

## Hemifacial Spasm (HFS)

Your doctor has diagnosed Hemifacial Spasm, a chronic condition that affects one side of the face. The patient with HFS experiences involuntary contractions, called “spasms,” of the muscles on one side of the face. The affected side of the face seems to “scrunch up” while the other side of the face remains normal. The eye on the side of the spasm closes and the corner of the mouth tightens and pulls up. The spasm can be brief or sustained, and can be triggered by facial movement. Middle aged men and women are affected equally. The spasms persist during sleep. They can be increased by stress or anxiety and decreased, but not resolved, by drugs such as *lorazepam (Ativan)*. Some patients have noticed that alcohol can also decrease the spasms, but the amount of alcohol required makes this undesirable as a treatment.

HFS is thought to be caused by a blood vessel lying on the facial nerve where it enters the brain. Surgery can sometimes help, consisting of placing a small sponge between the nerve and the artery (“facial nerve decompression”), but the safest treatment is by injections of botulinum toxin, called “BOTOX.”



Hemifacial Spasm



Botox injection sites for HFS

## **Botulinum Toxin**

Botulinum toxin, called “BOTOX,” is an effective treatment for hemifacial spasm. A tiny drop of BOTOX is injected under the skin at each affected site. In a few days the BOTOX takes effect, relaxing and weakening the facial muscles and preventing spasm. Many ophthalmologists and neurologists perform BOTOX injections for HFS. The injections are done in the doctor’s office and usually take only 5 or 10 minutes. The effect wears off in about 3 months and the injections must be repeated. Most patients have no side effects from the injections but minor bruising can occur at the injection sites and temporary lid drooping and double vision occasionally occur.

## **Facial Nerve Misdirection Syndrome**

Facial Nerve Misdirection Syndrome is a condition similar to HFS caused by nerves making wrong connections when they grow back after facial nerve palsy sometimes called “Bell’s palsy.” Most of the time, the nerves grow back and re-establish their connections with the original muscles. But sometimes the growing nerves connect to the wrong muscle instead of or in addition to their correct connections. In those cases, firing of the facial nerve results in contraction of the wrong muscle or of wrong muscles in addition to the intended muscle. This misdirection causes the mouth to move when the patient closes his eye or causes the eye to close when he smiles or purses his lips. Selective injection of BOTOX can interrupt or block the aberrant messages and return specificity of function.

## **Frequently Asked Questions**

*Can I catch botulism from the BOTOX shots?*

*No. BOTOX is injected just under the skin and does not affect the rest of the body. The small amount of botulinum toxin injected is a fraction of the dose that causes botulism.*

*Do the shots hurt?*

*BOTOX is injected through a very tiny needle to avoid pain. Most patients report only mild discomfort lasting seconds.*