Botox – **Not Just A Treatment For Wrinkles But A Versatile Product With Many Medical And Cosmetic Uses**

Botox is today well-known as a highly effective treatment for wrinkles and it did indeed take the facial rejuvenation industry by storm when it became generally available for aesthetic use, but what is much less known is that this iconic injectable product whose name is derived from the Latin word for a sausage has many other uses, both medical and aesthetic, ranging from being a treatment for chronic migraine to helping those who suffer from excessive sweating.

The now familiar trade name *Botox* is derived from the natural protein known as *Botulinum Toxin*, and medical use of this protein has a long and interesting history. It was a certain Doctor Justinus Kerner who in 1822 first conceived of the therapeutic use of Botulinum Toxin and coined the name *botulism* (from the Latin word for a sausage) for the related medical condition. He described it as a "sausage poison" because the bacterium that produces the toxin would often cause poisoning by growing in unhygienically handled meat products. But it was not until the late 1960s that doctors in San Francisco developed a standardized Botulinum Toxin preparation for therapeutic purposes. The cosmetic effect of the toxin on wrinkles was first documented in 1989 by Dr Richard Clark, a plastic surgeon from Sacramento in the USA, and thence began its ever-growing general use in aesthetic medicine.

But in addition to being a highly effective treatment for wrinkles, Botox has many other uses, both medical and cosmetic. Some of these are outlined here by Dr Allen Rezai, who is both a qualified Doctor of Medicine and an internationally renowned Plastic and Reconstructive Surgeon, a specialist in both surgical and non-surgical facial treatments. "Since 1989," says Dr Rezai, "Botox has in fact been approved for 20 indications in more than 75 countries and is prescribed to patients who suffer from a range of serious or debilitating disorders, as well as to those with cosmetic needs. In the UK, Botox is licensed for use in treating several therapeutic indications including those involving the muscles around the eyes, such as *blepharospasm*, an uncontrolled twitching of the eyelid, focal spasticity in paediatric cerebral palsy, upper limb spasticity in adult post-stroke patients, and also severe axillary hyperhidrosis, which in layman's terms can be simply stated as excessive underarm sweating.

"The use of Botox in the treatment of hyperhidrosis," explains Dr Rezai, " is a particularly interesting application that is far from obvious. In this treatment a small amount of Botox is injected into 10 to 15 places about 1 cm apart and spread evenly in each area. It actually works through blocking the actions of the nerves that supply the eccrine glands, thus preventing them from producing sweat. Botox blocks the nerve endings, but over about 4-8 months new ones will grow to replace them, and so repeated treatment is necessary to maintain the result. Nevertheless, it will typically last around 6 months before further injections are required.

"In my own practice," continues Dr Rezai, "I have also used Botox in the treatment of chronic migraine. It was licensed specifically for the treatment of this condition in 2010 by the UK Medicines and Healthcare Products Regulatory Agency, or MHRA. It is a particularly effective treatment that is generally well-tolerated."

"However in the world of aesthetic treatments, Botox was first granted a licence by the UK MHRA for the temporary improvement in the appearance of moderate to severe *glabellar lines*, which are frown lines occurring between the brows, in adult women and men aged 65 and younger. Indeed it is a highly effective treatment option capable of achieving a naturally refreshed and relaxed upper face rejuvenation that today so many people are seeking. And when administered by a qualified and experienced practitioner, it scores very highly when it comes to patient satisfaction," states Dr Rezai.

"Botox can also temporarily reduce or eliminate forehead creases, crows feet near the eyes and thick bands in the neck," explains Dr Rezai. "It works by blocking the nerve impulses, temporarily paralyzing the muscles that cause wrinkles whilst giving the skin a smoother, more refreshed and youthful appearance. It is suitable for both women and men who are not yet ready for forehead or brow lifts or other cosmetic and plastic surgeries to improve their appearance and who want a simple and fast procedure to eliminate wrinkles with little downtime and recovery period. An advantage of Botox treatment is that untreated areas of the face aren't affected, so you can still smile and frown, but the skin on the treated areas won't wrinkle as much as usual."

New uses for Botox are being found all the time. In fact a recent study by researchers at the University of Southwest Texas, Austin, announced in the *Dermatology Times* of April 1st, 2014, has found that botulinum toxin injections also possess significant longer-term anti-depressive properties which last beyond the cosmetic effects.

However, new patients seeking treatment for lines and wrinkles should be aware that Botox is a temporary treatment, the effects of which wear off naturally over time. Dr Rezai explains that "following treatment with Botox, visible results are usually seen within four to seven days, however it can take up to two weeks to obtain the full result. Also, depending on a person's lifestyle and how their muscles react to the treatment, the effects of Botox may last from three to six months and the treatment should not be repeated more than two or a maximum of three times per year."

As time passes it is becoming clear that Botox is a highly versatile product with an ever widening range of both cosmetic capabilities and therapeutic properties being discovered with increasing frequency. It is entirely possible that even more fascinating and unforeseen uses are just around the corner.

In fact Dr Rezai is highly experienced in providing a wide range on non-surgical rejuvenation procedures, of which Botox treatment is just one example. His clinics in Harley Street, London, and Sheffield, in the north of England, are at the forefront of facial rejuvenation, offering a wide range of treatments many of which are at the leading edge of aesthetic medical technology: procedures such as the *8-Point Facelift* and the *Vampire Facelift* and Rejuvenation treatments.

For more information about available Botox treatments, together with other procedures and treatments, both surgical and non-surgical, performed by Dr Rezai, reference can be made to his website at http://cosmeticsurgeryspecialists.co.uk

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