



KATARZYNA MACKENZIE

PLASTIC SURGEON

Anti Wrinkle Injections

Our facial expressions change as we contract or relax our facial muscles. Over time, repeated use of the underlying facial muscles results in wrinkles and lines, which are usually associated with ageing. Botulinum toxin injections are successful in treating fine lines and wrinkles of the face most commonly glabellar "frown" lines (between the eyebrows), horizontal forehead lines and crow's feet. It can also be used to treat excessive sweating, thick bands in the neck, and thick jaw muscles. Botulinum toxin may be used in conjunction with other procedures such as dermal fillers or surgical procedures such as facelifts or blepharoplasty to enhance facial rejuvenation.

Introduction

There are 43 muscles in your face and it's vital that the person who performs botulinum toxin injections understands the anatomy to optimize the treatment.

Botulinum toxin is a purified toxin produced by the bacteria Clostridium Botulinum. It works by paralysing nerves as they enter muscles. The muscle is then unable to contract and move. This relaxes and smooths the fine lines and wrinkles caused by repeated contraction of the underlying small facial muscles. The end result is diminished unwanted facial wrinkles or appearance. Botulinum toxin provides a temporary result and treatment must be repeated at various intervals to maintain the result or effect. Commonly known type of botulinum toxin is Botox®.

What areas can be treated?

Botulinum toxin is most commonly performed in the upper face. The most common areas requested are the horizontal forehead lines, vertical frown lines between the eyebrows, and crow's feet. While it would probably work around the mouth and chin, it would almost undoubtedly weaken the smile and Dr Mackenzie does not recommend its use around the mouth.

Botulinum toxin is useful for the treatment of platysmal bands ('turkey neck') as well as excessive sweating in the armpits, palms or soles of feet.

Who is a good candidate for botulinum toxin injections?

The following are some common reasons why you may want to consider botulinum toxin injections:

- Patients who wish to reduce wrinkles and enhance their look

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- Patients with hyperhidrosis (excessive sweating) in the armpits, palms or soles of feet
- Patients with prominent vertical bands on the neck. Botulinum toxins can be used to relax the responsible muscles and give the neck a smoother, softer appearance

Are there any reasons for a patient to not have botulinum toxin injection?

You should not have botulinum toxin treatments in the following situations:

- You are pregnant or breastfeeding
- You have skin conditions which may result in infections
- You are taking medications such as aminoglycosides, penicillamine, quinine, calcium channel blockers
- You suffer from a neurological disease such as motor neurone disease, myasthenia gravis or Lambert-Eaton disease
- You have an allergy to eggs, albumin or Botox®. Currently there are no documented cases of allergy to Botox®
- If you take medication or supplements that thin your blood you will be more at risk of bruising or bleeding after the procedure. Please inform Dr Mackenzie of all products taken

What are the limitations of botulinum toxin injections?

This type of injection only relaxes muscles and does not fill wrinkles or tighten skin. For patients who have excessive skin laxity, facelift, blepharoplasty or other procedures may be a better suited treatment.

Additionally, botulinum toxin will not eliminate very deep wrinkles or rejuvenate the skin surface e.g. sun damage or uneven pigmentation.

What to expect from botulinum toxin consultation?

Botulinum toxin is a nonsurgical injection that's given in Dr Mackenzie's consulting suit.

During your botulinum toxin consultation Dr Mackenzie will discuss:

- Your goals for your appearance
- Your complete medical and social history
- Your current prescription medications, including blood thinners, vitamins, herbal supplements, alcohol, tobacco and drug use, allergies

Dr Mackenzie will also:

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- Evaluate your general health status and any risk factors
- Examine different parts of your face
- Evaluate elasticity of the skin
- Take photographs with your face relaxed, smiling and frowning
- Recommend a course of treatment
- Discuss likely outcomes and any potential risks or complications

What are the procedure details?

Botulinum toxin is given in an outpatient setting. Prior to injection, you will be asked to sign a consent form. The area to be treated will be cleaned with an antiseptic wipe. Then, using a very fine needle and disposable syringe, small amounts of botulinum toxin will be injected into several points in the area being treated. The number of injections you need will depend on your facial features and the extent of your wrinkles. Crow's feet, for example, usually demand two to three injections. Furrows above your brow could take five or more.

An ice pack may be used to soothe the area prior to injection and help reduce bruising.

Botulinum toxin treatment injections usually take less than 15 minutes.

Most patients find that the injections cause only a little discomfort or sting, as the needles used are very fine and the treatment is very quick. A few patients do, however, prefer to have a cream called EMLA applied half an hour or so prior to the treatment to help numb the skin.

What is the aftercare post treatment?

- Avoid touching, rubbing and make-up to the treated areas for 6 hours
- Avoid facial massage or any facial treatments for 24 hours. Do not massage the area of the injections for 24 hours
- Avoid extreme heat/cold for up to 1 week post treatment
- Abstain from alcohol, heavy exercise for 24 hours
- Stay out of sunlight/UV radiation until redness and swelling has resolved
- Use the muscles that have been injected as much as possible in the days following the procedure (repeated frowning and smiling). It will concentrate all the Botox® into the muscles and help it to work more efficiently
- Treatment normally takes 2-4 days to start to take effect and 10-14 days to reach full effect
- Do not lie down flat for approximately 4 – 6 hours after the injections. If you have had your injections in the evening use an extra pillow for the first part of the night
- Do not take aspirin for pain relief; if you have bruised, aspirin will make the bruise worse. Take simple paracetamol instead
- There is usually no downtime or recovery stage following botulinum injections

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- Patients can usually return to work and resume their daily activities following botulinum injections immediately

How long does the effect of botulinum toxin injection last?

Successful therapy is signalled by muscle weakness that begins at 2-4 days after injection with a full weakness at 7-14 days.

The wrinkle-reducing effects from botulinum treatments will vary depending on the patient, the area treated, and the product used, but results will typically last anywhere from 3 to 6 months. To maintain your results, Dr Mackenzie will simply repeat treatment, adjusting dosage and techniques as necessary to ensure optimal results.

Does the body produce antibodies to the botulinum toxin injection protein?

When significant amounts of antibodies are formed, the therapeutic effects of botulinum toxin injections are greatly reduced. A very small number of people have antibodies that inactivate the wrinkle relaxing injections (probably from foods eaten previously). They will not get an effect from the wrinkle relaxing injections injection.

What are the complications of botulinum toxin injections?

No severe complications after cosmetic use of Botox® have been reported in the literature. Very rarely excessive weakening of the target muscles and paresis of adjacent muscles can occur, resulting in facial weakness. This is self-limiting. When injecting above the eyebrows, upper eyelid ptosis or slight drooping may occur but only 1:100. This can be corrected with eyedrops but will also improve as the effects of the Botox® wears off. Other possible complications include:

- Hypersensitivity, allergic response, anaphylactic reaction (very rare)
- Asymmetry of facial expressions
- Muscle weakness, twitching
- Bruising/swelling/skin redness
- Stinging/burning
- Headaches
- Drooping of the eyelid or eyebrow (ptosis)/local muscle weakness, double vision, dry/teary eyes
- Hives, feeling faint, nausea or flu like symptoms, tiredness
- Swelling of the face or throat, dry mouth, difficulty swallowing
- Infection at treatment site
- Period to take effect, further treatment needed, remaining muscle movement