Patient Information

Cervical Dystonia (Spasmodic Torticollis)

What is Cervical Dystonia?

Cervical dystonia, also known as spasmodic torticollis, is a neurological movement disorder that causes involuntary muscle contractions in the neck. These muscle spasms cause the head to twist, tilt, or turn to one side, and may be accompanied by tremors, jerky movements, or sustained abnormal postures.

Cervical dystonia is the most common form of **focal dystonia** and typically develops in **adulthood**, although it can occur at any age. The condition is **chronic**, but treatments can significantly reduce symptoms and improve quality of life.

What Causes It?

In most cases, the cause is **unknown** (idiopathic). Cervical dystonia is thought to involve abnormal signalling in the **basal ganglia**, the part of the brain that helps control movement.

Possible contributing factors include:

- **Genetic predisposition** about 10–20% of cases have a family history
- Secondary causes, which are rare, may include:
 - Neck or head injury
 - Stroke
 - Certain medications (especially dopamine-blocking drugs)
 - Other neurological diseases

Cervical dystonia is **not caused by psychological conditions**, although stress or fatigue can worsen symptoms.

Who is Affected?

- Most commonly affects adults aged 40 to 60
- More frequent in women than men
- Can occur in children, though this is uncommon

Symptoms

Symptoms may develop gradually and worsen over weeks or months. Common features include:

- Involuntary turning, tilting, or twisting of the head or neck
- Neck pain or discomfort, often on one side
- Muscle tightness or stiffness
- **Head tremor** (shaky or jerking movements)
- Difficulty maintaining a natural head position
- Sensory tricks (e.g. touching the chin or cheek) that temporarily reduce spasms

Types of abnormal head postures:

Туре	Description
Torticollis	Head turns to one side
Laterocollis	Head tilts sideways
Anterocollis	Head tilts forward
Retrocollis	Head tilts backward

In many cases, a combination of these postures may be present.

How is it Diagnosed?

Cervical dystonia is diagnosed based on **clinical assessment** by a healthcare professional, usually a **neurologist** or **movement disorder specialist**.

The diagnostic process includes:

- Detailed medical history and symptom review
- Neurological examination to observe posture, movement, and muscle activity
- Imaging (MRI or CT) may be done to exclude structural brain or neck issues
- Blood tests or additional investigations may be used to rule out secondary causes

There is no specific test for cervical dystonia. Diagnosis is made based on recognition of symptoms and exclusion of other conditions.

Treatment Options

While there is no cure for cervical dystonia, a number of **effective treatments** can help reduce symptoms and improve neck posture and quality of life.

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1. Botulinum Toxin Injections (BoNT-A)

- First-line treatment for most patients
- Small doses of botulinum toxin are injected into the overactive neck muscles
- Temporarily weakens the muscles to relieve spasms and abnormal posture
- Onset of benefit usually occurs within a few days, lasting 3 to 4 months
- Injections are repeated as needed
- Side effects may include:
 - Mild neck weakness
 - Soreness at injection sites
 - Swallowing difficulties (usually temporary)

Botulinum toxin treatment is highly effective in most patients and is usually delivered by a specialist experienced in movement disorders.

2. Oral Medications (used if Botox is not enough or not tolerated)

- Anticholinergics (e.g. trihexyphenidyl) reduce involuntary muscle activity
- **Benzodiazepines** (e.g. clonazepam, diazepam) may help with muscle relaxation
- Baclofen a muscle relaxant that acts on the spinal cord

These medications may cause side effects such as drowsiness, dry mouth, or dizziness and are typically used cautiously.

3. Surgical Options (for severe, treatment-resistant cases)

- **Deep Brain Stimulation (DBS)** involves placing electrodes in specific brain areas (e.g. the globus pallidus) to regulate movement
- Selective denervation surgery cuts overactive nerves in the neck muscles

Surgery is reserved for **carefully selected patients** who have not responded to other treatments.

Coping and Lifestyle Management

Living with cervical dystonia can be challenging, especially when it affects daily tasks, work, or self-confidence. The following strategies may help:

- Use of **sensory tricks** (light touch to the chin, cheek, or back of the head)
- Stress management techniques, such as relaxation exercises or mindfulness
- Maintaining good posture and neck support (e.g. ergonomic pillows or chairs)
- Heat therapy or gentle neck stretching
- Support groups to share experiences and coping strategies

Prognosis

Cervical dystonia is a **chronic condition**, but many patients experience **partial or significant symptom relief** with appropriate treatment. In rare cases, symptoms may improve spontaneously.

With consistent care and treatment, most people can maintain a good quality of life, though some may require ongoing therapy or adjustments to their treatment plan.

When to Seek Medical Advice

Speak to your GP or specialist if you:

- Notice involuntary neck movements or abnormal posture
- Experience neck pain, tightness, or tremors
- Have difficulty with daily activities due to neck positioning
- Are not achieving relief from current treatment

Early diagnosis and treatment can help prevent complications and improve long-term outcomes.

Summary

Feature	Details
Condition	Cervical Dystonia (Spasmodic Torticollis)
Cause	Neurological dysfunction in movement control pathways
Main Symptoms	Involuntary neck muscle contractions, abnormal head posture, pain
Diagnosis	Clinical evaluation by a neurologist or movement disorder specialist
Treatment	Botulinum toxin injections, medications, surgery in severe cases
Prognosis	Long-term condition; symptoms manageable with appropriate care

If you are concerned about neck spasms, pain, or abnormal head posture, speak to your healthcare provider for an evaluation and guidance on next steps.

Support and Resources

UK-Based:

Dystonia UK

www.dystonia.org.uk

Provides patient support, information, and access to resources and support groups.

• Brain and Spine Foundation

www.brainandspine.org.uk

Offers help for those affected by neurological conditions.

International:

Dystonia Medical Research Foundation (DMRF)

www.dystonia-foundation.org

Offers educational resources, research updates, and global community support.