

Newslinks for the week of April 14<sup>th</sup>:



## A New Reason to Frown

Does Botox get into the brain? Troubling research contradicts earlier findings about the treatment.

By [Sharon Begley](#) | NEWSWEEK

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The way it usually works is, the rats and mice die first. Or at least get sick first. Or at the very least, show some adverse effect first—as in, before people do. The reason countless lab animals have given their lives during the testing of experimental drugs is to allow manufacturers and regulators to see that a compound might be toxic, even deadly, before millions of people use it. And if the compound does look a little dodgy, the lab-animal tests uncover the reason—how the compound affects the liver, say, or reaches the brain. Not surprisingly, these "preclinical tests" (that is, those performed before testing on humans) were especially rigorous for botulinum. One of the deadliest poisons in nature and a possible bioterrorism agent, this neurotoxin reached the market, in very dilute doses, starting in 1989 as [Botox](#). A big reason Botox and its cousins, such as [Myobloc](#), were OK'd was that preclinical testing showed that after being injected, they did not travel along the body's highways—nerve cells—to the brain and spinal cord. Yes, there was some evidence the toxin slipped into the bloodstream or the lymph system, but Botox in the bloodstream cannot enter the brain, says its manufacturer.

Oops. In a reversal of the usual sequence in science, researchers have discovered, after millions of people have received the drug, something fundamental about how Botox can act. Contrary to what turned up in preclinical testing, botulinum toxin can travel along neurons from the injection site into the brain, at least in lab animals. Researchers at Italy's Institute of Neuroscience injected rats and mice with botulinum neurotoxin A in doses comparable to those used in people. (Strains are named A, B and E, depending on where the common soil bacteria that produce them live; A is Botox, B is Myobloc, which is used for severe back pain.) Neurons at the injection site—the whisker muscles—absorbed some of the toxin and passed it along to other neurons they connected to, the researchers report this month in *The Journal of Neuroscience*. Within three days, the toxin had migrated from the whisker muscles to the brainstem,

where it disrupted neuronal activity. "The discovery was quite serendipitous ... and surprising," Matteo Caleo, who led the study, told the journal *Science*. "A significant portion of the toxin is active where it's not intended to be."

That stands in contrast to the findings of earlier studies, which suggested that the neurotoxin is completely broken down at the injection site into innocuous compounds and does not migrate beyond it—or if it does, only into the bloodstream or lymph system. Botox's manufacturer, Allergan, thinks those older studies are more credible. "This study is not conclusive," says spokesperson Cathy Taylor, "and other published studies using botulinum toxin type A contradict these findings." Contrary to Allergan's statement that the Italian scientists "injected the material directly into the brain," however, they injected the neurotoxin into facial muscles—and from there it found its way to the brainstem. "This is a new pathway, and we need to think about the implications of this," says Edgar Salazar-Grueso, chief medical officer of Solstice Neurosciences, which makes Myobloc. The new study, he says, means the original preclinical testing of Botox and its cousins "can be interpreted in a different light."

Something else that can be seen in a different light is the hospitalizations and deaths that have been reported following Botox injections. In 2005 scientists at the [U.S. Food and Drug Administration](#) analyzed 1,437 such "adverse events" between 1989, when Botox was approved for eye spasms, and 2003. Most came from people who got Botox to erase their wrinkles, but the 28 deaths occurred in people who had received it for medical purposes. The FDA didn't do much in response, but since then it has been getting new reports of serious adverse reactions in people receiving Botox, and launched a safety review. An analysis of the FDA's database by the advocacy group Public Citizen found 16 deaths from Botox or Myobloc. Most involved children with serious diseases like cerebral palsy, who got the injections for muscle spasms (an unapproved, though legal, use). But the agency has "evidence that [serious reactions and even death] can happen in a broader population," said the FDA's Russell Katz. "Is it possible with cosmetic use? Possibly."

Those unapproved uses are another concern of the agency. Last month Allergan revealed that federal prosecutors were investigating it for promoting the non-FDA-approved use of Botox for headaches, though doctors are free to prescribe a drug as they see fit. Allergan says it's cooperating.

Botox and Myobloc carry labels warning of possible adverse reactions near the injection site such as drooping eyelids, and of severe difficulty swallowing in patients with neuromuscular disorders. The FDA's Katz said that people getting Botox for cosmetic reasons should "make their own personal best judgment about this" and "be aware that there's the potential for" the neurotoxin to spread. With the new evidence that Botox can spread to the brain in ways that preclinical tests failed to turn up, it's enough to bring back those Botox-erased frown lines.

## Everybody's Talkin' About Plastic Surgery

Verena von Pfetten | April 15, 2008 03:14 PM

It's no secret that celebrities (gasp!) have plastic surgery, but it does seem like people are getting pretty darn sick of it.

In an article from this Sunday's *LA Times*, Mary McNamara [writes](#) :

To avoid those angry denials through publicists, and to appear above the proletariat fixation with appearance, mostly we in the mainstream press say nothing. Or rather we say nothing in print and then run into our editor's office to say what everyone else across the country is saying: "Oh, my Lord, did you see what she did to her face?"

Me, I think it's time to come clean. If cosmetic surgery and other age-battling or appearance-altering procedures are part of the zeitgeist, then we need to figure out a way to discuss it critically without seeming like we are engaging in some form of gotcha.

Beyond being able to write about celebrity surgery, she asserts that:

Television is a visual art, and if people are going to significantly alter the way they look in ways not directly connected with the roles they are playing, it can affect not only their performance but the whole tone of the show.

So you tell me, what is a critic supposed to say when part of the problem with a show is that the leading lady's face seems incapable of movement or her eyes appear to be moving toward the sides of her head or her lips just look weird?

*Should* critics be able to critique actors who's surgical endeavors are not only a distraction but a liability to the film? Nicole Kidman's turn in *Invasion*, the alien invasion flick she co-starred in with Daniel Craig, was admirable, but less so, however, for her acting skills and more so for the blessed coincidence that her artificially frozen forehead enabled her to oh-so-easily blend in with the emotionless alien drones she was trying to avoid.

In any case, McNamara's thoughts proved to be timely, as this week's issue of *Newsweek* features an [article](#) on some newly discovered dangers of Botox, namely it's tendency to leak into one's *brain*.

But, according to the Telegraph, there's been an almost-seismic boom in [male plastic surgery](#), thanks largely in part to such imitable alpha-males as Nicholas Sarkozy and Michael Douglas.

But lastly, and most importantly: What are your thoughts? Who do you think has the worst plastic surgery? Would you ever have plastic surgery? Please tell us your thoughts!



## Better Than Botox?

Posted: April 17, 2008 12:16 PM EDT

By, KOLD News 13 This Morning Anchor/Reporter, [Jenny Anchondo](#)

In the world of youth enhancing and anti-aging, there is a new face freezer.

GFX, is a minimally invasive procedure to reduce or get rid of frown lines and it could be an alternative to Botox.

50-year-old Leslie Graff said after having GFX, nobody believes she is 50 years old.

"Really, seriously, I just have a lot more confidence because I just look so much better," Graff said.

GFX took away the frown lines in between her eyes.

"I mean, I'm looking at my friends and I'm like, seriously, you need to do this," Graff said.

Plus, if her friends are already getting Botox, which lasts about three months, this can save time. GFX lasts up to 18 months.

Under anesthesia, Board Certified Plastic Surgeon Gwen Maxwell uses a dose of radio frequency to target motor nerves through a needle near the eyebrows.

You may remember the 2004 case of a Tucson couple accused of selling an unapproved Botox knockoff to more than 200 doctors. Four patients, including a Florida doctor were temporarily paralyzed from botulism poisoning.

Dr. Maxwell said if you want an alternative to Botox, this is it.

However, if you desire a "frozen" look, GFX isn't for you, Maxwell said.

"You can still kind of move your eyebrows, so you have more of an expression than you would if you were to have Botox," Graff said.

Mild bruising and swelling from GFX lasts three to 10 days.

Essentially, Botox and GFX cost the same. Botox costs about \$1600 per year and GFX costs 2,220 and can last 18 months or more.

"There is no reason why, as an older person you have to look old- you don't, you can look young and beautiful," Graff said.



## Kids' book explains mommy's plastic surgery

April 17, NEW YORK (AP) — Divorce. Bullies. Foster care. There are books for children on just about every tough subject these days. But mommy's plastic surgery?

A Florida plastic surgeon has written about just that in *My Beautiful Mommy*, a picture book due out April 28 that tries to calm the fears of kids with parents getting tummy tucks, breast enhancement procedures and nose jobs.

Dr. Michael Salzhauer said so many moms brought kids to their appointments that he was motivated to stock up on lollipops in his Bal Harbour, Florida office. In *My Beautiful Mommy*, he explains mommy's recuperation, changing look and desire for plastic surgery.

"Many parents don't explain to their kids what's going on," said the father of four, with his fifth child on the way. "Children are very perceptive. You can't hide a major surgery from them. When mom goes down for two weeks after a tummy tuck it affects them."

Illustrations show a crook-nosed mom with loose tummy skin under her half shirt picking up her young daughter early from school one day and taking her to a strapping and handsome "Dr. Michael."

Mom explains she is going to have operations on her nose and tummy and may have to take it easy for a week or so. The girl asks if the operations will hurt, and mom replies, "Maybe a little," warning she will look different after the bandages come off.

The girl asks: "Why are you going to look different?"

Mom responds: "Not just different, my dear — prettier!"

Big Tent Books in Savannah, Georgia is racing the book out after the Internet lit up Wednesday with word of its upcoming release. The initial 4,400 copies will be available for purchase only through the website of the company, which provides editorial and publishing services to picture book authors for fees.

Salzhauer acknowledges the subject matter may seem distasteful to some.

"There are people who are going to read this and say 'You're indoctrinating kids and idealizing beauty.' That's not the intention of the book at all," he said. "The intention is to allow parents who are going through this process anyway to have a vehicle to explain it to their kids."

Diane Kuplack understands.

At 37, Kuplack has six biological children under the age of 12, including 5-year-old twins, along with two older stepchildren from her husband Matt's first marriage. She said it was "nerve-racking" trying to decide what, if anything, to tell her children about the breast implant surgery she scheduled for Friday.

Kuplack, who lives in Weston, Florida, and is a patient of Salzhauer's, read the book to her children.

"The older ones loved it," she said. "We were nervous that if we didn't say anything at all that they would notice I look different when I came home. It really helped them understand because it explains everything so well. They didn't have any questions after that."

The book, told from the perspective of the school-age daughter, has the groggy mommy home from the hospital the day after her double surgery, sitting up in bed sipping chicken soup with grandma helping out. Soon mommy is out of bed but still not able to do any heavy lifting, so the girl and her big brother pitch in around the house.

At the breakfast table, the girl tells mommy how she is learning about butterflies at school and mommy laughs that her bandages make her feel like a cocoon.

Then the big day arrives — mommy's bandages are gone and illustrator Victor Guiza lights up the new and improved mommy with a sparkly princess pink background.

"Mommy, your eyes are sparkling like diamonds," the girl exclaims. "You're the most beautiful butterfly in the whole world."

Jerry Seltzer, general manager of Big Tent's parent company, Whimsical LLC, sees the obvious niche for *My Beautiful Mommy* in plastic surgeons' offices and among moms undergoing cosmetic procedures. He admits he initially wondered about the content.

"I thought, 'Gee, mommy looked awfully good before the surgery.' But I felt confident because it was appropriate for the market," he said. "Women are out there getting the surgery."

Salzhauer said he performs about 200 tummy tucks and breast procedures a year, the bulk on mothers. The American Society of Plastic Surgeons, representing most of the nation's board-certified surgeons in the specialty, reported nearly 348,000 breast augmentation procedures and 143,000 tummy tucks on women in 2007.

"My patients do worry about their children when they're going through this," Salzhauer said. "The book just goes toward trying to make the process as understandable as possible for the kids, so they can feel included and don't have to make things up in their minds on what's going on."