NANOS
Patient Brochure
Hemifacial Spasm

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Hemifacial Spasm

Hemifacial Spasm (HFS) is 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 while the other side of the face remains normal.

The spasms typically start around the eye and cause the eye to blink, squeeze, or close. With time, the condition involves the cheek area, causing the corner of the mouth to tighten and pull up. HFS may eventually affect the neck muscles, and can also cause a clicking sound from muscle involvement in the middle ear.

The spasms in HFS can be brief or sustained and can be triggered by facial movement (smiling, talking, eating, blinking, etc.), stress, fatigue, or anxiety. The spasms persist during sleep. The spasm can be decreased in some individuals with drugs such as lorazepam (Ativan) or carbamazepine, but usually with minimal efficacy.

HFS is caused by increased activity of the facial nerve. This increased activity is thought to be caused by irritation from a blood vessel lying on the facial nerve where it enters the brain. Surgery can sometimes help, and consists of placing a small sponge between the nerve and the artery ("facial nerve decompression"), but the safest and most common treatment is with injections of botulinum toxin, into the areas of spasm.

Botulinum Toxin

Botulinum toxin, is an effective treatment for hemifacial spasm. Botulinum toxin is available under the trade names Botox®, Dysport®, Myobloc®, and Xeomin®. A small amount of botulinum toxin is injected under the skin in the areas of spasms. The botulinum toxin takes effect within a few days, relaxing and weakening the facial muscles and reducing spasm.

Many ophthalmologists and neurologists perform botulinum toxin injections for HFS. The injections are done in the doctor’s office and usually take 5 or 10 minutes. The effect wears off in 3-4 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 in which nerves become “miswired” during recovery from 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. In Facial Nerve Misdirection Syndrome, 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 botulinum toxin can interrupt or block the aberrant messages and return specificity of function.

Frequently Asked Questions

Can I catch botulism from the BOTULINUM TOXIN shots?

No. botulinum toxin 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?

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