CONDITION

Spasmodic torticollis

Spasmodic torticollis causes involuntary neck muscle contractions that twist or tilt the head.

WHAT IT IS
Involuntary contractions of the neck muscles

BODY SYSTEM
Nervous system

MAIN SYMPTOMS
Head twisting, neck pain, muscle spasms, head tremor

WHAT CAUSES IT
Usually unknown; sometimes medicines, injury, or neurological conditions

HOW IT IS DIAGNOSED
History and neurological examination; tests exclude other causes

MAIN TREATMENT
Botulinum toxin injections and supportive therapies

CAN IT BE CURED?
No - treatment can control symptoms

IS IT AN EMERGENCY?
No, but sudden weakness needs emergency care

LONG-TERM OUTLOOK
Usually lifelong, with symptoms that may fluctuate

Overview

Spasmodic torticollis is a movement condition that causes neck muscles to contract without your control. These contractions can twist, turn, pull, or tilt your head into an unusual position. The medical name now used most often is cervical dystonia .

"Cervical" refers to the neck. "Dystonia" means involuntary muscle contractions that cause repeated movements or abnormal postures. The contractions may be steady or come and go.

Your head may turn to one side, tilt toward a shoulder, pull forward, or pull backward. Some people have a mixture of these movements. A shaking movement called a tremor can also occur.

Spasmodic torticollis often causes neck pain as well as changes in head position. It may affect

reading, driving, working, sleeping, or taking part in social activities. It does not usually affect thinking or intelligence.

The condition is generally long-lasting. There is no cure at present, but treatment can reduce abnormal movements and pain. Botulinum toxin injections into selected neck muscles are the main treatment for many people.

Symptoms

Symptoms can develop slowly or appear over a shorter period. They may be mild at first and become more noticeable over months or years.

The main symptoms include:

The movement pattern is not the same for everyone. Symptoms may affect one side more than the other, and several neck muscles may be involved.

Pain can range from an ache to more intense muscle pain. It may spread into the shoulder or upper back. Headaches can occur, especially when the muscles remain tense for long periods.

Symptoms often become more noticeable with stress, tiredness, walking, or activities that require a steady head position. They may improve when you are lying down or asleep, although this is not true for everyone.

Some people discover that lightly touching their chin, cheek, or the back of their head briefly improves the posture. This is called a sensory trick . It is a recognised feature of dystonia and does not mean the problem is psychological.

- Your head repeatedly turning, tilting, pulling forward, or pulling backward
- Neck muscle spasms, tightness, or pulling
- Neck and shoulder pain
- Shaking or jerking of the head
- One shoulder appearing raised
- Difficulty keeping your head facing forward

Causes and risk factors

Spasmodic torticollis results from changes in how the brain controls movement. The muscles themselves are usually not the original source of the problem.

In most people, no single cause can be identified. This is called idiopathic cervical dystonia ,

meaning cervical dystonia of unknown cause. Researchers believe that communication between brain areas involved in movement and sensory processing is disrupted.

In a smaller number of people, cervical dystonia may be associated with:

Most cases are not directly inherited. However, inherited gene changes can contribute to some forms of dystonia, particularly when symptoms begin earlier in life or affect several parts of the body.

The condition most often begins in adulthood, although it can occur at other ages. Having a family member with dystonia may increase risk, but it does not mean you will develop it.

Do not stop a prescribed medicine because you are concerned about abnormal movements. Sudden changes can sometimes cause harm. Arrange a medication review instead.

- Another movement or neurological condition
- A previous brain or neck injury
- Certain medicines, especially some that block the brain chemical dopamine
- An inherited form of dystonia

Diagnosis

There is no single blood test or scan that confirms spasmodic torticollis. Diagnosis is based mainly on your symptoms and a neurological examination.

A clinician may observe:

You may be asked when the symptoms began, how they have changed, and which medicines you take. Information about previous injuries and neurological conditions can also be relevant. A short video of symptoms at home may help if they change from day to day.

Blood tests or brain and neck imaging may be used when the history or examination suggests another cause. These tests do not usually prove cervical dystonia; they help rule out conditions such as structural neck problems, inflammation, or another neurological disorder.

Electromyography, or EMG , records electrical activity in muscles. It is not always needed for diagnosis, but it may help identify the muscles involved and guide injections.

Several problems can resemble cervical dystonia, including neck muscle strain, joint disease, tremor, medication-related movements, and conditions affecting the eyes or balance. Assessment by a clinician familiar with movement conditions can help distinguish them.

- The direction in which your head moves

- Which neck muscles are active
- Whether movements are sustained, repeated, or shaking
- Whether touching your face or head changes the posture
- Whether dystonia affects another part of your body

Treatment and management

Treatment aims to improve head position, reduce unwanted movement, ease pain, and make everyday tasks easier. The most suitable approach depends on the movement pattern, the muscles involved, and how much symptoms affect you.

Botulinum toxin injections are the main treatment for many adults. Botulinum toxin temporarily reduces signals between nerves and selected muscles. It is injected into the overactive neck muscles, sometimes with EMG or ultrasound guidance.

Improvement is not immediate. The effect develops after treatment and gradually wears off, so injections usually need to be repeated. The benefit and timing differ between people.

Possible effects include injection-site discomfort, temporary neck weakness, dry mouth, or difficulty swallowing. Rarely, toxin effects can cause serious swallowing or breathing problems. These symptoms need prompt medical assessment.

Medicines taken by mouth may be considered when injections do not provide enough benefit, when several body areas are affected, or when injections are unsuitable. Options can include medicines that alter nerve signals, such as anticholinergic medicines, baclofen, or clonazepam. Their usefulness may be limited by sleepiness, dizziness, memory problems, dry mouth, or other side effects.

Physical therapy can support treatment. It may focus on comfortable movement, posture, strength, balance, and ways to complete daily tasks. It does not remove the brain-based cause, but it may help pain and function. Forceful neck manipulation is not a treatment for dystonia and could worsen pain or cause injury.

Other supportive measures may include heat, pacing activities, adapted seating, or strategies for work and driving. Treatment for anxiety, low mood, or sleep problems can also be important.

For severe symptoms that have not responded to other treatment, deep brain stimulation may be considered. This involves surgery to place electrodes in areas of the brain involved in movement control. It can reduce dystonia in selected people, but it does not work equally well for everyone and requires ongoing specialist follow-up.

Operations on particular neck nerves or muscles are now used less often, but they may be an option in specialised centres.

Complications

Persistent muscle contractions can lead to ongoing neck and shoulder pain. Reduced movement or an uneven posture may also make stiffness and fatigue worse.

Some people develop difficulty swallowing because of the condition or as a temporary side effect of botulinum toxin treatment. Neck weakness can make it difficult to hold the head upright.

Long-term abnormal posture may place added strain on the neck joints and nerves. This can sometimes contribute to arm pain, tingling, numbness, or weakness. New neurological symptoms should not automatically be assumed to be part of dystonia.

Visible movements and pain can affect confidence, relationships, work, and social activities. Anxiety and depression are more common among people living with dystonia and deserve the same attention as physical symptoms.

Falls are not a typical direct feature of isolated cervical dystonia. However, difficulty turning the head or keeping it steady can affect awareness of traffic, steps, and other surroundings.

Prevention

Most cases of spasmodic torticollis cannot be prevented because the cause is usually unknown.

There is no proven exercise, diet, or supplement that prevents idiopathic cervical dystonia. It is not caused by poor posture, although posture and muscle strain may affect how uncomfortable it feels.

Some medicine-related movement conditions may be avoided by using certain medicines only when needed and reviewing them regularly. This is a prescribing decision and does not mean you should stop medication on your own.

Protecting your head and neck during sports, work, and travel reduces the risk of injury in general, but it has not been shown to prevent most cases of cervical dystonia.

Living with it and what to expect

Spasmodic torticollis is usually a long-term condition. Symptoms may change in direction, strength, or frequency over time. Some people have periods of improvement, but symptoms can return. It is not possible to predict an individual course with certainty.

Treatment often becomes a cycle. Symptoms improve after botulinum toxin injections, remain steadier for a period, and then gradually return as the effect wears off. Finding the best muscles and injection pattern may take more than one treatment session.

Isolated cervical dystonia is not usually a condition that damages thinking or shortens life. In some people, dystonia later affects nearby areas such as the face, jaw, shoulder, or arm, but widespread progression is not inevitable.

Many people continue working, driving, exercising, and caring for family. Adjustments may be needed for tasks that require prolonged head control. Examples include changing screen height, using supportive seating, taking movement breaks, or changing how mirrors are positioned.

Whether driving is safe depends on your ability to turn your head, see the road, and control sudden movements. Treatment-related weakness or sedating medicines can also matter. Follow local licensing rules and discuss practical concerns during routine follow-up.

Regular review is useful for tracking pain, swallowing, head control, treatment benefit, and side effects. It is also a chance to discuss changes in work, sleep, mood, or daily independence.

When to get medical help

Arrange a routine medical appointment if you develop repeated or persistent neck pulling, involuntary head turning, or an unexplained head tremor. Gradual symptoms still deserve assessment, especially when they cause pain or interfere with daily activities.

Contact your treatment team promptly if symptoms change significantly, injections provide much less benefit than expected, or you develop troublesome neck weakness or swallowing difficulty after treatment.

Seek urgent medical help if you cannot swallow fluids, are repeatedly choking, or develop breathing difficulty, particularly after botulinum toxin treatment.

Call emergency services for sudden facial drooping, arm or leg weakness, severe loss of balance, difficulty speaking, or a sudden severe headache. These can be signs of a stroke or another emergency rather than cervical dystonia.

A new abnormal neck position after a significant injury, especially with weakness, numbness, severe pain, or loss of bladder or bowel control, also needs emergency assessment.

Common questions

Is spasmodic torticollis the same as cervical dystonia?

Yes. Spasmodic torticollis is an older name for cervical dystonia. Cervical dystonia is now the more commonly used medical term because the head can tilt or pull in several directions, not only twist.

Will spasmodic torticollis go away on its own?

It is usually long-lasting. Some people have a period when symptoms partly or completely settle, but symptoms often return. Treatment can provide meaningful control even when the condition does not go away.

Is it caused by stress?

No. Stress does not cause cervical dystonia, but it can make movements, pain, and muscle tension more noticeable. Symptoms that worsen during stress are still physical and involuntary.

Does botulinum toxin cure it?

No. Botulinum toxin temporarily weakens selected overactive muscles. It can improve posture, movement, and pain, but its effect wears off and treatment generally needs to be repeated.

Can I exercise with spasmodic torticollis?

Many people can remain active. Comfortable aerobic activity, general strengthening, and exercises planned with a physical therapist may help function and well-being. Avoid forcing your head into position or continuing an activity that causes sharp pain, new weakness, or numbness.

Can cervical dystonia spread to other parts of the body?

It can sometimes extend to nearby areas, such as the shoulder, jaw, or face. Many people continue to have symptoms mainly limited to the neck. A change in the pattern of movement can be reviewed during routine follow-up.

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