Blepharospasm

Summary

- Blepharospasm means involuntary twitching, blinking or closure of the eyelids resulting from any cause.
- Blepharospasm may be misdiagnosed or not diagnosed at all, because it shares similar characteristics with a range of other problems.
- Treatment includes paralysing the eyelid muscles with injections of the botulinum toxin type A, or surgery to remove the muscles.

Blepharospasm is the term used to describe involuntary movements of the eyelids. In its more severe (rare) form, the person experiences squeezing and closure of the eyelids – this is the condition that doctors generally refer to as blepharospasm or benign essential blepharospasm (BEB). Very mild and common twitching of the eyelids is usually referred to as a tic, twitch or flicker of the eyelid.

Some of the disorders and conditions associated with blepharospasm include dry eyes and Tourette’s syndrome. However, most cases occur spontaneously with no apparent cause. Men and women of any age can be affected, but middle-aged and older women appear to be particularly susceptible.

In very severe cases, the person is rendered functionally blind, because the muscular spasms force the eyelids shut, sometimes for hours. A person with blepharospasm may give up activities such as sports, driving or socialising for fear of ‘losing’ their eyesight to a muscular spasm.

There is no cure. Treatment includes paralysing the eyelid muscles with injections of the botulinum toxin (available in Australia as Botox® and Dysport® through the PBS).

Surgery to remove the muscles is a last resort.

Causes of blepharospasm

The causes of blepharospasm are unknown, but abnormalities in the way the brain is working are thought to be involved. One theory suggests that chemical messages fail to pass from one nerve cell to another in the brain’s movement control centres (the basal ganglia, located at the brain’s base). No one knows what causes the dysfunction or damage. Rarely, more than one family member is affected by blepharospasm, which suggests there may be a genetic factor involved. In many cases, the symptoms of dry eye either precede blepharospasm or start at the same time, but the significance of this isn’t known.

Symptoms of blepharospasm

A person with blepharospasm may uncontrollably blink, squint, wink, twitch or squeeze closed one or both eyes. They may have difficulties keeping their eyes open. The spasms become increasingly more pronounced and frequent as time goes by.

The progression of symptoms includes:
- spasms in response to particular triggers, such as fatigue or bright lights
- spasms occurring more frequently during the day, whether the triggers are present or not
- spasms forcing the eyelids shut for hours at a time – spasms also pull the eyebrows down towards the eyes.

Classifications of blepharospasm

Blepharospasm is often graded according to its severity, which includes:
• **tics and twitches** – many people experience brief bouts of eyelid twitching when they are tired or under stress. These muscle contractions are so small that often the twitch can only be felt, but not seen. Tics and twitches are common and there is no real treatment. This flickering of the eyelids is not what doctors generally call blepharospasm (although they are a form of blepharospasm in a technical sense)

• **blepharospasm** – chronic involuntary spasms or squeezing of the eyelid muscles. This is the more severe form of eyelid spasm that doctors refer to as blepharospasm

• **Meige’s syndrome** – the person has involuntary and repetitive movements of the mouth and tongue as well as the eyelids. The person’s mouth may open and close, their lips may purse and their tongue may poke in and out. Meige’s syndrome is also known as oromandibular dystonia.

**Diagnosis of blepharospasm**

There is no particular test for blepharospasm. Diagnosis relies on physical examination, medical history and ruling out other possible causes.

Blepharospasm may be misdiagnosed or not diagnosed at all, because it shares similar characteristics with a range of other problems including ptosis (droopiness) of the eyelids.

Particular drugs such as antipsychotic medications and drugs to treat Parkinson’s disease can cause similar symptoms to blepharospasm, and some drugs are known to trigger blepharospasm in susceptible people.

**Treatment for blepharospasm**

Treatment for blepharospasm can include:

• **stress management** – symptoms tend to worsen in times of emotional stress. Learning stress management techniques and joining a support group can be helpful

• **botulinum type A toxin injections** (Botox®/Dysport®) – botulinum type A toxin is made by the bacteria Clostridium botulinum. When injected, the toxin disrupts nerve messages to muscles and causes paralysis. Generally, multiple injections are given both above and below the eye. It takes between one and four days for the paralysis to begin. The complete effect usually takes about a week. The treatment often lasts up to four months. Botulinum toxin injections work for about 90 per cent of people with blepharospasm. Common but temporary side effects include dry eyes, drooping eyelids (ptosis) and double vision. Short-term blurry vision is common. This is because the tear film on the cornea, the outer covering of the eyes, dries up. Special tear supplement eye drops can help to relieve this symptom

• **medication** – medications such as lithium and diazepam (Valium®) are sometimes used, but the success rate varies. There is no standard treatment regime, because a particular medication may bring relief to one person, but not another. Motility drugs such as Artane® can be useful in controlling blepharospasm if botulinum is not working.

• **surgery** – a myectomy is an operation involving the removal of some (or all) of the eyelid and eyebrow muscles responsible for squinting. This procedure is usually performed after botulinum therapy has failed. Repeat operations may be needed in some cases. Myectomy improves the symptoms of blepharospasm in up to 80 per cent of people who have this condition.

**Where to get help**

• Your doctor

• Ophthalmologist

• The [Royal Victorian Eye and Ear Hospital](Tel. (03) 9929 8666, TTY 9929 8052)

• [Blepharospasm Australia](betterhealth.vic.gov.au)