CONDITION

Linguofacial dyskinesia

Linguofacial dyskinesia causes involuntary, repetitive movements of the tongue, lips, jaw, or face.

WHAT IT IS
Involuntary repetitive movements of the tongue, lips, jaw, or face

BODY SYSTEM
Nervous system

MAIN SYMPTOMS
Tongue movements, lip smacking, chewing motions, facial grimacing

WHAT CAUSES IT
Usually medicines; sometimes neurologic or dental factors

HOW IT IS DIAGNOSED
Movement examination, medicine review, and targeted tests

MAIN TREATMENT
Cause-directed changes, movement-suppressing medicine, and supportive therapy

CAN IT BE CURED?
Sometimes - reversible causes may resolve

IS IT AN EMERGENCY?
Sometimes - when breathing or swallowing is suddenly impaired

LONG-TERM OUTLOOK
Often persistent, though severity and daily impact may improve

Overview

Linguofacial dyskinesia is a pattern of uncontrolled movement involving the tongue and face. "Lingual" refers to the tongue, "facial" refers to the face, and "dyskinesia" means abnormal involuntary movement.

The movements may include tongue rolling or protrusion, lip smacking, chewing motions, puckering, or facial grimacing. They are not deliberate, although some people can briefly suppress them.

Linguofacial dyskinesia is a condition rather than one specific disease. It can have several causes. A common cause is tardive dyskinesia, a movement condition linked to medicines that block the brain chemical dopamine. Other medicines, neurologic conditions, and dental problems can produce similar movements.

The condition matters because repeated movements can interfere with speaking, eating, swallowing, dental health, and social comfort. Mild movements may have little effect on daily life, while more severe movements may need specialist treatment.

Symptoms

Movements may be continuous or may come and go. Stress, tiredness, or concentration can make them more noticeable. They often become less obvious during sleep.

Typical movements include:

You may also notice changes in speech, accidental tongue or cheek biting, drooling, or difficulty controlling food in the mouth. Swallowing problems are less common but can be important.

Some people do not notice their movements until somebody else points them out. Others feel an inner urge to move or become uncomfortable when trying to hold the movement back.

Not every unusual facial movement is linguofacial dyskinesia. Facial tics, tremor, teeth grinding, seizures, muscle spasms called dystonia, and weakness from a stroke can look different but may be confused with it. A medical assessment helps separate these conditions.

- Repeated tongue protrusion, twisting, rolling, or side-to-side movement
- Lip smacking, puckering, pursing, or sucking motions
- Repetitive chewing or jaw movement without food
- Facial grimacing, blinking, or movement around the nose and cheeks
- Difficulty keeping the mouth or tongue still

Causes and risk factors

Tardive dyskinesia is an important cause. "Tardive" means delayed. It usually develops after exposure to medicines that reduce dopamine activity, sometimes after months or years. It may also appear or become more obvious after a medicine is reduced or stopped.

Medicines associated with tardive dyskinesia include antipsychotics and certain anti-nausea or digestive medicines, such as metoclopramide. These medicines can be essential treatments, and developing movements does not mean that they were prescribed incorrectly.

Risk increases with longer or greater exposure to dopamine-blocking medicines. Older age, previous medicine-related movement symptoms, and some mental or neurologic conditions

are also associated with higher risk. However, these factors do not predict exactly who will develop it.

Other possible causes or related situations include:

The timing and exact appearance of the movements offer important clues. Sudden painful pulling of the tongue or jaw soon after starting a medicine may be acute dystonia rather than tardive dyskinesia. This needs prompt assessment, especially if swallowing or breathing is affected.

- Dyskinesia associated with Parkinson's medicine, especially levodopa
- Neurologic conditions such as Huntington disease or Wilson disease
- Missing teeth or poorly fitting dentures, particularly in older adults
- Brain injury or other disorders affecting movement-control pathways
- Spontaneous movements without an identified medicine or disease

Diagnosis

There is no single blood test or scan that confirms linguofacial dyskinesia. Diagnosis is based mainly on observing the movements, reviewing your health history, and identifying possible causes.

A clinician will usually ask when the movements began, whether they fluctuate, and whether they affect eating or speaking. A complete list of current and past medicines is important, including anti-nausea medicines and medicines taken only occasionally.

The examination looks at the tongue, lips, jaw, face, neck, and limbs. This helps show whether the movement is limited to the face or is part of a wider movement condition. You may be asked to perform simple tasks because movements can change while talking, walking, counting, or using your hands.

The Abnormal Involuntary Movement Scale, often called AIMS, may be used when tardive dyskinesia is suspected. It records the location and severity of movements over time. It supports monitoring but does not, by itself, identify the cause.

Blood tests, brain imaging, genetic tests, or dental assessment are only needed when the history or examination suggests a particular cause. For example, younger people with unexplained movements may need testing for Wilson disease. A video recorded with your permission may help document movements that come and go.

Treatment and management

Treatment is matched to the cause, severity, and effect on daily life. Mild movements that are stable and do not cause harm may only need monitoring.

If a medicine may be responsible, the prescriber can review its benefits, dose, duration, and possible alternatives. Do not stop an antipsychotic like olanzapine or risperidone , metoclopramide, or another suspected medicine on your own. Sudden changes can worsen the movements, cause withdrawal effects, or allow the original illness to return.

For confirmed tardive dyskinesia, medicines called VMAT2 inhibitors may reduce involuntary movements. Valbenazine and deutetrabenazine are approved for adults with tardive dyskinesia in the United States. They change how certain chemical messengers are stored and released in nerve cells. They can cause side effects, so treatment requires medical review and follow-up.

When another condition is responsible, treatment focuses on that condition. Parkinson's-related dyskinesia may improve after a specialist adjusts the timing or type of Parkinson's treatment. Dental treatment may help when missing teeth or poorly fitting dentures contribute to mouth and jaw movements.

Supportive care can reduce the practical effects:

Botulinum toxin injections are sometimes considered for a specific focal movement, particularly when dystonia is present. Injections around the tongue or swallowing muscles require specialist expertise because they can worsen swallowing.

- Speech and language therapy for speech or swallowing problems
- Dietitian support if chewing problems affect nutrition
- Dental care for biting injuries, tooth wear, or denture problems
- Occupational strategies for work, meals, and social situations
- Specialist movement-disorder care for persistent or complex symptoms

Complications

Repeated tongue and jaw movement can cause mouth ulcers, tongue injuries, cracked lips, tooth damage, or denture problems. Jaw discomfort and tired facial muscles may occur.

Difficulty chewing can lengthen meals or limit the foods you can manage. Significant swallowing problems may lead to weight loss, dehydration, or food entering the airway. This is called aspiration.

Speech changes and visible movements may affect confidence, relationships, or work. Some people avoid eating or talking in public. These effects are legitimate reasons to seek support, even when the movements are medically mild.

Treatment can also have unwanted effects. For example, movement-suppressing medicines may cause sleepiness or other neurologic symptoms. Regular follow-up helps balance movement control against side effects.

Prevention

Linguofacial dyskinesia cannot always be prevented. Some neurologic causes are inherited, and spontaneous cases have no known preventable trigger.

When dopamine-blocking medicine is needed, careful prescribing and regular movement checks can reduce avoidable risk. The aim is to use an effective treatment while limiting unnecessary exposure. This decision belongs in a discussion with the clinician who manages the medicine.

Report new tongue, lip, jaw, or facial movements early. Early recognition allows the medicine plan and other possible causes to be reviewed. Do not stop treatment suddenly in an attempt to prevent worsening.

Regular dental care and properly fitted dentures may reduce mouth movements related to dental problems, although they will not prevent dyskinesia caused by medicines or neurologic disease.

Living with it and what to expect

The course depends mainly on the cause. Medicine-related movements can fluctuate and may remain for months or years. Some improve after treatment changes, while others persist even after the suspected medicine has been stopped.

Symptoms do not always progress. They may remain mild and stable, or become more or less noticeable over time. Stress and fatigue can temporarily increase the movements without meaning that the underlying condition has permanently worsened.

Follow-up may include repeat movement examinations, medicine reviews, and checks for eating, speech, or dental problems. Keeping a brief record of when movements occur can help. A short video may also be useful if symptoms are not present during an appointment.

Practical adjustments can make meals and conversation easier. Softer foods, smaller bites,

unhurried meals, and fewer distractions may help if chewing is difficult. A swallowing assessment is safer than changing to a very restricted diet without guidance.

Many people continue their usual work, relationships, and activities. The main impact ranges from a visible but manageable movement to more persistent problems requiring ongoing treatment and support. Emotional support or counselling may help if embarrassment or social withdrawal becomes a major part of life.

When to get medical help

Arrange a routine medical appointment if you develop new or persistent tongue, lip, jaw, or facial movements. Bring a complete medicine list, including medicines you have stopped and non-prescription products. An earlier appointment is appropriate if the movements are worsening, causing mouth injuries, or affecting eating or speech.

Seek prompt medical advice after a recent medicine change if you develop painful jaw clenching, sustained tongue protrusion, neck pulling, or difficulty opening your mouth. These symptoms may represent acute dystonia, which is treated differently.

Call emergency services if:

Sudden one-sided facial weakness is not typical linguofacial dyskinesia and may be a sign of stroke. Repetitive movements without breathing, swallowing, or other sudden neurologic problems are usually assessed through routine or prompt outpatient care rather than emergency care.

- You cannot breathe, are choking, or your lips or skin turn blue or grey
- You suddenly cannot swallow saliva or keep your airway clear
- Facial change occurs with sudden weakness, numbness, severe imbalance, or speech loss
- New movements occur with high fever, severe stiffness, confusion, or reduced awareness

Common questions

Is linguofacial dyskinesia the same as tardive dyskinesia?

Not always. Linguofacial dyskinesia describes where and how the movement appears. Tardive dyskinesia is one cause, usually associated with dopamine-blocking medicines. Other neurologic, medicine-related, or dental causes can look similar.

Will the movements stop if I stop the medicine?

They might improve, but they may also continue or briefly become more noticeable. Abruptly stopping some medicines can be harmful. Any change should be planned with the prescriber after considering why the medicine is needed.

Can anxiety cause these mouth movements?

Stress or anxiety can make existing movements more noticeable, but that does not prove anxiety caused them. New repetitive movements still deserve assessment for medicine effects, dental problems, and neurologic causes.

Can linguofacial dyskinesia affect swallowing?

Yes, although many people have only visible movements. Tongue and jaw dyskinesia can make it harder to control food or coordinate swallowing. Coughing during meals, repeated choking, weight loss, or a wet-sounding voice after swallowing should be assessed.

Is linguofacial dyskinesia permanent?

Not necessarily. Some reversible causes improve, but tardive movements can remain after the original medicine is changed. Treatment may reduce the severity and practical impact even when the movements do not disappear completely.

Why does my tongue keep moving when I am not trying to move it?

Involuntary tongue movement can result from dyskinesia, dystonia, a tic, medicine effects, or another neurologic condition. The movement's pattern, timing, and relationship to medicines help identify the most likely explanation.

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