



# Understanding dystonia

## What is dystonia?

Dystonia is a neurological movement disorder that causes muscles in the body to contract or spasm involuntarily. The involuntary muscle contractions cause twisting, repetitive and patterned movements as well as abnormal postures.

Dystonia is not a single disease but a syndrome – a set of symptoms that cannot be attributed to a single cause but share common elements. Some forms may affect a specific body area, such as the neck, face, jaw, eyes, limbs or vocal cords.

Dystonia affects men, women and children of all ages and backgrounds. It can develop in childhood and is often particularly disabling for children. It may be genetic or caused by factors such as physical trauma, exposure to certain medications, or other neurological conditions.

## Symptoms

There are many different types of dystonia. Focal dystonias only affect one body part, while segmental dystonias affect two or more body regions that are next to each other. Generalised dystonia affects most of the body. These are some of the main types of dystonia:

- **Cervical Dystonia or Spasmodic Torticollis** - Affects the neck muscles, turning the head to the side, or pulling it back or forward.
- **Spasmodic Dysphonia** - Affects the muscles that control the vocal cords, making it difficult to speak.
- **Oromandibular Dystonia** - Affects the muscles of the lower face causing them to pull or contract.
- **Blepharospasm** - Affects the eyelids, causing them to close for seconds to hours.
- **Writer's Cramp** - Affects the fingers, the hand, and occurs when the person attempts to write or perform fine hand functions.

## Causes

The causes of dystonia are not yet fully understood, and there is no single cause in all individuals. It can be associated with damage to certain regions of the brain - including the basal ganglia, thalamus, cortex, brainstem and cerebellum. Dystonia could develop due to damage or degeneration in these structures, but it can also occur in the absence of damage. Dystonia is best viewed as a network disorder.

Some forms of dystonia are linked to genetics, but this is rarely the only cause. It's likely that it's a combination of genetic and environmental factors for most forms of dystonia.

## Treatment

There is no cure for dystonia, but there are various treatments available depending on the type of dystonia you have. A neurologist who has a special interest in movement disorders will be able to develop a treatment & management plan with you.

Some of the treatment options include pharmacological medications, botulinum toxin, various types of therapy (occupational, physio, speech), or surgery.

## Outlook

The natural history of dystonia is variable, depending on the specific type of dystonia present as well as the presence of an identifiable cause. If dystonia develops in childhood, it may (but not always) spread to involve other parts of the body and become generalised. Adult onset dystonia is more likely to be confined to a local area (focal dystonia) and less likely to spread to other parts of the body, though this may occur. A small proportion of individuals may even experience remission and improvement in their symptoms.