

GENERAL SLEEP INFORMATION

Sleep Apnea

Obstructive sleep apnea is a common sleep disorder, estimated to affect 18 million American adults. In addition, 2 to 3% of children may experience sleep apnea. Obstructive sleep apnea causes a pause in breathing during sleep that lasts for at least ten seconds. It is usually accompanied by loud snoring, followed by a pause in breathing and a snorting sound. Another, less common, form of sleep apnea is central sleep apnea, in which the brain fails to trigger breathing. Risk factors for obstructive sleep apnea include a small upper airway, obesity, large neck size and male gender. Obstructive sleep apnea seems to run in some families, suggesting a possible genetic basis.

Symptoms and Diagnosis: Patients with sleep apnea can have variety of symptoms including snoring, daytime fatigue, non-refreshing sleep, excessive daytime sleepiness, mood and behavior problems, inability to concentrate and choking episodes at night. Overnight polysomnography (sleep study) is the recommended test to confirm a suspected diagnosis of sleep apnea. Untreated sleep apnea increases the risk of high blood pressure, irregular heartbeat, heart attack, stroke and automobile crashes.

Treatment: Several options are available to treat sleep apnea and a specific recommendation will depend on various factors, including the severity of sleep apnea. Continuous Positive Airway Pressure (CPAP) is the most commonly used and most effective treatment for obstructive sleep apnea. It involves delivery of pressurized air to breathing passages to help keep them open. Other treatment options include weight reduction, positional therapy, positioning devices for the lower jaw, and surgical procedures to increase the size of the breathing passages.

Restless Leg Syndrome

Restless Leg Syndrome (RLS) is a common neurological disorder which often disrupts sleep. It is estimated that RLS affects 10% of adult and 2% of children in the United States. The likelihood of RLS appears to increase with age. It is a common problem, causing an uncomfortable or tingling feeling in the legs associated with an urge to move the legs. This is usually worse at rest and in the evening, and temporarily relieved by moving the legs. The exact cause of RLS is unknown but it has a primary form, not related to other disorders, and a secondary form related to underlying conditions such as kidney failure, nerve damage, or iron deficiency



anemia. It may also be caused or made worse by certain medications. Primary RLS accounts for 40-60% of RLS.

Symptoms: Symptoms include an urge to move the legs, often associated with an uncomfortable feeling in the legs (e.g. tingling, creeping, itching, pulling or aching) during periods of inactivity, including sleep and wakefulness. Symptoms may also include involuntary jerking of the limbs that intensifies in the evening or at night and are relieved by movement. People with RLS tend to have difficulty falling or staying asleep and suffer from chronic sleep loss, leaving them with fatigue and loss of alertness that occur with lack of sleep.

Diagnosis and Treatment: There is no specific test for RLS but physicians often suggest tests to eliminate factors that may cause the symptoms, such as pregnancy, iron deficiency and kidney failure. RLS is usually treated with medications, including like ropinirole, pramipexole, levodopa/carbidopa, sedatives, opiates or gabapentin.

Insomnia

Insomnia, which is Latin for "no sleep," causes people to have difficulty falling asleep or staying asleep. It is typically followed by impairment in daytime functioning.

Insomnia is the most common sleep problem in the United States. Insomnia can be either temporary—lasting one to several nights, or chronic—lasting more than a month. About 30-40% of adults say they have some symptoms of insomnia over the course of a year, and about 10-15% say they have chronic insomnia. Insomnia is more common among women and older people.

Symptoms: Symptoms of insomnia include difficulty falling asleep, frequent awakening, difficulty returning to sleep, waking up too early in the morning, unrefreshing sleep, and daytime irritability and sleepiness. Often, insomnia is caused by pain, anxiety, depression, medications, or medical and neurological conditions. Other causes may include sleep disorders such as restless leg syndrome or sleep apnea syndrome. Insomnia without any cause, called primary insomnia, is a very rare condition.

Treatment: Treatment of insomnia begins a search for the underlying cause. Treatment of the cause often resolves the problem but, at times this must be supplemented with behavioral therapy or sleep medications. Various behavioral therapies, including stimulus control, sleep restriction and cognitive therapy are used to treat patients with chronic insomnia. There has been important progress in the medical therapy of insomnia with the introduction of newer, short-acting medications.



Insomnia can be quite a disabling problem. Your primary care physician or sleep physician can help you achieve healthier sleep.

Narcolepsy

Narcolepsy is an uncommon sleep disorder that causes excessive daytime sleepiness, sleep attacks, sudden severe weakness, and dream-like hallucinations. Narcolepsy symptoms are related to changes in the different phases of sleep, and recent research has linked narcolepsy to certain chemical changes in the brain.

Symptoms: There are four main symptoms of narcolepsy:

- 1. Excessive daytime sleepiness: Persons with narcolepsy can fall sleep at inappropriate times, such as like during conversation or while eating.
- 2. Sleep paralysis: A temporary inability to move body, during the sleep-wake transition, despite being awake. These symptoms can last for a few seconds to a few minutes.
- 3. Cataplexy: Cataplexy is a sudden loss of muscle strength, usually triggered by emotions such as anger or laughter. Patients with cataplexy may experience buckling of the knees, sagging of the jaw or sudden collapse.
- 4. Hypnogogic hallucination: A dream-like experience during the transition from wakefulness to sleep.

Diagnosis and Treatment: Overnight polysomnography and a daytime nap study are generally required to confirm the diagnosis of narcolepsy, which is treated with medications and/or attention to sleep hygiene. Medications include CNS stimulants such as modafanil, methylphenidate or amphetamine. Antidepressants are also used to control the symptoms of cataplexy.