

TerranearPMC Safety Share

Week of January 11, 2016– Botox!

It was back in 1992 when researchers announced that those wrinkles we all succumb to as we age could be a thing of the past by simply injecting ourselves with botulinum toxin. Botox blocks signals from the nerves to the muscles. The injected muscle can no longer contract, which causes the wrinkles to relax and soften. It doesn't fill lines, it just makes it harder to make the muscle contract which, in turn, creates those lines. It is most often used on forehead lines, crow's feet (lines around the eye) and frown lines. However, wrinkles caused by sun damage and gravity will not respond to Botox. If you have smile lines (the parentheses around the mouth), you'll need a filler like Restylane (most commonly used for lip enhancement) to erase them.

Botulinum toxin (BTX) is a neurotoxic protein produced by the bacterium *Clostridium botulinum* and related species. *Clostridium botulinum* is a Gram-positive, rod-shaped, anaerobic, spore-forming, motile bacterium with the ability to produce the neurotoxin botulinum. The botulinum toxin can cause a severe flaccid paralytic disease in humans and other animals and is the most potent toxin known to humankind, natural or synthetic, with a lethal dose of 1.3–2.1 ng/kg in humans. While all bacteria toxins are rapidly destroyed at 100°C, they are resistant to degradation by enzymes found in the gastrointestinal tract. This allows for ingested toxin to be absorbed from the intestines into the bloodstream.

While Botox is derived from the same bacteria as the toxin botulism, there has not been any associated cause/effect relationship of contracting botulism from the use of Botox. However, there is a small chance that you could have an allergic reaction to preservatives and ingredients used in the restorative procedure. Some reactions that have been reported include itching, rash, welts, asthma symptoms or feeling faint.

While unlikely, there is a possibility that the effect of botulinum toxin may spread to other parts of the body and cause botulism-like signs and symptoms such as muscle weakness all over the body including vision problems. These symptoms can become evident within a few hours to weeks after receiving Botox injections.

If the Botox is injected wrong in any part of your face, you may have a lopsided appearance. Thus, there is an artistry involved in the technique, so be sure your physician is highly experienced and skilled at administering it.

Drooping of the eyebrows can happen even in the best of hands; it can occur if too much is injected in one place. And if you're already using Botox, over-application could make it worse. Overuse of Botox can cause the muscles to become so weak that they can't support the flesh. The results can look unnatural, and even worse, be painful. If too much Botox is applied during a



neck rejuvenation, it can cause the side of the face to droop, or in some cases the muscles that hold the neck up weaken to the point where you can't swallow or hold your head up.

It takes about three to seven days to show the full effect, and results will last about four months. And those results vary, depending on the depth of your wrinkles. If you start Botox treatments just as fine lines are beginning to appear and continue them as you age, you can prevent select expression lines from forming at all. Patients who already have pronounced lines may see benefits in a bit more time. It takes a few days to see results, and a full two weeks to see the full effects of a Botox treatment.

Although getting Botox is not particularly painful for most patients, since there are needles involved, you can't expect to feel absolutely nothing when getting injected. During the procedure, you can expect a slight pinch from the needle. There are numbing creams available in topical and aesthetic forms. Sometimes ice is used to numb the area for people who have a low tolerance or phobia of needles.

"We tell our patients to stop using aspirin products up to a week before a treatment because they are blood thinners," says Dr. Gross, a physician that performs Botox injections for patients regularly. "Discontinuing the use of aspirin the week before will help to keep bruising down. Also, we tell our patients to stop using fish oils a week beforehand because they also promote bruising for the same blood thinning reason."

There's no lowering of the head for two hours post-procedure. No yoga, no bending over, no blow drying your hair, no tight hats, no napping. In other words, heads up!

And Botox injections may cure more than wrinkles! If you have excessive underarm or palm sweating or suffer from serious migraines, Botox can help to cure such conditions. It's been proven to diminish or stop excessive sweating, called hyperhidrosis, and to reduce the severity of migraines too. But don't try tacking either treatment onto your cosmetic visit. You'll need to book separate appointments. Containers for Botox that specialize for cosmetic purposes will have the words, "Botox Cosmetic" on the packaging, as opposed to "Botox for medical purposes."

And, as one might expect from the ever-growing Botox industry, an additional side benefit which they tout is that the application of Botox injections can make you a happier you! If you're prone to frowning, eventually those muscles strengthen in that formation, which means it takes much effort to smile and look happy. When Botox relaxes those muscles, you look happier, which can really improve your mood and confidence!

The Simplest Truths often meet the Sternest Resistance

Frederick Douglass

