

Background to the Cosmetic Use of BOTOX®

BOTOX® injections for facial lines were pioneered in 1988 by Doctors Jean and Alistair Carruthers, a Vancouver ophthalmologist and her husband, a dermatologist. The ophthalmologist noted that the wrinkles disappeared in her patients with eyelid spasms who were treated with BOTOX®. This led to further research which confirmed the effectiveness and safety of the BOTOX® vaccine for improving wrinkles due to overactive muscles of the face.

In 1996, at the annual meeting of The American Academy of Dermatology in Washington, a presentation by Dr Nicholas Lowe confirmed that BOTOX® was effective for facial expression lines. Significant improvement was noted in both forehead frown lines and crow's feet. No significant side effects were noted beyond the expected injection discomfort. The length of effective improvement for the forehead frown lines was approximately 17 weeks.

BOTOX® For Frown Lines

Crease lines and wrinkles are a natural process of aging due to a combination of aging, sun damage, gravity and the muscle action of laughing, talking, frowning and crying. Filling agents including Collagen, Fibrel, autologous fat and Gortex are the mainstay of non-surgical treatments. Surgical options include face, forehead, neck and eyelifting operations, dermabrasions, laser resurfacing, and deep chemical peels.

Between the eyebrows, the vertical frown lines result from over-active muscles. These muscles are also used when concentrating. By drawing the eyebrows inward, one expresses anger, confusion or anxiety. Repeated often enough, permanent skin creases develop and even when relaxed, these frown lines remain. Neutralisation of these overactive brow muscles helps eliminate these negative appearances.

BOTOX® For Crow's Feet

Wrinkles radiating from the corner of the eyes caused by smiling, laughing or squinting are especially distressing to some individuals. Previously, no reasonable medical or surgical solution improved this problem due to the strong underlying muscles. Even with deepest chemical peels or laser resurfacing techniques, rapid recurrence of these lines around the eyes is inevitable. Now, BOTOX® has proved to be effective at preventing the recurrence of wrinkles by inhibiting the underlying muscles.

Horizontal Forehead Lines

Some individuals use different muscles for raising the brows; others "talk" with their forehead. A more dilute toxin is used when treating the horizontal forehead lines. Another alternative for this area is a forehead lift which is now being increasingly performed endoscopically in order to leave minimal surgical scars. Unfortunately, longevity has not been established with this particular procedure.

Lower Face & Neck Lines

Some people may be suitable for treatment with BOTOX®. This area is most dynamic when talking, smiling and eating. As one ages, muscle activity leads to some lines and fat is lost from this area. Replacement of fat is now possible with the newer, more long lasting techniques. One recent advance has been the development of a permanent filling agent called Softform, used for lip enhancement and some lower facial lines. BOTOX® may be used to improve some lower face and vertical neck lines or neck bands.

BOTULINUM TOXIN (BOTOX®)

Please read these instructions carefully and make notes on THIS sheet if you have any questions during your consultation.

You have a right to be informed about your condition and treatment so that you may make a decision whether or not to undergo this procedure after knowing the risks and hazards involved. This disclosure is not meant to alarm or scare; it is simply an effort to better inform you so that you may give or withhold your consent for the treatment.

Botulinum Toxin

Botulinum Toxin is a medicine produced by the bacteria that very rarely causes Botulism food poisoning. BOTOX® is not alive but is a protein which weakens and inactivates muscles. BOTOX® is a potent toxin that blocks neuromuscular transmission in the area into which it is injected. In other words it can stop messages from being sent from a neuron to a muscle, or a sweat gland and therefore it can stop the muscle or gland from performing tasks. This is another example where "natural" products are used for medicinal purposes: fungi produce penicillin, cowpox virus protects against smallpox, foxglove plant produces the "poison" digitalis which millions of patients take daily for heart disease. Now with bioengineering, it is common for bacteria to produce the necessary medicine for a specific disease.

First Clinical Uses of BOTOX®

In 1973 BOTOX® was used as a treatment for patients with crossed eyes. By weakening the overactive eye muscles, this medicine provided an alternative to surgery. After this "breakthrough", BOTOX® quickly gained acceptance for other ophthalmologic disorders including nystagmus and blepharospasm (involuntary spasm of the eyelids) to name a few.

Other Specialists Use BOTOX® For Their Patients

Neurologists have explored possible indications for BOTOX® therapy for their patients. It has now become the mainstay of non-surgical therapy for spasmodic neck muscles, spasmodic laryngeal muscles, writer's cramp, certain tremors, tics, multiple sclerosis, cerebral palsy, post stroke states, spinal cord injuries, nerve palsies and speech impediments. Also, genitourinary disorders of spastic bladder and other disorders have been studied. Congenital muscular disorders or acquired nerve injuries have been improved by balancing muscles with BOTOX®.

Safety

While BOTOX® is very potent in a high concentration, it is used in very small quantities with high margins of safety. After an area is injected, its first effects are not seen for 48 hours and the complete effect may not be seen for 2 weeks.

The Hibernation Treatment

Facial lines are caused by the repeated use of the facial muscles in a particular manner. Just as a freshly ironed shirt will become severely creased at, for example, the elbow, as a result of the bending arm, so likewise our facial lines form wherever we frown, squint or smile. Some people have a distinctive facial habit – grimacing, raising eyebrows, using one side of the face more than the other – and they will in time see a set of facial lines appear which reflect this individual habit.

Lines can be softened, or in some cases erased, by means of “filler injections” or surgical peeling treatment. These processes vary in how effective they are and how long they last; however, they all have one common characteristic – the EFFECT is being treated rather than the CAUSE. The damage has already been done and continues to be done.

The Hibernation Treatment is different in that it is a PREVENTATIVE treatment. Injections are given, usually to the forehead frown area, which temporarily put the frown muscles to sleep for a period of 3-4 months. This freezing of the muscle is always temporary and can never be permanent, this is why the treatment is called “The Hibernation Treatment” – the muscle temporarily “hibernates”.

The aim is to break the habit of frowning and educate the patient in his or her facial movement so that one “forgets” how to frown. Usually patients have several of these injections over a year or two until the frowning habit is broken.

Apart from the “habit breaking” aim, other positive benefits are that:

- While the muscle is temporarily immobilised, the forehead is “at peace” and the frown line is not being created or reinforced.
- Most patients notice that their existing frown lines do soften out because the forehead is completely relaxed.
- Many would agree that frowning is an unpleasant habit which tends to spoil the serenity and beauty of the face. After the treatment, although all the many other facial muscles can still be used normally, the forehead is still and calm and thus the face appears more serene. Patients have even commented that they feel the calmness within themselves.