Narcolepsy

healthysleep.med.harvard.edu/narcolepsy

Harvard Medical School | Division of Sleep Medicine | Sleep and Health Education

What Is Narcolepsy?

Narcolepsy is a common cause of chronic sleepiness, affecting about 1 in 2,000 people. Narcolepsy typically develops during the teen years and lasts for life. Narcolepsy is a manageable condition, and people with narcolepsy can lead full and rewarding lives.

SYMPTOMS

Narcolepsy is a neurological disorder that causes persistent sleepiness and additional symptoms such as brief episodes of muscle weakness known as cataplexy; vivid, dreamlike hallucinations; brief episodes of paralysis when falling asleep or upon awakening (sleep paralysis); and fragmented nighttime sleep. Symptoms typically develop over several months and last a lifetime. More about each symptom:

- Periods of **sleepiness** occur during the day, even after a good night's sleep. The severity and frequency of sleepiness vary among individuals.
- **Cataplexy** is often triggered by strong emotions and causes weakness of the face, limbs, and trunk, sometimes leading an individual to slump to the ground, awake but unable to talk or move for up to one or two minutes. About half of all people who have narcolepsy have episodes of cataplexy.
- **Hallucinations** can occur while an individual is falling asleep or just waking up.
- **Sleep paralysis** is a transient inability to move when an individual is drifting off to sleep or waking up.
- People with narcolepsy may also experience **fragmented sleep** at night that can worsen daytime sleepiness.

DIAGNOSIS

Many doctors are unfamiliar with narcolepsy, so visiting a sleep medicine specialist is often necessary for an accurate diagnosis. The diagnosis of narcolepsy is usually confirmed by sleep lab tests consisting of an overnight sleep study followed by a series of planned naps the next day.

CAUSES

Research has revealed that narcolepsy with cataplexy is caused by the lack of hypocretins, key brain chemicals that help sustain alertness and also prevent rapid-eye-movement (REM) sleep from occurring at the wrong times. In people who have narcolepsy with cataplexy, most of the hypocretinproducing neurons die off. Genetics, age, and triggering infections or inflammation play important roles in the development of narcolepsy.

Though much has been learned about narcolepsy with cataplexy, considerably less is known about the cause of narcolepsy without cataplexy. Most likely, it is caused by less severe injury to the hypocretin neurons, resulting in fewer and less severe symptoms.

TREATMENT

Narcolepsy is usually treated with behavioral strategies plus carefully chosen medications. Sleepiness often improves with modafinil, armodafinil, amphetamines, pitollisant, solriamfetol, oveporexton, or an oxybate. Cataplexy often improves with antidepressants or sodium oxybate.

For more information on narcolepsy, visit
healthysleep.bwh.harvard.edu/narcolepsy

Copyright 2026 by the President and Fellows of Harvard College