



Botox for the Treatment of Wrinkles

What is Botox? Botox is the trade name of Botulinum Toxin Type A, a purified toxin derived from the bacterium *Clostridium botulinum*. The toxin blocks the nerve impulses to muscles and sweat glands. It has been used since 1980 for the treatment of strabismus (lazy eye) and blepharospasm (uncontrolled eye blinking). Dr. Carruthers of Vancouver pioneered the use of Botox for wrinkles in 1989.

Who may benefit from Botox? Botox improves the appearance of wrinkles that are caused by contraction of the underlying muscles. It does not help wrinkles associated with sun damage or age-related sagging of skin.

How soon will I see a result? The actual treatment takes only a few minutes, and the Botox begins to take effect in two to three days. Maximal weakness occurs at one to two weeks.

How long will it last? Over about two to five months the Botox effect will fade, and the muscle action will return. Botox causes a temporary, not permanent, muscle weakness.

How can I achieve the best results? The best results are achieved when treatments are given every three months for the first year, so that the muscles will not return to their full strength between treatments. After the muscles have withered over the first year, treatments may be spaced further apart, usually every six months, based on the return of muscle strength/movement.

How often can I be treated? Closely spaced treatments increase the possibility of developing neutralizing antibodies. For this reason, treatments should be performed no earlier than 3 months after the previous treatment.

Can a benefit be guaranteed? No. Some patients do not get the desired effect from Botox. A lack of benefit may occur when wrinkles are due to "sleep creases," sun damage, or other factors unrelated to muscle movement. If patients develop neutralizing antibodies to Botox, subsequent treatments are not as effective. There are rare patients in whom Botox simply fails to "take."

What happens if it doesn't work? Some patients require more Botox than the usual amount. A dose-adjustment may be given two weeks after the initial treatment (for an additional cost).

Who should not receive Botox? Botox should not be used in patients with muscular or neurological diseases, pregnant women, breastfeeding women, patients with egg allergy, patients taking aminoglycoside antibiotics (gentamycin, tobramycin, amikacin, netilmycin) or drugs that interfere with neuromuscular transmission, or patients with a known hypersensitivity to human albumin.

Are there side effects? There will be a slight discomfort when the needle enters the skin, and a small chance of a bruise at the site of the injection, especially if patients are on aspirin, ibuprofen, or other medications that increase bleeding. Approximately 2-3% of patients may develop a ptosis (slight lowering) of one eyelid. This side effect is temporary, may not even be noticeable, but may be improved with a medicated eye drop.