What is Blepharospasm?

BENIGN ESSENTIAL BLEPHAROSPASM-BEB – is a neurological condition characterized by forceful involuntary closure of the eyelids. Benign means it is not life threatening and Essential means of unknown cause. Blepharo is a Greek word that refers to eyelids and spasm to involuntary muscle contraction. Blepharospasm may develop spontaneously and is a specific type of dystonia or movement disorder. It often begins with an increased sensitivity to light with a marked increase in blinking which may be accompanied by a feeling of irritation in the eyes. Some people may experience a feeling of dry eyes followed by an uncontrolled closure of the eyelids.

We can help!

The Benign Essential Blepharospasm Canadian Research Foundation Inc. (BEBCRF) was founded in 1992 as a non-profit corporation with a mandate of support, education and research.

We raise awareness of blepharospasm, cranial dystonia, and hemifacial spasm among the medical professions and the general public. We offer information, support and hope to people who have these conditions. We direct people to the appropriate qualified medical professionals, and, throughout the year conduct support group meetings in several major cities in Canada. Our newsletters provide highlights of these support group meetings as well as news about the latest research.

We also have a toll-free phone line and website with which to provide support and information. With your help the BEBCRF helps to fund research projects.

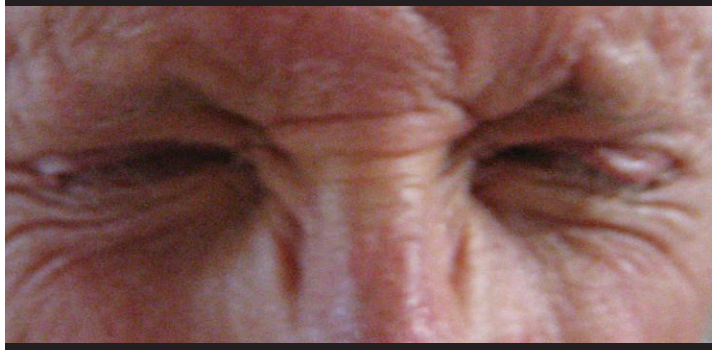
Tax Deductible Donations may be made to the BEBCRF Inc. via our WEB Site or by cheque. Donations are directed to fulfilling our mandate to offer support, education and research. Be involved!

Benign Essential Blepharospasm
CANADIAN RESEARCH FOUNDATION INC.

www.blepharospasm.ca

Excessive blinking…

Light-sensitivity, dry eyes, forceful involuntary closure of the eyelids?



You may have

Benign Essential Blepharospasm

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Causes

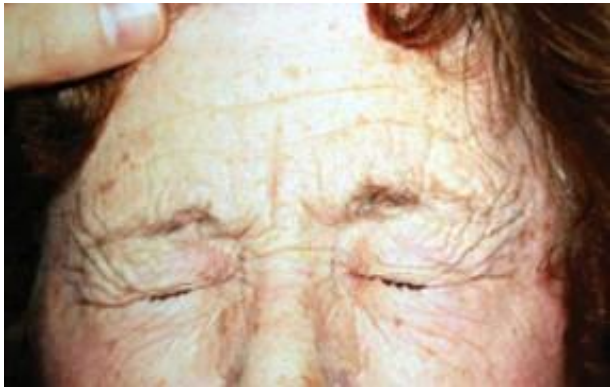
There is no single cause of BEB, however, we know that it is linked to an abnormal activity in the 'basal ganglia' of the brain, resulting in excessive electrical impulses to the eyelids and brow. In some cases BEB may be genetic in origin, although the genes responsible have not been identified.

Blepharospasm often begins with increased blinking and light sensitivity in both eyes. There may be other symptoms more often associated with dry eye syndrome, such as eye irritation or excessive tearing. The significant symptom of blepharospasm is uncontrollable blinking and forced involuntary eyelid closure. Symptoms may worsen when a person is tired, under stress, exposed to wind or direct light. The symptoms usually disappear when the person is sleeping. Symptoms of BEB may progress until it affects the activities of daily living and renders the patient *"functionally blind"*.

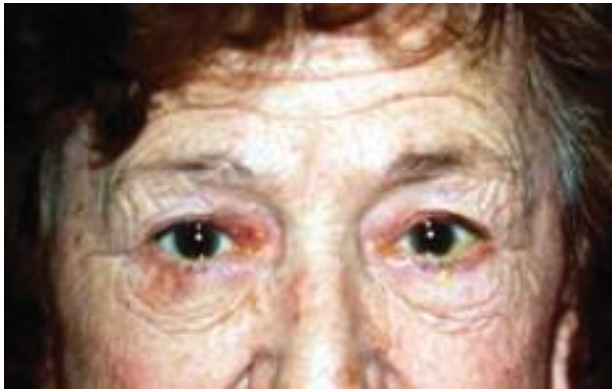
The diagnosis of BEB may be difficult, as it is often mistaken for more common conditions such as 'dry eye syndrome'. Although many medical professionals are still not familiar with BEB, this situation is gradually being addressed as more doctors learn about it during their training and through the efforts of organizations such as the BEBCRF.

Some people suffering with blepharospasm may also have apraxia of eyelid opening, a delay or inability to open the eyes in the absence of spasms. Cranial dystonia, or Meige Syndrome, is a condition that combines eyelid spasms with other uncontrolled movements and contractions of the lower face. About a third of people with BEB may also have cranial dystonia.

A condition that resembles BEB but is not a form of dystonia is called Hemifacial Spasm (HFS). In this condition, the eyelid and muscles on one side of the face may contract uncontrollably. The cause of **HFS** is usually pressure of an artery on a facial nerve.



Patient with contractions before treatment



Patient after toxin treatment

Treatment

The most effective treatment for BEB, Cranial dystonia and HFS to date, is minute doses of botulinum toxin (such as Botox®, Xeomin® or Dysport®) injected directly into the affected muscles. These injections weaken the muscles by blocking nerve impulses and give some improvement within days. Treatment is usually repeated every 3 to 4 months, or as needed.

Botulinum toxin injections are administered by specially trained neurologists, ophthalmologists or neuro-ophthalmogists.

In cases where botulinum toxin is not sufficiently effective, other treatments may prove helpful. Certain drugs may weaken or diminish spasms and there are several surgical options. One surgical procedure is a myectomy, whereby a portion of the muscles controlling the eyelids is removed. People affected with apraxia of eyelid opening may have a device known as a 'frontalis sling' inserted, which connects the eyelids to the frontalis muscle of the forehead in order to raise the eyelids. People with hemifacial spasm may be helped with microvascular decompression surgery to take pressure off the affected nerve.

Generally, treatment is refined over time, as the individual and their medical professionals gradually find the specific approach that best helps their situation.

There are rare cases of spontaneous remission of BEB symptoms, but for most people it is a condition they will have for the rest of their lives. Fortunately, there are treatments and strategies that can improve the symptoms of BEB. In addition, research is helping us learn more about the causes of BEB and develop new approaches to treatment.