

# A Prick of

5 individuals experience Botox benefits that go beyond the cosmetic



ne can only commiserate with dry fruits wholesaler **Kanhialal Shah's** predicament. Blinded in his right eye at birth, he relied on his left eye to carry him through life. Two years back he developed a twitch in that sole eye which set off a rapid fire blinking spree — non-stop. “Initially it was just an irritation, something for people to comment about,” says this portly 56-year-old, who is also battling heart disease. “Then it started affecting my ability to function, at home and at the office.” The blinking was so persistent, that Shah found his eyes were shut more often than they were open. “I had trouble crossing the road, couldn’t read the newspaper, interacting with customers became difficult. I was almost *blind for all practical purposes*”.

# Relief

Consultations with ophthalmologist proved futile.

In August 2006 Shah (*below*), persuaded by his son, submitted himself to a last resort eye check up. That was when he received his first flicker of hope — and a diagnosis — from Dr Debraj Shome, ophthalmic and facial plastic surgeon at the Aditya Joyt Eye Hospital Pvt. Ltd. Shah had



Kanhialal's left eye before and after Botox

what is termed in medicalese as Benign Essential Blepharospasm. The symptoms of this condition are as common as sensitivity to light, difficulty in keeping the eye open, and frequent involuntary twitching — which one would attribute to stress or allergies.

Though the exact reason for the disorder is not known, according to Dr. Shome, it is believed to occur as a result of "abnormal functioning of the basal ganglia". The basal ganglia is a bunch of nerves situated

at the base of the brain "that plays an important role in all coordinated involuntarily muscle movements." The cure for Shah's condition — and there was one, albeit temporary — was surprisingly simple and non-invasive — a shot of Botox.

## HOW BOTOX WORKS

Botulinum toxin is a nerve poison produced by the bacterium that causes botulism, a potentially fatal form of food poisoning.

Ingestion of sufficient amounts of the toxin can cause death by paralyzing the muscles that control breathing, "but the drug Botox does not pose a danger," says Dr. Nina Madnani, Head of Department of Dermatology at P.D. Hinduja Hospital, "because it contains only minuscule amounts of the toxin in a highly purified form, and it does not spread throughout the body."

Although Botox is more famous today for its wrinkle erasing properties, it was originally approved a decade ago by the US FDA for alleviating nervous twitches of the eyelids (such as Kanhialal's), crossed eyes, and, recently, a movement disorder marked by severe neck and shoulder spasms. For several years, doctors have also used Botox to treat such conditions as migraine headaches, chronic low-back pain, and excessive sweating.

"When Botox is injected into the muscle surrounding the eye it blocks the action of acetylcholine, a naturally occurring chemical, and thereby interrupts the transmission of nerve impulses that signal muscles to contract," says Dr Shome.

"The distance between the muscle that keep the eyes open and the ones that shut them is just 0.3mm, so precision is

essential or it could cause stiffening or an eyelid droop, with clown like results". The side effect is temporary but it would mean 6 to 9 months of misery.

"Botox's biggest plus — apart from its non invasive characteristics — is that it requires almost no recovery time, permitting normal activities to resume almost immediately" says Dr.Shome. No systemic anesthesia is required.

55-year-old Kaushalya Khanvilkar (*right*) was stricken with the same condition as Kanhialal in 1996. Fed up with fruitless visits to various eye specialists, she had resorted to the desperate measure of using duct tape to keep her peepers open "because when my only son was out of the house, I was totally helpless," she recounts. But the discomfort of duct tape was as much of a nuisance as being (nearly) blind. Khanvilkar "saw" a shred of hope at last when her son took her to Dr Nirmal Surya, a Neuro Physician who runs the Surya Neuro Centre on Marine Lines.



Kaushalya without duct tape post Botox

The Botox procedure took barely 10 minutes — "all I felt was the sting of an ant bite for a couple of seconds, and it was over." Khanvilkar saw results within 7 to 14 days. But the miracle was that the 55-year-old only needed a total of 3 injections — in 1996, 1997 and 2003 — to achieve a cure. "Hers is one of those rare cases where repeated Botox injections have caused the problem to vanish," says Dr Surya.

## IN A SPASM

Rita Shah, 45 years old, mother of two and a homemaker residing in Borivili, developed a problem that was as baffling as it was embarrassing. It happened 13 years ago. "All of a sudden I observed a few lines framing my mouth. I thought I was developing early wrinkles except they were only present on the left side of my face. Then I began experiencing weird sensations — a tightening of the facial muscle, a persistent twitching." Rita's distress became acute as time passed and the condition refused to go away. None of the doctors she sought out could give her a solution — or even an explanation.



"A face conveys to the world some part of the person you are, and a facial twitch can unsettle anyone," she says. Rita hid out at home because she "did not want to face the world with a distorted face."

Dr Surya explains, "Spasms can take place due to certain abnormalities in the seventh nerve (which is associated with the movement of facial muscles) like when a blood vessel puts pressure on it."



Rita before and after Botox

Rita (left) has been taking Botox injections every six months for the past ten years. After the shot, she experiences a heaviness on the left side of her face for about two hours. Over the space of a week the twitching relaxes and her face regains a natural look. When she smiles or talks, both sides of her face are in sync, i.e till the effects of the Botox lasts.

The shots cost Rs 5000 a dose but she plans to continue with the treatment "as it is my only option."

### JUMPING THE LINES

Julian Fernandez (below) used to teach French to US army cadets. It's been her profession for over 16 years and she now



Julian's creases eased out

takes tuitions in foreign languages. Years of frowning down on errant students had etched deep trenches across her forehead and between her brows. "Disgustingly the lines remained even when I was laughing at a joke that a student cracked," she rues. The grim expression did not help in social encounters elsewhere. "At

parties, my facial reactions belied my feelings all too often."

Dr S S Trasi (Trasi's Clinic) diagnosed Julian's wrinkles as that of the "static" variety. "Aging isn't the only cause of wrinkles," explains Dr Trasi. A lifetime of laughing, frowning and other expressions can leave their track record behind. "In their initial stage the wrinkles are dynamic — i.e they are still superficial, can be erased," says Dr Trasi. However, after years of repeated scowling, the lines become deeply entrenched.

Cornea, cataract and refractive surgeon at Aditya Jyot Eye Hospital, Dr Vandana Jain's quandary would have been funny were it not serious: Her patients always expected the worst possible news from her. Why? Because of the permanently anxious look on her face caused by the vertical grooves between her brow. "They (the patients) would assume there was something worrisome in their reports. Even when I told them things were fine, they were not quite convinced I was on the level," reminisces Dr Jain ruefully. One day a patient asked her straight off: "Doctor, why do you frown all the time?" That was when Jain (right) realized that it was the frown lines that were bothering her patients. An acquaintance told her that lines develop because of stress and yoga could help, so Jain took up a class. "They said breathe in, breathe out, your stress

### BOTOX RISKS

About 1% of patients treated for wrinkles on the forehead or between the brows develop a headache shortly afterward. Other rare and transitory problems that may occur include a lopsided smile or drooling around the mouth; respiratory infection, nausea, or flu-like symptoms; and pain, redness, swelling, or bruising at the injection site. Patients taking anticoagulant or anti-inflammatory drugs are vulnerable to bruising and bleeding. A small percentage of patients do not respond to Botox, and individuals with neuromuscular disorders such as myasthenia gravis should not be given the drug. Perhaps most important, overuse or poor administration of Botox can produce a mask-like appearance in which the face loses its normal expression and looks immobilized.

Finally, some people may produce antibodies that cause them to become resistant to Botox after repeated injections. These individuals may respond to a slightly different type of the toxin, called botulinum toxin B (Myobloc). Myobloc is currently approved only for the treatment of neck and shoulder spasms but can be used off-label for cosmetic purposes.

If you are thinking of undergoing Botox therapy, be sure to inform your doctor in advance about any drugs or supplements you are taking. Certain antibiotics, anti-inflammatory drugs (including aspirin), vitamins, and herbs may raise the potency of Botox and increase the risk of bleeding and bruising after injection. Once Botox has been injected, do not lie down, lean over, or engage in strenuous activity for six hours to prevent the toxin from sweeping into adjacent tissues and inadvertently paralyzing other muscles. Avoid Botox if you're pregnant or nursing.

will ease away and so will your wrinkles," recalls Jain. No such magic took place.

One fine day she ended up discussing the problem with her colleague Dr Debraj Shome and learned about the Botox effect.

When Botox is injected into the facial muscles that give rise to wrinkles it temporarily paralyzes these tissues. The initial cosmetic impact is usually noticeable within 1 to 3 days, but the maximum effect may not be achieved for about a week. The antiwrinkle effects wear off gradually but are likely to persist for 3 to 6 months. It has also been suggested that they may linger slightly longer after several treatments.

Within a week of taking the injection Dr Vandana Jain's frown lines reduced to the extent that they now appear only when she is actually frowning and not all the time. "When some of my old patients or friends meet me they are surprised at the transformation. They ask what's keeping me so happy these days. I tell them it's Botox." Shah plans to stay with the treatment "as long as it helps me, as I really like the way it has changed my expression for the better."

As for Julian, "After speaking with her I realized that while teaching she used her facial muscles extensively and also tended to frown when engrossed in her thoughts," says Dr Trasi. Julian had developed creases not just on her brow but also around her nose and eyes.

Botox smoothed out her creases as well and "made me look the 30 years that I am instead of the 40 I appeared."



Vandana's frown lines are erased

DEBJANI SENGUPTA