Treatments for blepharospasm and hemifacial spasm

This leaflet explains about treatments for blepharospasm and hemifacial spasm including the benefits, risks and any alternatives, together with what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is blepharospasm?
Blepharospasm is a medical condition that causes the muscles around your eyes to spasm involuntarily. It is thought to arise because of loss of control of the normal blink reflex. Frequent blinking or uncontrollable eye closure are common characteristics of blepharospasm. In the most severe cases, a person may be unable to open their eyes for several minutes.

Some people find that their blepharospasm is worsened by certain things e.g. bright light, stress, social interactions etc. If you have blepharospasm, the pattern of the spasm may change throughout the day. For example, you may have few or no symptoms when you wake up in the morning, but they may start to appear or get worse when you are tired or stressed.

What is hemifacial spasm?
Hemifacial spasm causes similar spasms around the eye, but only affects one side and usually involves other muscles elsewhere on the same side of the face e.g. the cheek and mouth. Some patients who develop hemifacial spasm can have a blood vessel in the brain that lies too near to the facial nerve and which touches it, resulting in the spasms. Another cause is abnormal rewiring of the facial nerve following a facial nerve paralysis, as it heals again over time. This is known as aberrant facial nerve regeneration.

Treatment of blepharospasm and hemifacial spasm
Management of these conditions include simple measures such as keeping the eyes comfortable with moisturising drops, using sunglasses (especially FL41 filters) or occasionally covering (occluding) one eye, which can stop the spasms temporarily. The most effective first line treatment for this condition is Botulinum toxin type A.

Alternative treatment option
Some neurologists (a doctor who specialises in the brain and nervous system) also use tablets to control spasms, although these can have a range of side effects. They are usually recommended when there is partial response or adverse reaction to Botulinum toxin.
Botulinum toxin type A injections

Botulinum toxin injections, such as Botulinum toxin and Dysport, are medical treatments that have been used by doctors for the treatment of many muscle problems. The injections help to relax muscles and are therefore used for blepharospasm and hemifacial spasm to relax the muscles around the eyes. This reduces the involuntary closure of the eyes and helps patients to keep their eyes open when they want. They are generally not used for spasms in the lower face.

What do Botulinum toxin injections involve?

Small amounts of botulinum toxin are injected into the muscles around the eye to be treated. Usually around three to six injections are given at different sites, taking around one to two minutes. The injections may be a little painful but most people tolerate the discomfort well. If patients find the injections particularly difficult, anaesthetic cream (EMLA) can be applied to the skin beforehand.

What are the effects of the Botulinum toxin?

It takes about three to five days before the injections take effect, and up to two weeks for the full effect to be seen. You should then notice a reduction in the amount of spasm you have around the treated eye(s). The effects of the Botulinum toxin generally last for about three months but then start to wear off. If you want to maintain the effect, you'll need regular follow-up injections. Most patients repeat their injections around every three months.

Are there any side effects?

The side effects of Botulinum toxin treatment around the eyes relate to it working too well or leaking into other muscles round the eye that are not deliberately meant to be weakened. All the side effects are temporary and will wear off as the Botulinum toxin wears off; consequently, they should resolve within three months. Side effects include:

- Poor closure of the eye if the Botulinum toxin works too well. This can result in dry eye, discomfort or blurry vision.
- A droopy upper lid, if the muscle holding up the eyelid is involved.
- Double vision, if the muscles moving the eye are involved.

In addition, you may get some bruising at the injection sites. Very rarely, patients can develop resistance to the treatment, rendering it less effective.

Botulinum toxin very rarely causes side-effects in other areas of the body. This may include a flu like illness feeling tired with a headache.

Side effects usually disappear within a few days or weeks. Although rare, you should seek immediate medical advice if you develop any problems with swallowing, speaking or breathing (with or without swelling of the face, lips or tongue, redness of the skin or a lumpy rash) after botulinum toxin treatment.

If you are concerned about any side effects, please call the Ophthalmic Day Case Unit on 020 7188 9545.
Long term treatment

In general, most patients with blepharospasm or hemifacial spasm find that Botulinum toxin injections are very helpful in managing their condition. The injections do not cure the disorder but help to control it. Most patients choose to remain on long-term Botulinum toxin injections every three to four months but the injections can be discontinued at any stage if required. Some patients find that they can extend the period between their injections over time.

Other uses of Botulinum toxin injections around the eye

Occasionally eye doctors use Botulinum toxin injections to treat patients who have abnormal nerves connecting to their tear glands, resulting in excessive amounts of watering from the eye, especially on eating. The injections are also used to correct rare imbalances in the muscles around the eyes, or to deliberately induce a droopy lid. Occasionally, the injections are used to correct squints.

Contact us

If you have any questions or concerns about the treatment, please contact the Ophthalmology secretary on 020 7188 0161 (Monday to Friday, 9am to 4pm).

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS)  e: pals@gstt.nhs.uk

t: 020 7188 3514 (complaints)  e: complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815  e: languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk