

LEGEND HAS IT



WE TALK TO THE FIRST LADY OF BOTOX®, JEAN CARRUTHERS

Jean Carruthers is very modest and unassuming for a woman credited with changing the face of the beauty industry. The softly spoken Canadian doctor is in the UK for the FACE conference, where she is due to run a workshop and speak about the drug that has made her famous – Botox®.

Despite only landing a few hours ago, Dr Jean Carruthers has been seeing journalists back to back from the comfort of her suite at the Melia White House Hotel.

It is no surprise that the press are queuing up to meet the women who discovered that injections of botulinum type A could erase lines and wrinkles. Since that discovery in 1987 the treatment has become a billion dollar global phenomenon and the word 'botox' has become a household name. But far from being arrogant about her role in the birth of Botox®, Dr Carruthers is matter of fact when she tells the now legendary story of how it came about.

In 1987 Dr Carruthers was working as an ophthalmologist treating pediatric disorders as well as adult conditions such as blepharospasm. She shared her office with her dermatologist husband Alastair who, at the time, was dividing his practice between surgery for skin cancer and cosmetic

dermatology. Jean was using a form of botulinum toxin type A known as Oculinum, to treat strabismus (misaligned eyes). She had learned about the technique years earlier from scientist Alan Scott who had first discovered its effects on the condition after carrying out tests on cross-eyed monkeys, and had since been involved in a multi-centre worldwide study to look at the drugs effects on blepharospasm.

"After the study one of the dystonia patients I was treating got very angry with me", she remembers. "She came in to see me and pointed to her forehead and said 'you didn't treat me there'. I said 'I'm so sorry I would have treated you there but I didn't think you were spasming' then she looked at me and said 'I'm not spasming its just every time you treat me there I get this beautiful untroubled expression! I wouldn't have seen that as being a really important comment except for my husband was a dermatologist and he had told me how difficult it was to treat people with deep frown lines with the fillers that were then available."

At the time all cosmetic dermatologists had at their disposal in terms of non-surgical options were collagen and fat injections, but these had their drawbacks, as Dr Carruthers explains. "It was kind of nerve

BOTOX® 20TH ANNIVERSARY

Allergan acquires rights to distribute Dr Scott's botulinum toxin type A, Oculinum.

1988

Allergan, Inc. receives approval from the Food & Drug Administration (FDA) for the name Botox® (botulinum toxin type A, Oculinum) and gets FDA approval to market Botox® for strabismus and blepharospasm (uncontrollable eye blinking) associated with dystonia.

1989

Botox® approved in the UK for the treatment of hemifacial spasm (a neuromuscular disorder characterised by unpredictable and involuntary twitching of the facial muscles on one side of the face) and blepharospasm.

1994

Botox® approved for the treatment of the symptomatic relief of idiopathic cervical dystonia in the UK.

1997

wracking area”, she says. “People wanted it treated but there wasn’t anything really good. There was really only just collagen and autologous fat and its actually quite dangerous if you inject fat into the forehead as it can migrate down into the eyes and damage your vision.”

When she went home to dinner that night Dr Carruthers had a conversation with her husband that would change both of their lives forever. She remembers, “I went home to dinner that night and spoke with Alastair about it and you have to remember that we had three little boys at the dinner table so it was chaos! I said to him ‘we should do a study with your patients and my Oculinum’ and that’s what we did.”

Next day, Jean talked their receptionist, Cathy Bickerton, into being their first guinea pig and once Alastair saw the results there was no turning back. The ‘genie was out of the bottle’ as he has been famously quoted as saying.

But it was not plain sailing from then on, the husband and wife team now needed to persuade their colleagues that their discovery was really something and find people that were willing to be injected with what they only knew as a toxic poison.

“You know when we were first doing our research it took us from 1987 to 1990 to persuade 30 people to have it injected because the reaction back then was ‘you want to inject what into my wrinkles?’”, explains Dr Carruthers. “We published our findings in the *Journal of Dermasurgery* and when we gave the paper at the annual meeting of the American Society for Dermatologic Surgery in Orlando in 1991 our friends all came up to us and said ‘that’s a crazy idea, that’s going nowhere’”.

But the skeptics would very soon be proven wrong as the Carruthers continued conducting clinical trials and presenting their findings and slowly but surely their audience began to grow.

“Alastair started giving courses at the American

Academy of Dermatology”, Dr Carruthers remembers. “It started small, first year there were half dozen dermatologists, then it was 50, then 500 – it just went like that. They just need to see one patient to know that it really worked. But people were nervous about it at first they were saying ‘isn’t that a poison?’. We had one dermatologist that came to seven of our courses before he finally got up the nerve to inject somebody.”

Since then it has been like a snowball effect and botulinum toxin has been used to treat millions of people around the world, making it by far the most popular non-surgical beauty treatment the world has ever seen.

“It was the start of a new era because suddenly you didn’t just have to have surgery”, says

Dr Carruthers. “Suddenly you could do all these wonderful things like lift brows, undo crow’s feet and relax lip lines without surgery.” Nowadays Dr Carruthers treats

very few ophthalmological patients and has dedicated her life to aesthetics. A qualified cosmetic surgeon, she specialises mostly in head and neck procedures and, along with Alastair, is considered to be one of the foremost and well-respected practitioners in the cosmetic surgery and medical aesthetics industries.

It is certain that neither of the Carruthers is ready to retire just yet as they remain as passionate and excited about their work as ever. However the pair’s strong partnership is a testament to their dedication to their home and family life, despite both being self-confessed workaholics. They have worked closely together throughout their careers, having written more than 100 articles in peer-reviewed medical journals, 60 book chapters, and five textbooks, but have been quoted as saying that they keep separate offices because they ‘want to stay married’.

Family is obviously very important to them both and Jean is said to treat her staff and patients like family, sending cards to her patients on their birthdays and greeting her employees with hugs. The staff at their

clinic are also given treatments for free so that they look good and can genuinely speak to the patients about the treatments they offer.

Dr Carruthers herself is an embodiment of the industry she so loves and looks much younger than her 61 years. She has famously boasted that she ‘hasn’t frowned since 1987’ and has talked openly about the treatments she has had including a face-lift, Thermage and IPL. Even in her casual attire, fresh off the plane, she has the air of a woman who takes care of her appearance and is immaculately made up. But while she encourages her staff to have the treatments themselves she believes that no one should be pressured into having treatment.

“As long as someone is over 18 and it is some thing that bothers them, and not their mum or their boyfriend, or someone else, then there is no reason they should not be treated”, she says.

Dr Carruthers is a firm believer in the preventative effects of Botox injections and in her experience says the treatment can really improve people’s quality of life, describing it as ‘penicillin for self-esteem’.

“Botox® absolutely has preventative effects”, she says. “There are some interesting studies that have been published about identical twins in *Plastic and Reconstructive Surgery* and its extraordinary to see two genetically identical people where one has aged so much faster than the other. People nowadays are working until they are a lot older and they want to look fresh not tired and groggy. There is a phrase ‘before you are 40 you’ve got the face God gave you and after 40 you have got the face you made yourself’ I think these treatments enable us to turn that a little further and say ‘after 40 you’ve got the face that you maintain’.”

It is clear that Botox® will always have a strong place in Dr Carruthers’ heart but what does she think about its biggest rival Dysport®, which has just received its cosmetic license?

“Botox® has always been the gold standard treatment that everything else has to match up to”, she says. “There are over 3,000 articles that have been written about neurotoxins now, most of them about Botox, so it’s the most researched and safe drug there is, certainly from the cosmetic point of view. I think it is going to be really exciting two or three years now that we have got more than one neurotoxin approved. Watch this space!”

“IT TOOK US THREE YEARS TO PERSUADE 30 PEOPLE TO HAVE IT (BOTOX®) INJECTED – THE REACTION BACK THEN WAS ‘YOU WANT TO INJECT WHAT INTO MY WRINKLES?’”

Botox® receives UK approval for dynamic equines foot deformity due to spasticity in paediatric cerebral palsy patients aged two years and older.

1998

Botox® approved for the treatment of axillary hyperhidrosis (excessive sweating) in the UK.

2001

Botox® receives UK approval for treatment of wrist and hand disability due to upper limb spasticity associated with stroke in adults.

2002

Vistabel® receives an aesthetic licence in the UK for the treatment of glabellar lines (brow furrow).

2006

Botox® celebrates its 20th anniversary. Over the past 20 years, the drug has been approved in more than 80 countries for 21 different indications. Vistabel® is now approved in more than 40 countries.

2009