

What is Narcolepsy?

Narcolepsy is a chronic sleep disorder characterized by a recurring and overwhelming desire to sleep. This urge to sleep often results in unintentional sleep attacks throughout the day that can occur without warning, potentially putting the person or those around him or her in danger.

Living with narcolepsy can cause considerable disruption to an individual's professional, family, and social life and can severely limit their daytime activities.

There are three main components associated with narcolepsy, as follows:

- i) **Excessive Daytime Sleepiness (EDS).** EDS is characterized by an irresistible need to sleep during the day, which often results in sleep at inappropriate times and places (e.g. while driving, attending a meeting, during a conversation, etc.).
- ii) **Cataplexy.** This is characterized by a sudden loss of muscle tone that is usually triggered by intense emotion (e.g. anger, surprise, laughter, etc.). This muscle weakness occurs in varying degrees across individuals, from a drooping of the eyelids to complete body collapse.
- iii) **REM Sleep Intrusions.** These occur during the transition period between sleep and wakefulness. REM sleep intrusions are characterized by vivid dreamlike imagery immediately before falling asleep or after awakening, and may also involve episodes of sleep paralysis, a temporary inability to move or talk when falling asleep or waking up.

What Causes Narcolepsy?

Although the causes of narcolepsy are not completely clear, it appears that this disorder may be neurologically based. Research has shown that this disorder appears to be caused by a deficiency in the release of brain chemicals known to regulate the sleep-wake function. As a result, a narcoleptic will fall asleep at times when they would normally want to be awake.

Other factors thought to contribute to the development of this disorder are genetics and environmental factors. A genetic disposition (i.e., heredity and specific genes) has shown to increase an individual's susceptibility to developing narcolepsy and although environmental factors have not been specifically identified, it appears that the onset of narcolepsy often follows a particularly exciting or distressing life event.

What is the Impact of Narcolepsy?

Narcolepsy can significantly affect virtually all areas of a person's functioning. Some examples of this include: learning difficulties, memory problems, social withdrawal and isolation, sexual dysfunction, decreased job performance and productivity, increased absenteeism, greater risk of accidents, and greater health care costs. Furthermore, excessive daytime sleepiness and sleep attacks may be viewed by others as a form of indifference, disinterest, and laziness, which often results in (misguided) negative appraisals from friends, family, and co-workers. More importantly, excessive daytime sleepiness and sleep attacks increase the risk of serious accidents, which can be prevented when narcoleptic symptoms are managed and controlled.

Anyone who suspects that they, or a family member, may suffer from narcolepsy should seek immediate help from a health care professional, preferably a sleep specialist.

How is Narcolepsy Treated?

Proper assessment of narcolepsy requires both a clinical evaluation, as well as objective testing to substantiate the diagnosis of this condition. This requires the expertise of a health care professional, preferably a sleep specialist, as the objective testing can only be done in a sleep laboratory equipped with the necessary facilities. The most common diagnostic tests used for the evaluation of narcolepsy are the Nocturnal Polysomnogram (PSG; a night time sleep study), and the Multiple Sleep Latency Test (MSLT; a daytime sleepiness study). Both tests monitor a person's physiological cues, such as brain wave activity, muscle and eye movements, as well as heart rates. The PSG also monitors breathing rates during sleep. This testing is critical in excluding other sleep disorders that may be causing narcoleptic-like symptoms, such as excessive daytime sleepiness.

Once a diagnosis has been made, there are a number of treatment options available. Examples of such treatments include:

- **Medications.** Medications can be used to manage the symptoms of excessive daytime sleepiness, cataplexy, and REM sleep intrusions. Caffeine and over-the-counter drugs have not been shown to be effective and are not recommended.
- **Sleep Hygiene.** This includes lifestyle practices to minimize or prevent sleep difficulties.
- **Behaviour Modification and Relaxation.** Includes interventions designed to incorporate helpful habits for this condition (e.g., taking short frequent naps throughout the day or one long nap in the early afternoon), reduce tension, and manage the stress associated with living with this condition.
- **Education and Support.** Understanding narcolepsy, its effects, and how to best manage this condition has proven to be beneficial for people affected by this condition and their families.



The Canadian Sleep Institute's 10 Commandments for a better sleep

If getting a better night's sleep is your goal, and underlying medical conditions are not an impediment, you may achieve success by following the Ten Commandments of Sleep Hygiene:

1. Schedule a relaxing period before going to sleep, to separate your body and mind from the day's hassles.
2. Use your bedroom primarily for sex and sleep, and not as an all-purpose activity area.
3. Your bed should be comfortable, large enough, in a quiet, dark room, and at the right temperature.
4. Keep a regular schedule, going to bed and getting up at the same time each day. Don't go to bed until you feel sleepy.
5. Be consistent about taking naps. Take one regularly or not at all.
6. Exercise regularly in the morning or early afternoon, but do not engage in strenuous activity late in the evening. A relaxing, mild physical activity might be helpful close to bedtime.
7. Assess your caffeine intake, and avoid caffeine after 2 p.m. Smoking close to bedtime or at night causes further sleep disruption.
8. Don't use alcohol or drugs, such as sedatives. While they might help you initially fall asleep, they lead to sleep disruption and deprive you of deep sleep (at times, even for years).
9. If you feel hungry in the evening, have a light snack or a glass of milk. Heavy meals close to bedtime can result in discomfort and further sleep disturbance.
10. Above all, do not try too hard. If you can't fall asleep, don't lie in bed anxious and frustrated. Leave your bedroom to read, watch T.V. or do something else to relax, going back to bed only when you feel sleepy again.

- Adam Moscovitch, MD, FRCP (C), ABSM

The Good News:

Sleep specialists are in a position to properly diagnose and treat narcolepsy. Patients who seek appropriate diagnosis from a qualified sleep specialist are able to manage their condition and resume a perfectly healthy and normal life. Our specialists at the Canadian Sleep Institute are experienced and well trained in the assessment, diagnosis, and treatment of narcolepsy, along with a host of additional sleep disorders. If you feel that you could benefit from seeing a sleep specialist, call us for more information or have your family physician refer you to:

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Canadian Sleep Institute

The Canadian Sleep Institute is a leading centre of excellence in the provision of clinical care, diagnostic services, corporate consulting, clinical research, and education in the area of sleep and fatigue disorders. Our full-service, community-based sleep centre serves a patient population from across Western Canada, and is accredited by the College of Physicians and Surgeons of Alberta to assess, diagnose, and treat the full spectrum of over eighty sleep and fatigue disorders.

Our fully qualified team of clinicians, headed by a board-certified sleep physician, is focused on providing comprehensive, coordinated, inter-disciplinary care in the most convenient, accessible, and cost-effective manner available. We feature a state of the art, four-bedroom, overnight sleep diagnostic facility in a comfortable atmosphere and residential hotel-like setting. We also provide a full-service CPAP clinic and follow-up care program for those patients with sleep apnea and related conditions.



Canadian Sleep Institute

Better Health Through Better Sleep

Narcolepsy

I think I might have
narcolepsy. What do I
need to know?

Answers to Questions

and information about

Narcolepsy and Sleep.
