CONDITION

Familial essential tremor

Familial essential tremor is an inherited tendency to develop shaking during movement or while holding a position.

WHAT IT IS
Inherited action tremor affecting movement and posture

BODY SYSTEM
Nervous system

MAIN SYMPTOMS
Shaky hands, head tremor, voice tremor, reduced coordination

WHAT CAUSES IT
Inherited tendency; exact genes often unknown

HOW IT IS DIAGNOSED
Neurological examination after excluding other causes

MAIN TREATMENT
Medicines, practical aids, and specialist procedures

CAN IT BE CURED?
No - treatments control symptoms, not cause

IS IT AN EMERGENCY?
Sometimes - sudden tremor with stroke signs

LONG-TERM OUTLOOK
Usually slowly progressive, without shortening life

Overview

Familial essential tremor is essential tremor that occurs in more than one family member. It causes rhythmic, involuntary shaking, most often in the hands and arms.

The tremor is usually most noticeable when holding the arms out, carrying a cup, using cutlery, writing, or making another purposeful movement. This is called an action tremor . It differs from a classic resting tremor, which is strongest when a body part is relaxed and supported.

Essential tremor is a nervous system condition. Nervousness does not cause it, although stress can make shaking more noticeable. It is also not the same as Parkinson's disease, but the conditions can sometimes look similar and require careful assessment.

"Familial" describes the family pattern; it does not mean a specific genetic change will always

be found. Relatives may develop symptoms at different ages and be affected to different degrees.

Essential tremor does not usually shorten life, but it can interfere with eating, writing, work, hobbies, communication, and confidence. Treatment depends on its effect on daily life.

Symptoms

Shaking of both hands or arms is most common, although one side may be more affected. It is usually easiest to see while the hands are being used or held against gravity.

It may affect:

Symptoms may become more obvious with tiredness, strong emotion, hunger, caffeine, or physical exertion. Certain medicines and recreational drugs can also worsen shaking.

Some people have mild symptoms for years, while others gradually find precise tasks harder. Mild balance or coordination difficulties can occur, especially later. Essential tremor does not usually cause weakness, loss of feeling, prominent stiffness, slowed movement, or repeated falls. These symptoms may suggest another condition and should be assessed.

- Drinking from a cup or using utensils
- Writing, typing, shaving, applying makeup, or fastening buttons
- The head, causing a "yes-yes" or "no-no" movement
- The voice, making it sound shaky
- Less commonly, the jaw, trunk, or legs

Causes and risk factors

Essential tremor is linked to altered signalling in brain networks that coordinate movement, but no single cause explains every case.

Inherited factors are important in familial essential tremor. Some families show autosomal dominant inheritance , meaning a person may inherit a tendency from one affected parent. However, inheritance is complex, and relatives with the same tendency may have different symptoms or none at all.

Having a parent, sibling, or child with essential tremor makes a familial pattern more likely. Symptoms can begin at almost any age but may become more noticeable with ageing.

Caffeine, anxiety, lack of sleep, and some medicines can worsen an existing tremor but do not

usually explain a long-standing familial tremor. Possible contributors include certain asthma treatments, stimulants like methylphenidate or lisdexamfetamine , mood medicines, thyroid hormone, and some anti-seizure medicines. Do not stop prescribed medicine without medical advice.

Diagnosis

There is no single blood test, scan, or genetic test that confirms familial essential tremor. Diagnosis is based mainly on symptoms, family history, and a neurological examination.

A clinician may observe your hands while they are resting, held out, and performing tasks. You may be asked to write, draw a spiral, pour water, or touch a target. The examination also checks for stiffness, slowed movement, weakness, sensory changes, and balance problems that could suggest another condition.

You may be asked when the tremor began, which body parts it affects, and whether relatives have similar symptoms. Bring details of medicines, supplements, caffeine and alcohol use, and other health conditions.

Blood tests may check for other causes, such as an overactive thyroid or metabolic problem. Brain imaging is not routinely needed for typical, long-standing essential tremor, but it may be arranged if symptoms are unusual or begin suddenly.

Genetic testing is not routinely used because known genetic changes do not explain most families. A specialist may consider it if symptoms suggest another inherited movement condition.

Treatment and management

Mild tremor may not need treatment. If it affects daily activities, practical aids, medicines, injections, or specialist procedures may help. No current treatment permanently removes the inherited tendency.

Weighted or larger-handled utensils, lidded cups, electric grooming tools, voice technology, and simpler clothing fasteners can make tasks easier. An occupational therapist can recommend equipment and adaptations for work or home.

Common medicines include propranolol, which affects the body's response to adrenaline, and primidone, an anti-seizure medicine. Other medicines may be considered if these are unsuitable or ineffective.

Propranolol may not be suitable for people with asthma, a slow heart rate, or certain heart conditions. Primidone can cause sleepiness, dizziness, or nausea, particularly when first started. A clinician should introduce and adjust treatment; do not stop or change it suddenly without advice.

Botulinum toxin injections may help tremor affecting the head, voice, or one arm by temporarily weakening selected muscles. Depending on the injection site, they can cause hand weakness, difficulty swallowing, or a breathy voice.

For severe, disabling tremor that has not responded to medicines, specialist options include:

These procedures may reduce tremor but do not cure the condition. Risks include speech, balance, sensation, or movement problems, so detailed specialist assessment is required.

Alcohol may briefly reduce tremor, but it is not recommended as treatment. Regular use can cause tolerance, dependence, other health problems, and worse shaking when its effects wear off.

- Deep brain stimulation , using implanted electrodes to deliver controlled electrical signals to movement-related brain areas
- Focused ultrasound , using targeted sound waves to make a small, permanent change in a tremor-related brain area

Complications

Essential tremor is not usually medically dangerous. Complications mainly result from difficulty with everyday tasks.

Hand tremor can lead to spills, cuts, burns, or mistakes when taking medicine. Voice or head tremor may affect communication. Embarrassment can cause some people to avoid eating in public, writing in front of others, or attending social events.

Reduced independence may affect mood and confidence, while anxiety can intensify shaking. Support for anxiety or low mood can be useful alongside tremor treatment.

Medicines and procedures can also cause unwanted effects. Regular follow-up helps balance symptom relief against dizziness, tiredness, weakness, low blood pressure, balance problems, or other concerns.

Prevention

Familial essential tremor cannot currently be prevented because the inherited tendency

cannot be changed. A family history does not mean every relative will develop symptoms.

Regular sleep, stress management, and limiting caffeine may reduce temporary worsening. A clinician can review medicines that might be contributing.

These measures manage triggers but do not prevent or cure the condition. No supplement, special diet, or exercise programme has been proven to stop familial essential tremor from developing.

Living with it and what to expect

Essential tremor often changes slowly over years. Symptoms may remain mild for long periods, but shaking can gradually become broader or affect other body areas. Family history cannot predict an individual course.

Many people continue working, driving, exercising, and living independently. Fine-motor tasks may require more time, different tools, or workplace adjustments. Tremor does not automatically make driving unsafe, but seek an assessment if it affects steering, vehicle controls, or your ability to react safely.

Treatment may need review as symptoms, health, or priorities change. Some people use medicine only for important activities; others need regular treatment. Agree any changes with the clinician responsible for your care.

A brief record of triggers and symptom changes can show whether treatment is helping. Videos may also be useful when symptoms fluctuate.

Routine follow-up is appropriate if the tremor is stable. Arrange an earlier review if it affects eating, drinking, medication use, work, communication, or personal care.

When to get medical help

Make a routine appointment for a persistent tremor, even if relatives have similar symptoms. Other conditions and medicines can cause shaking, and family history alone does not confirm the diagnosis.

Seek a review if:

Get urgent or emergency help if shaking starts suddenly with facial drooping, one-sided weakness or numbness, trouble speaking, severe loss of balance, confusion, or a sudden severe headache. These may indicate a stroke or another acute neurological problem, not typical essential tremor.

Sudden severe shaking with fever, agitation, heavy sweating, a very fast heartbeat, or possible poisoning also requires urgent assessment.

- A known tremor is getting noticeably worse
- New stiffness, slowed movement, weakness, numbness, or balance problems appear
- Tremor begins after starting or changing a medicine
- Symptoms interfere with eating, drinking, work, driving, or self-care
- Treatment causes dizziness, faintness, breathing problems, or troublesome weakness

Common questions

Is familial essential tremor the same as Parkinson's disease?

No. Essential tremor is usually strongest during action or while holding a position. Parkinsonian tremor often appears at rest and may occur with slowed movement, stiffness, or walking changes. Because features can overlap, diagnosis requires an examination.

Will I pass essential tremor to my children?

Children may have an increased chance when essential tremor runs in a family, but inheritance is not predictable. A child who inherits a tendency may never develop symptoms or may have a different degree of tremor. Routine genetic tests usually cannot provide a definite answer.

Does essential tremor always get worse?

It is often slowly progressive, but the rate varies. Symptoms may remain mild or stable for years. Temporary worsening caused by stress, tiredness, illness, caffeine, or medicine changes does not necessarily mean permanent progression.

Can essential tremor go away on its own?

Long-standing essential tremor usually does not disappear permanently, although its severity can fluctuate and treatment may reduce it substantially. Tremor that starts and stops abruptly may have another cause and should be assessed.

Can I drink coffee if I have essential tremor?

You do not always need to avoid caffeine. Reducing coffee, tea, energy drinks, or other caffeinated products may help if they clearly worsen shaking. Gradual reduction may prevent caffeine-withdrawal symptoms.

Is there a cure for familial essential tremor?

There is no current cure that removes the inherited tendency. Medicines, adaptive equipment, injections, and specialist procedures can reduce symptoms and help maintain independence.

Sources

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