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Drug-induced tremor

Drug-induced tremor is involuntary shaking due to the use of medicines. Involuntary means you shake without trying to do so and can't stop when you try. The shaking occurs when you move or try to hold your arms, hands, or head in a certain position. It is not associated with other symptoms.

Causes

Drug-induced tremor is a nervous system and muscle response to certain medicines. Medicines that can cause tremors include the following:

- Cancer medicines such as thalidomide and cytarabine
- Seizure medicines such as divalproex sodium (Depakote)
- Asthma medicines such as theophylline and albuterol
- Immune suppressing medicines such as cyclosporine and tacrolimus
- Mood stabilizers such as lithium carbonate
- Stimulants such as caffeine and amphetamines
- Antidepressant medicines such as selective serotonin reuptake inhibitors (SSRIs) and tricyclics
- Heart medicines such as amiodarone, procainamide, and others
- Certain antibiotics
- Steroids
- Certain antivirals, such as acyclovir and vidarabine
- Alcohol
- Nicotine
- Certain high blood pressure medicines
- Epinephrine and norepinephrine
- Too much thyroid medicine (levothyroxine)
- Tetrabenazine, a medicine to treat excessive movement disorder

Symptoms

Your tremor may affect your hands, arms, head, or eyelids. In rare cases, your lower body is affected. Your tremor may not affect both sides of the body equally.

The shaking is usually fast, about 4 to 12 movements per second.

Your tremor may be:

- Episodic (occurring in bursts, sometimes about an hour after taking the medicine)
- Intermittent (comes and goes with activity, but not always)
- Sporadic (happens on occasion)

Your tremor can:

- Occur either with movement or at rest
- Disappear during sleep
- Get worse with voluntary movement and emotional stress

Other symptoms may include:

- Head nodding
- Shaking or quivering sound to the voice
- Problems with writing, drawing, drinking from a cup, or using tools if the tremor affects the hands

Exams and Tests

Your health care provider can make the diagnosis by performing a physical exam and asking about your medical and personal history. You will also be asked about the medicines you take.

Tests may be done to check for other reasons for your tremor. A tremor that occurs when the muscles are relaxed or that affects the legs or coordination may be a sign of another condition, such as Parkinson disease. The speed of the tremor can be an important way to determine its cause.

Other causes of tremors may include:

- Essential tremor
- Alcohol withdrawal
- Cigarette smoking
- Overactive thyroid (hyperthyroidism)
- Parkinson disease
- Adrenal gland tumor (pheochromocytoma)
- Too much caffeine
- Disorder in which there is too much copper in the body (Wilson disease)

Blood tests and imaging tests (such as a CT scan of the head, brain MRI, and x-rays) are usually normal.

Treatment

Drug-induced tremor often goes away when you stop taking the medicine that is causing the shaking.

You may not need treatment or changes in the medicine if the tremor is mild and does not interfere with your daily activity.

If the benefit of the medicine is greater than the problems caused by the tremor, your provider may have you try different dosages of the medicine. Or, you may be prescribed another medicine to treat your condition. In rare cases, a medicine such as propranolol may be added to help control the tremor.

Do not stop taking any medicine without first talking to your provider.

Possible Complications

Severe tremor can interfere with daily activities, especially fine motor skills such as writing, and other activities such as eating or drinking.

When to Contact a Medical Professional

Contact your provider if you are taking a medicine and a tremor develops that interferes with your activity or is accompanied by other symptoms.

Prevention

Always tell your provider about the medicines you take. Ask your provider if it is OK to take over-the-counter medicines that contain stimulants or theophylline. Theophylline is a medicine used to treat wheezing and shortness of breath.

Caffeine can cause tremor and make tremor caused by other medicines worse. If you have a tremor, avoid caffeinated drinks such as coffee, tea, and soda. Also avoid other stimulants.

Alternative Names

Tremor - drug-induced; Shaking - drug tremor

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Updated by: Joseph V. Campellone, MD, Department of Neurology, Cooper Medical School at Rowan University, Camden, NJ. Review provided by VeriMed Healthcare Network. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.

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