surgery*. "When one identical twin looks noticeably older than the other," Dr. Antell has said, "only external factors can account for the differences in appearance." (He also presented the study at a national plastic surgery conference in Newport, Rhode Island, and at an international conference in Venice, Italy.)

"When I got back to New York that first year," he says, "I was struck by how different some of these twins looked in the pictures." Perhaps the most stunning case is that of Gay and Gwyn, two women approaching sixty; both had strong features, luminous dark eyes and short, similarly cut iron-gray hair, but their photographs eerily resemble "before" and "after" shots of the same woman. Gay had been a California sun worshipper for three decades, smoked a pack of cigarettes a day for four years, used marijuana heavily for seven, drank socially for ten years, and had undergone the horrific stress of losing a child to leukemia. Gwyn had lived in Maryland with moderate sun exposure, never smoked or drank, and had not had as stressful a life; as a result, she was free of Gay's pronounced wrinkles and leathery skin. Even more telling were Kathleen and Karen, two Maryland-based twins in their fifties with comparable lives and lifestyles: Kathleen looked noticeably older; the only difference between them was that she had smoked for thirty years. (She has since quit.)

"This is a good story to get people to stop smoking," says Dr. Antell. "You can tell people about their lungs turning black until you're blue in the face. You tell them they're going to look older? It's a much better sell."

Through his research Dr. Antell was able to pinpoint three factors that he calls "the three Ss" — smoking, sun exposure and stress — that impact on premature aging. "This is really the first study of its type," he says, "that documented the effects of nature versus nurture. We're all going to get old anyway, we can't do anything about that. But this study conclusively proved that you can affect the rate at which you age. Nature is highly overrated," he says with a distinct twinkle. "I think we can control about 80 percent of how we age by healthy lifestyle choices and by doing all the right things Mom always told you to do: don't smoke, eat right, exercise and get good sleep."

reverse face-lift technique, taking all the skin from her neck and moving it up. This is why reconstructive surgery and cosmetic surgery blend together. She really had a face-lift but for a different purpose."

As for the effects of stress, Dr. Antell confirms that one can indeed "turn gray overnight," or at least within months. "What happens with stress is what's called the fight or flight mechanism," he says, "that shunts all the blood away from the perimeter to your brain and your central organs. And the blood is being shunted away from the scalp over time. So that's one aspect of stress. You also tend to tighten the muscles in the forehead and between your eyebrows with stress. It's like a tin can in that if you bend it enough times, eventually it will crack."

For someone with a national reputation — his work has been written about in such diverse publications as *People*, *Town & Country* and *Vogue* magazines

## What we see in a face of a smoker is a window to what's happened inside.

Dr. Antell has said of cigarettes, "What we see in a face of a smoker is a window to what's happened inside." Damage caused by sun exposure is arguably better known today than ten or even five years ago, although a large part of the reconstructive work Dr. Antell does is related to skin cancer. Perhaps his most shocking case was that of a woman who had, through a terrible and sad kind of denial, allowed a basal skin cancer to grow over much of her face. "The hardest thing was that it encroached onto her eyelid," he says soberly. "We rebuilt both the inside and outside of the nose. The reason I point this out is because we used basically a

and the *Wall Street Journal* — Rick Antell is also about as down to earth as it gets, perhaps a reflection of his Norman Rockwell childhood in Cleveland, Ohio, the son of a dentist. Plastic surgery has its origins in dentistry, and Dr. Antell earned a DDS at Case Western Reserve University before attending Medical College of Ohio.

"While I was in dental school," he says, "I met Clifford Khein, who was a well-known plastic surgeon, and I started following him around. I really got interested, so I applied to medical school knowing that I wanted to be a plastic surgeon." Then came internship and residency at Stanford University,

where he met Lisa (who also has a medical degree but these days concentrates on the family), then to New York Hospital/Cornell University Medical Center for training in his specialty.

"As a kid I was very finicky, very detail oriented," he says with a grin. "I was always straightening up without thinking about it, so I liked the precision of plastic surgery. Having gone to dental school first was really helpful; it's terrific training in using your hands. When I started practicing, I did a lot of jaw reconstruction because of that —the kind of surgery where you cut the bones and reposition the jaw. Today, with what's called rigid fixation, we put tiny little screws and plates in. It's all through the mouth, and it shortens the recuperation process because you don't have to wire the jaw." In some cases, the patients can open their mouths right after surgery.

"You know," Dr. Antell says, "in some ways my life has been a series of lucky accidents. Years ago I was playing baseball with my buddies, and the kid who was at bat wasn't hitting much, so I was getting kind of bored out in right field. There was a fly buzzing around my face, and I took my glove and went to swat at it ... and the ball landed right in my glove. Everyone was applauding and saying, 'What a great catch!' If I'd been one foot over, the ball would have hit me right in the head.

"Another example? Shortly after I started my practice, New York Magazine came out with one of their Best Doctors lists. Now they do them all the time, but back then they only did them every ten years so it was a big deal. I wound up on the list for breast reconstruction, so I started doing more and more of them. As a practice develops, you do more elective surgery, and that's cosmetic surgery, which is the bulk of what I do at this point."

A successful plastic surgeon must be part diplomat, part father confessor and above all, kind. "Everyone's got their

own deal," Dr. Antell says bluntly. "Sometimes we'll see someone with a very minor deformity, but they are very concerned about it. If you can make that a little bit better and help them, that's fine. We sometimes refer to it as surgical psychiatry. After surgery, they stand a little straighter, their chins up in the air instead of down on the floor, they feel better about themselves. No matter how much we want to deny it, people do judge a book by its cover. It can even have an impact on survival, like the animal kingdom where symmetry is important. A cleft lip, for example, is not symmetric,

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and in some cultures those people used to be killed at birth. And plastic surgery was considered a dark art because to change something like a cleft lip was going against the will of God.

"There's plastic surgery that changes the way you look," he continues, "like taking a bump off someone's nose, and there's plastic surgery that makes you look more youthful. I've had surgery, I'm happy to say, and you can quote me. I had my eyelids done over twenty years ago. I had bags of fat under my eyes that were driving me crazy. Everyone always thought I looked tired when I wasn't. I just got tired of hearing it. I'd get a good night's sleep, and I'd go to work and someone would ask, 'Were you out late last night?' I'm self-employed, but what if you had an employer? What sort of subtle message would that send?

I mean, we've all been there, where you get a new blouse or a new tie, and you just feel better. You really can help people, and as a doctor that's what it's all about."

Dr. Antell also cheerfully admits to having used Botox, which he deems "the greatest thing since sliced bread." "When Botox was first used," he says, "it was primarily in ophthalmology, for things like twitchy eyelids. When you get really tired, your eyelid twitches, and in some people it twitches all day long. When Botox was used for this, people noticed that their crow's feet went away, so they started applying it for other uses." Botox is most commonly used to relax deep worry lines between the eyebrows. "I had it done because when I looked in the rearview mirror of the car, I looked angry," he says, laughing. "I saw these two number eleven signs. Botox has been used for back pain, when your back goes into spasm, and it's been shown in retrospective studies to be extraordinarily effective on migraines. The downside is minimal as long as it's properly administered."

Which segues neatly into Dr. Antell's concern that patients should know what they're getting in a doctor. "If you're going to have plastic surgery, the most important part of getting a good result is the surgeon you choose," he says firmly. "Not only should you check that they're board certified, you should check what they're board certified in. Legally, you can call yourself anything you want to, even in a specialty; I could call myself a neurosurgeon and do neurosurgery, even though I'm not trained in it. People know the buzz phrase 'board certification,' but they don't take it to the next level. And this is one area in life where it pays to pay retail — you can't take it back, like a pair of shoes.

"Unfortunately, for some people, plastic surgery is that which you can see," he concludes. "Well, it shouldn't show. The good results should be those you're not aware of. I always say plastic surgery should whisper, not shout."