PLASTIC **EYE** SURGERY ASSOCIATES, PLLC
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BENIGN ESSENTIAL BLEPHAROSPASM

Benign essential blepharospasm is a condition that usually involves both eyes. There are two forms. In the first form, also called *eyelid apraxia* or *apraxic blepharospasm*, patients are unable to open their eyelids. The eyelids appear placid, but patients may work very hard to raise their eyebrows in order to see. The second form, *essential blepharospasm*, is a dramatic and frequent forced closure of the eyelids. In more advanced or severe cases, the muscles of the brow, cheek, mouth, neck, and shoulders may be involved. Blepharospasm, whether essential or apraxic, can be very troublesome and often incapacitating.

The cause of blepharospasm is unknown. There are clearly abnormal impulses originating in the brain, which tell the muscles in the eye to go into spasm. However, what causes these impulses to be generated is still a mystery and currently the focus of considerable research. There are a number of factors that have been identified which worsen blepharospasm. Such factors include dry eyes, inflammation of the eyelids (blepharitis), activation of "trigger" points (such as may be stimulated by ill-fitting glasses), and excessive dermatochalasis (loose, redundant, over-hanging upper eyelid skin). Identification and treatment of these specific factors in a patient may go a long way toward alleviating blepharospasm symptoms.

There are four mainstays of therapy for blepharospasm. First, there are medications. These medications are commonly used for Parkinsonism, lowering blood pressure, or reducing anxiety, but additionally they appear to have a beneficial effect on blepharospasm. The good news is that these medications have very few side effects. The bad news, however, is that they are usually not very effective in controlling moderate to severe blepharospasm over extended periods of time.

A second treatment option for blepharospasm is injection of botulinum toxin (Botox) directly over the spasming muscles. This toxin is a highly purified form of the toxin that people used to worry about getting from poorly preserved foods. When injected locally, by an experienced physician, this treatment is very, very safe and very effective. We have been using this medication since the mid 1980's in literally thousands of patients. Most patients experience tremendous improvement seven to ten days after injection. The problems with botulinum toxin are: a) it may require multiple injections over each muscle group, b) it must be re-administered every three to six months, c) a careful "titration" of the medication must be performed for each patient so that they do not get too much weakness of their muscles or too little effect, d) some patients develop a "tolerance" to the medicine requiring larger doses over years.

A third treatment for blepharospasm is reserved for those patients who have failed oral medicines, cannot continue with botulinum injections (for any of a number of reasons), and have blepharospasm to a degree that significantly alters their life. This treatment is surgical and is called a myectomy. Myectomy means removing muscle. There are two forms of this operation: limited myectomy and extensive myectomy. Both of these operations require meticulous surgical technique and should only be performed by an experienced surgeon. The spasming muscles are removed, but extreme care must be taken to leave behind a tiny amount of muscle for normal eyelid closure. Sometimes, patients will have a limited myectomy first with some improvement and then years later undergo an extensive myectomy. The myectomy procedures are usually very effective; however, some patients will discover that after a period of three to six months, they will also need additional medications or infrequent botulinum injections for a maximal effect. In our experience, every patient who has ever undergone a myectomy procedure has been extremely pleased with the results. Remember, not every patient is a candidate for this type of surgery.

Finally, there is one other surgery available, that we do not advocate. This surgery involves making an incision in front of the ear, identifying the nerves that supply the muscles around the eyes, and literally pulling the nerves out. We believe that this procedure is less effective than myectomies, has more complications than myectomies, and is more cosmetically disfiguring than myectomies.

If you would like to know more about blepharospasm, we can refer you to a national organization that is dedicated to the support of patients with blepharospasm. Additionally, there is considerable literature available on this subject.

We believe that the more you know about your condition, the more you will be able to make informed decisions about the treatments, which are best for you.