# Botulinum toxin

Botulinum toxin is a neurotoxin that is produced naturally by the bacterium Clostridium botulinum. It can be used to weaken overactive muscles by stopping signalling between the nerves and muscles around the area where it has been injected.

Botulinum toxin can be used as treatment in a number of neuromuscular and movement disorders, including:

* Blepharospasm
* Cervical dystonia (spasmodic torticollis)
* Hemifacial spasm
* Chronic migraine

## Blepharospasm

Blepharospasm is a neurological condition characterised by continuous blinking and the forcible closure of the eyelids. Up to 90% of blepharospasm patients have reported almost complete relief following treatment with botulinum toxin. The injections are usually given on the eyelid, the brow, and the muscles under the lower lid. Benefits begin in 1 to 14 days after treatment and generally last for 3 to 4 months.

## Cervical Dystonia

Cervical dystonia is a focal dystonia that affects the neck and sometimes the shoulders. It is a chronic condition that occurs when the brain activates muscles to pull in different directions, causing abnormal movements and posture of the head and neck. Botulinum toxin injections have been shown to correct the abnormal posture and movement, and reduce pain.

## Hemifacial Spasm

Hemifacial spasm is characterised by involuntary twitching or contraction of the facial muscles on one side of the face. Botulinum toxin injections are used to stop the spasms and relieve the discomfort.

## Chronic Migraine

Botulinum toxin or Botox injection is an effective treatment for some migraine headaches, including chronic daily migraine and migraine aura symptoms.

[View the video.](https://www.drjulianrodrigues.com.au/videos/botox-treatment-migraine/)

### Botox treatment for migraine: Dr RodriguesA person wearing glasses  Description automatically generated

Two large randomised controlled clinical trials (PREEMPT 1 and PREEMPT 2) have shown that botulinum toxin type A, known as Botox, is effective in the treatment of chronic migraine. Treatment involves injecting the head, neck, upper back, forehead and several other areas with botulinum toxin and usually takes less than 15 minutes.

Currently in Australia, in order to qualify for PBS subsidisation a person must, on average, experience headache for 15 or more days each month, including migraine for 8 days (for a period of at least 6 months). In addition, other treatments must have failed before botulinum toxin will be subsidised.