



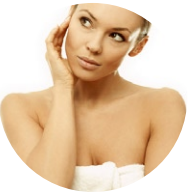
botox treatment

Not all wrinkles are alike. Some known as dynamic wrinkles, are caused by repeated muscular contractions such as frowning, squinting and brow furrowing. The wrinkle relaxing intramuscular injection derived from purified protein toxin produced by the Clostridium botulinum bacteria reduces dynamic wrinkles by preventing the muscles from contracting.



about wrinkle relaxing injection

The injection is a therapeutic muscle-relaxing agent that works at motor nerve endings (nerves that lead to muscles). It is in a class of drugs called neurotoxins.



A tiny amount of the solution is injected, very precisely, into the muscle being treated. As the muscle weakens, the wrinkles in the skin gradually soften and often disappear, giving the face a more refreshed and relaxed look. Because the needle is so fine, and only a small amount of liquid is used, the pain associated with the injections is minimal.



No sedation or local anesthetic is required. The procedure is so quick and simple that patients often have it done on their lunch hour.



what areas are best treated?

- Between the eyebrows, the vertical frown lines that result from over-active muscles. Repeated often enough, permanent skin creases develop and even when relaxed, these frown lines remain. Relaxation of these overactive brow muscles helps to eliminate these negative appearances.
- Wrinkles in the corner of the eyes - also known as crow's feet - caused by smiling, laughing or squinting can be smoothed and prevented from reoccurring. The injections are often used as a combination with peels and laser to give a longer lasting effect.
- Some individuals use different muscles for raising the brows; others "talk" with their forehead. Horizontal forehead lines can be treated with a more dilute toxin.
- The real advance for the nasal and labial lines has been the development of a long lasting filling agent with the technique of fat transfer. This area is very mobile when talking, smiling and eating.
- The wrinkle relaxing injections have been very successful in smoothing a banded neck. In the past, the only treatment of these bands was surgical, with neck lifting to tighten these muscles. Wrinkle relaxing injections treat a milder form of these bands.



how long does wrinkle relaxing injections last?

Muscle paralysis after the initial injection lasts between 4 and 6 months for most patients.

Following, another injection may be administered. After several treatments, the effects may begin to last longer.

are there any side-effects?

In some cases, the toxin can migrate and cause a temporary weakness of nearby muscles. In rare cases, there can be a drooping of an eyelid or asymmetry of facial expression. The most common side effects of the wrinkle relaxing injections are temporary and reversible, lasting only a few weeks.

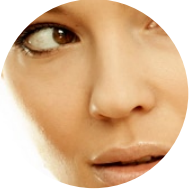
will they freeze my face?

No. These injections only relax the overactive muscle underneath the dynamic wrinkle. The other elements of facial expression remain active.

is it a safe procedure?

Medical use of Botulinum toxin started in the 1950's. In 1979 it was approved by FDA for treatment of strabismus. In 1987 Dr. Jean Carruthers, while treating patients for essential blepharospasm, made the observation that the patients had significant improvement of the dynamic rhytids of the glabellar region. Since then, together with her husband, dermatologist Dr Alastair Carruthers, she has initiated a more systemic use for cosmetic purposes.

Complications have been minor and only transient. Bruising may occur where injected and a brief pain or headache may follow. Bruising may be greater in patients who are taking aspirin or any blood thinning medicines. These products should be avoided if possible prior to the injection. Ice helps to prevent bruising. Muscle weakness is first noted at 24 to 48 hours, and not immediately after treatment.



Transient drooping of one eyelid or both is the most significant complication and occurs in well below 1% of all injections. This is a result of the local spread of the toxin in the injection site and can be minimized by accurate dosage, proper placement, as well as keeping the patient in an upright position for three to four hours after the injection. This symptom will subside in two weeks. Special eye drops may temporarily reduce eyelid droop.

who should not use wrinkle relaxing injections?

You cannot be treated if you are pregnant, nursing or have a neurologic disease. It is therefore very important to discuss with your surgeon if this treatment is appropriate for you.

things to avoid

- Do not massage the area of the injection for the first 3 hours after its administration.
- Do not lie down for a nap - keep upright for about 3 hours.
- Use the muscle - Intentionally making the muscle contract helps localize the protein to the selected muscle for ablation.

will the effect of an injection at one site spread to other muscles?

Wrinkle relaxing injections spreads along does not spread distantly by way of the blood stream.