

BLEPHAROSPASM AND HEMIFACIAL SPASM

What causes blepharospasm?

The cause of blepharospasm is unknown. The diagnosis may be made by your physician examining you and observing your facial movements. Blepharospasm is a benign condition that requires no further diagnostic testing.

Benign essential blepharospasm is uncontrolled contraction of muscles around the eyes. The condition affects both sides and may result in a variety of problems including difficulty opening the eyes, rapid fluttering of the eyelids, or forced contraction of the lids and brows. When the mouth and neck are involved with the spasms, the condition is called *Meige syndrome*. The initial symptoms may be excessive blinking with progression to more forceful and frequent muscle contraction. The spasms disappear during sleep and may be made worse with bright lights, fatigue or emotional stress.

Hemifacial spasm is uncontrolled contraction of the muscles on one side of the face, usually including the eyelids. The initial symptoms may be twitching of the eyelids, with progression to involve the muscles on one entire side of the face. The severity of symptoms may vary from mild fluttering to forceful contraction. Unlike blepharospasm, this condition occurs during sleep.

What causes hemifacial spasm?

Hemifacial spasm is sometimes caused by irritation of the facial nerve at the base of the skull. This irritation may be the result of an abnormal blood vessel pulsating against the facial nerve. When the facial nerve is irritated, it causes the facial muscles to contract and spasm. Less than 1% of cases are caused by a tumor. Therefore, your physician may recommend magnetic resonance imaging (MRI) to prevent unwanted contractions. The effects of botulinum toxin last an average of three to four months, and injections may be repeated as needed. This treatment has been found to be safe and effective. Side-effects are uncommon and transient, and may include droopy eyelids and double vision.

Surgery may be recommended for blepharospasm if botulinum toxin therapy is not successful.

Protractor myectomy surgery removes the eyelid muscle responsible for eyelid closure. This surgery is successful for some but not all patients. Many patients still require botulinum toxin injections after myectomy surgery. Surgery for hemifacial spasm may be contemplated if an aberrant blood vessel is found to be the cause. The surgery involves microvascular decompression of the

vessel near the brainstem to relieve pressure on the facial nerve.

What are treatment options?

Treatment of blepharospasm and hemifacial spasm with medications is difficult. The benefits are variable and short-lasting. These medicines may have undesirable side-effects, with patients complaining of fatigue or "clouding" of their thoughts.

The most common treatment of these conditions is with **botulinum toxin injections**. Botulinum toxin is **FDA approved** for the treatment of these disorders. The toxin is injected into the muscles at several sites around the eyelids and

What other supportive measures are helpful?

Dark glasses are a mainstay of supportive therapy, and serve two purposes. They block the bright lights which worsen spasms, and they hide the eyes from other people. In addition, stress makes these conditions worse. Stress management intervention may be helpful.

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For questions, contact:

Swaraj Bose, MD

Email: sbose@neuroeyeorbit.com