

A look at ten years of botox

MARIANNE POWER - 27th July 2004

What began as a scientific accident has become the medical and cosmetic phenomenon of the decade. Once the preserve of the rich, Botox is celebrating its tenth birthday in the UK and is used by around 100,000 Britons a year.

Botox is a trade name for a substance called "botulinum toxin A", a toxin secreted by the bacteria that causes botulism, which has the power to paralyse muscles.

How does it work?

When injected into the body, Botox stops the messages between nerves and muscles, so that the muscles in injected areas do not move. Its power to paralyse overactive muscles, which cause spasms, has made it a treatment for a huge variety of conditions - ranging from headaches, cerebral palsy, sweating and, of course, wrinkles.

When was it first used medically?

The toxin was developed for biological warfare in 1946 by Dr Edward Schantz in the U.S.

It was considered too volatile for army use, but he found that when he injected it into a patient with neck muscles in spasm, the activity stopped. In 1962, American doctors started using it to treat twitchy eyes, then noticed that in the process, crow's feet vanished.

When was it first used in the UK?

Used for more than 20 years in the U.S., Botox became licensed for medical use in the UK ten years ago, in May 1994.

It was first used to treat uncontrollable facial spasms and blinking. In July 1997, it was licensed for use in patients with cervical dystonia, which causes muscles in the neck to contract.

It was also around this time that it became clear Botox could help control spasms of cerebral palsy and by 2002, research suggested almost 50 per cent of children with the condition would benefit.

Dr Charlie Fairhurst, from Chailey Heritage in Sussex, was one of the first doctors in the UK to treat cerebral palsy children with Botox seven years ago.

"In children with severe disabilities which cause painful muscle spasms, Botox allows muscles to relax enough to help them walk, sit and stand comfortably," he says.

More uses followed. In July 2001, it was licensed as a treatment for hyperhidrosis - excessive sweating. The condition is caused by abnormal sensitivity to a chemical in the body that "switches on" sweat glands. Botox inhibits this chemical and the overactive glands become temporarily dormant.

Most recently, in 2002 Botox was licensed to be prescribed on the NHS for the 5,000 stroke sufferers a year who suffer limb spasticity - when muscles in the arms and legs become overactive. **How long has it been used cosmetically?**

Botox is not licensed in the UK for cosmetic purposes, so will not be available on the NHS in that context. But it is still legal for doctors to use it. Dr Patrick Bowler, of the British Association of Cosmetic Doctors, has been using Botox since it first came to the UK and even he is amazed at its popularity.

"At first, I was giving Botox to between five and ten patients a year," he says. "Now, I treat more than 200 a month. Ten years ago, when I tried to tell people that injecting poison into them would make them look younger, they laughed. "There is a huge amount of research to prove that it is safe and I have not seen any problems with Botox, except for when it was done inappropriately or by someone who was not trained.

"The forehead and frown lines are still the best area for Botox, but for the past five years we have been using it on the neck, and for headaches and sweating."

How is Botox used now?

The techniques for administering Botox have changed, according to Dr Bowler.

"Initially, everyone was cautious, but over the years the amount we inject has increased slightly and the technique we use has improved," he says. Needles are now sharper and more areas can be treated - over the past five years Botox has been used on the chin and around the eyes and in the past two years its use has spread to the neck and décolletage.

Dr Bowler has also discovered that injecting Botox into the brow relieves chronic headaches. He believes the frontalis muscle across the forehead is sometimes too tight, restricting the blood flow. Injecting Botox makes the muscle relax, relieving the pain.

Botox has now become so acceptable that men are having it, too. Cosmetic doctor Dr Jules Nabet, who has been using Botox for the past seven years and is a favourite among Hollywood actors and models, says 20% of his Botox customers are men, as opposed to 1% seven years ago.

He adds: "Botox is also being used at a younger age, sometimes as young as 23."

Are there any side effects?

A survey by the U.S. Food and Drug Administration says up to four in ten people who use Botox suffer side-effects, but cosmetic practitioners argue this is caused by inappropriate use or poorly trained staff.

They insist that although Botox is poison, it is injected at such a small level it can't be harmful.

However, there have been highprofile cases of people suffering droopy brows, such as Cliff Richard and PR guru Lynne Franks, who went on an aeroplane after treatment and discovered her right eyelid was drooping.

Botox advocates say these are rare, temporary reactions which are often caused when a patient's skin elasticity is so low because of ageing that Botox is inappropriate.

What is the future of Botox?

At a Paris conference a few weeks ago, the possibility of using Botox under the breast to improve uplift was raised. Medical research is indicating that Botox might also help treat a wide variety of conditions, from enlarged prostate to chronic pain and incontinence.

However, it is in the regulation of the industry that Dr Patrick Bowler hopes to see the greatest changes. He hopes there will eventually be a body regulating all practitioners, stopping untrained staff injecting the toxin.