



# BOTOX

Muscle relaxation  
for the forehead,  
glabella  
(between the eyebrows)  
& crow's feet.

**B**otox has become so popular that it is not necessary to insist on using this wonderful tool for correcting the signs of aging. Its name comes from "botulinum toxina" which in its normal concentration is a poison, but which has been used for the past 25 years in neurology at a dosage of up to 200 times less than its normal concentration.

Botulinum toxin brings about muscular paralysis, blocking the transmission of nerve impulses to the neuromuscular junctions inside a structure known as a synapse. This localised paralysis does not spread into the body, and the nervous system forms new nerve sprouts within a few months. This means the effects of botulinum toxin are temporary.

The main applications are the paralysis, or rather the relaxing, of certain facial muscles used when gesturing, such as the forehead muscle which causes the forehead to wrinkle when it contracts, the orbicular muscle, which produces crows feet, the corrugator and procerus muscles that cause wrinkles in the glabella, or the space between the eyebrows.

There are other applications, using the paralysis of the microfibrils of the muscles to relax and improve the wrinkles on the upper and lower lips (commonly referred to as bar code lines), and also the platysma bands (cords that appear when the neck muscles contract and that remain as age progresses).



It is important to know that botulinum toxin has its successes, its failures and its limitations. It should be used for a limited period of time and after a certain age should no longer be used, passing to surgery to correct the loss of elasticity in the skin.

While it is true that it relaxes the muscles of gestural expression of the upper part of the face, it is also true that the face is left looking smoother, but without being able to move. Furthermore, depending on which injection technique is employed, you can raise the tail of the eyebrows, but the lift cannot be controlled 100% and it could end up giving what we call the “Mefisto look”, where the eyebrows take the shape of an inverted V giving an “evil” appearance.

Also, if the botulinum toxin is injected too close to the eyes, it can completely prevent the eyebrows being raised, giving the sensation of heavy and drooping eyes. The reason for this sensation is that during the course of our life, the upper eyelid has more skin and is heavier. Consequently, you open your eyes raise your eyebrows, which causes wrinkles on the forehead and makes the eyes look rounder.

Another limitation is the gradual appearance of wrinkles above and below the injection points of the crow’s feet. To understand this problem, you have to understand that the orbicular muscle of the eye, which is responsible for the crow’s feet, has the shape of a pair of round glasses from one to three centimetres in diameter. Meaning that if you repeatedly paralyse a limited section of this muscle, new wrinkles will gradually appear above and below the paralysed area.

When this happens, it is time to start thinking about a different method of correction, and specifically how surgery can help.

25 years ago, botulinum toxin was originally used to correct squinting, blocking the muscle controlling the eyes, and for the past 10 years, it has been used in the field of aesthetics. It has not been known to cause any serious problems.

As an expert witness to the court, I can say that the very few cases of complications that have been recorded around the world have been due more to the incorrect use of the product, rather than the product itself.

In fact, I would like to bring to the attention of everyone a dangerous practice that has originated in England, known as a “botox party”. This involves group sessions of botox injections, often performed in private houses by someone who is not professionally qualified.

Legally speaking, only a doctor can take responsibility for injecting any product, and nurses are also allowed to perform this under the responsibility of a doctor. People must understand that the problem does not lie in taking a syringe, perforating the skin and pushing the plunger, but rather with the product that is inside the syringe.

Any product with a pharmacological effect can, even though only on rare occasions, produce side effects and complications that only a doctor is qualified to treat. It is not worth taking the risk of trusting someone who has not undergone thorough medical training. Even though only one patient out of a million might have problems, it can happen to anyone.

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