

## How Your Facial Muscle Pattern Determines Your Botox Results

Your satisfaction with facial muscle relaxing treatments depends on which of the 3 facial muscle types you have

*Adapted from the book, "Botulinum Toxin in Aesthetic Medicine" by Mauricio de Maio*

Why do some people get better or more consistent results from Botox or Dysport than their friends? Is the doctor mixing the Botox differently or are there "bad batches" of Botox circulating? The answer lies in the genetic differences in muscular behavior between people. Most people fall into one of 3 groups of facial muscle type. Do you know what your face is doing when you're not looking?



**Kinetic Muscle Type:** These people use their facial muscles to show their emotion only when they want to, so for example they'll raise one eyebrow when skeptical or raise both brows when surprised. Their facial muscles **only** move when they're trying to express an emotion. They're probably good at poker. Botox results in this group can last longer than in other people, sometimes up to a year. Since kinetic types only contract their facial muscles when they're trying to show an expression, they don't develop skin creases as early as the other types. Consequently, this group is not the majority of Botox users.

**Hyperkinetic Muscle Type:** Many Botox patients have hyperkinetic muscles which are facial muscles that are often moving without conscious effort. The moving muscles are not necessarily expressing the person's emotions but people with hyperkinetic muscles usually appear very animated to other people. Especially when excited, they may be moving almost all of their facial muscles when they talk and some are moving a single area most of the time without being aware of it. The lady pictured in this photo is an example of a hyperkinetic muscle type. She's frowning with concentration but if you asked her if she's frowning, she'd deny it. People who have the most hyperkinetic muscles usually **get great results with their first Botox treatment but with subsequent treatments done identical to the 1<sup>st</sup>, they often need a touch up dose a week or 2 later to achieve the same results they experienced with their first treatment.** To add to their frustration, the most hyperkinetic patients may only see their results lasting for 2-3 months instead of 3-4. It's not clear why they respond differently to each treatment & they often wonder if there was a difference in technique or if there was something wrong with the product because they don't get the same consistency in results as their kinetic-faced friends.



**Hypertonic Muscle Type:** Hypertonic patients cannot relax their facial muscles unless they consciously make an effort, and they think their muscles are relaxed until you show them a mirror & coax them into consciously relaxing them. These are people you see who for example are frowning when they concentrate, frowning when they squint and sometimes are even frowning when they smile. In the morning when they wake up they even have deep frown lines from frowning while they sleep. This group is the group who get most frustrated with Botox treatments because the treated areas may not completely stop moving no matter what dose is used & the results don't last more than 1-2

months. Repeating high dose treatments for at least a year may eventually weaken the muscles to behave more like the people in the kinetic group, but people with this type of muscle pattern are most likely to give up & decide that they're "resistant" to Botox.